

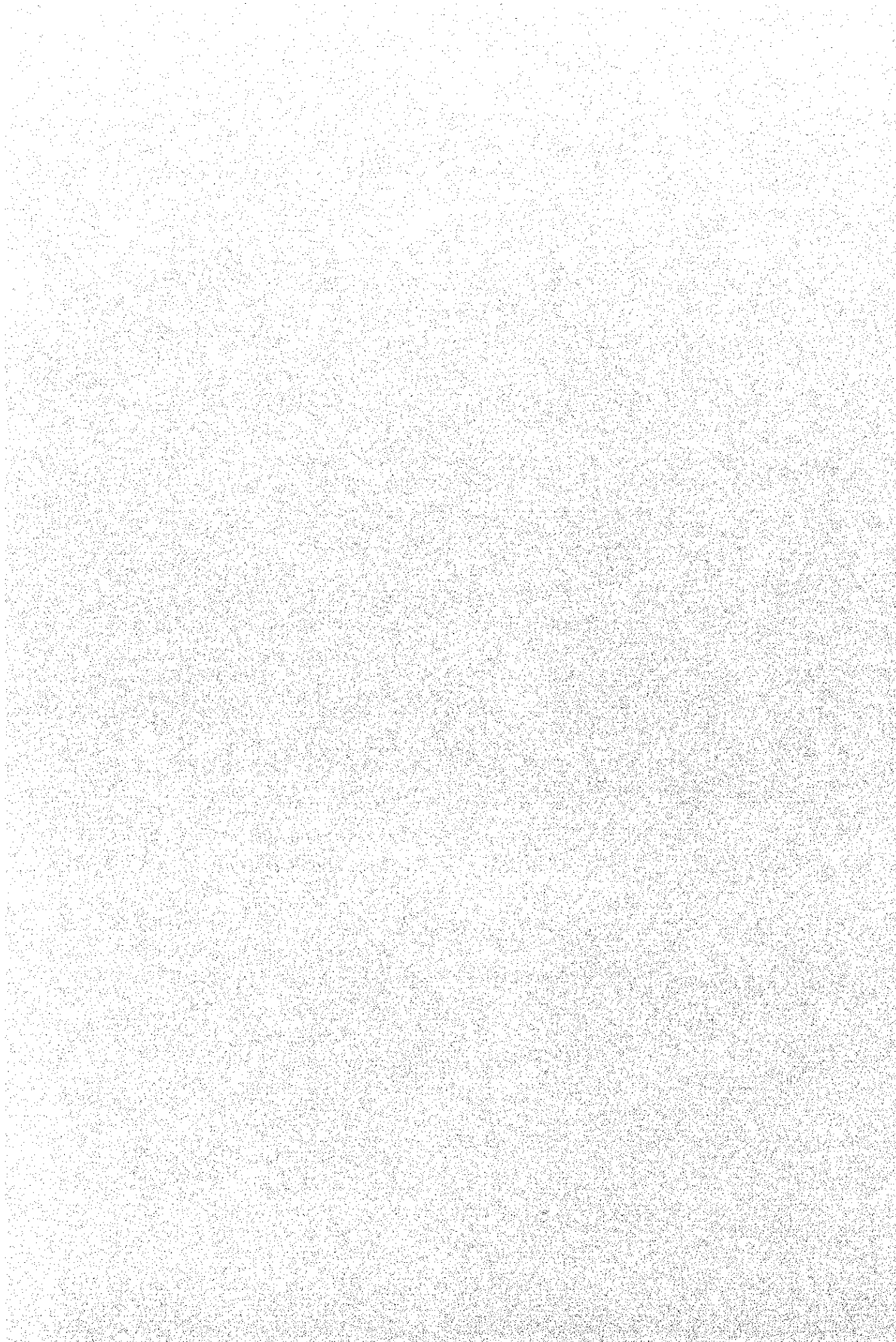
## **Chapter 3 Implementation Plan**

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## Chapter 3 Implementation Plan

### 3-1 Implementation Plan

#### 3-1-1 Implementation Concept

This plan consists of two parts. One concerns construction of FEM and the Center facilities and the other concerns supply of equipment and their installation.

Japan is committed to cooperate for implementation of this project to the extent in accordance with the framework of its Grant Aid system. Both facilities will be built next to each other within the same site and their construction will supposedly be conducted almost in parallel but the Center will be completed first and its management will start while FEM is still under construction. Therefore, special consideration must be taken when making the implementation plan for construction of FEM so that the construction work will not hinder management of the Center.

Implementation of this plan shall be initiated officially only after it is approved by governments of both countries and the exchange of notes (E/N) is signed. Immediately after signing of the E/N, the Laos organization which is responsible for implementation of this project and the Japanese consultant firm shall enter a contract and initiate the detail design work of the project. When the design is completed, the Japanese construction companies and equipment supply and installation companies participate in the tender for their works. The successful tenderers for construction of facilities and supply and installation of the equipment proceed to their work.

The basic principles and items to be considered for implementation of this project are described below.

#### (1) Executing organization

NUOL is the executing organization of this project and responsible for management and maintenance of the facilities to be built and the equipment to be supplied.

#### (2) Consultant

After signing of the E/N, the Japanese consultant firm and the Lao Government enter a consultant contract according to the formal procedure of the Grant Aid System of Japanese Government. This consultant firm executes the following activities under this Contract.

- 1) Detail design of the project : To prepare the design document (specifications and technical reference materials on the facilities and equipment included in the project)
- 2) Tender : To cooperate in selection of the construction firm(s) and equipment supply and installation firm(s) through the tender and in transaction of procedures required under the contract.

- 3) Construction supervision : To supervise so that instructions for construction of facilities, delivery and installation of the equipment, operation and maintenance are given properly.

In the detail design stage, the consultant determines the construction plan in detail based on the basic design investigation of the project, reviews the equipment, and prepares the tender document consisting of specifications of the project plan, tender terms and conditions, draft of the contracts required for the construction work and procurement of equipment, and their estimated costs as well.

Cooperation to the tender procedure means to observe selection of the construction firm(s) and the equipment supply and installation firm(s) through the tender and to help them transact the formal procedures required for execution of their contracts and preparation of the reports to be submitted to the Japanese Government.

Construction supervision means to check whether or not each work item done by the construction firm and the equipment supply and installation firm as specified in each contract and to confirm that the contents of their contracts are executed appropriately. In addition, to promote smooth implementation of the project, the consultant shall, in the neutral position, provide related parties with advice and guidance and serve as a coordinator among them.

Listed below are major items in the scope of the construction supervision work.

- 1) Procedures required for verification and approval of the work implementation plan, implementation drawings, equipment specifications and other document submitted by the construction firm(s) and equipment supply and installation firm(s).
- 2) Inspection and approval prior to shipment of the construction materials, quality and performance of equipment.
- 3) Confirmation of instructions for the construction machines and materials, supply, installation and handling of the equipment.
- 4) Checking and reporting the progress of the construction
- 5) Observation of handing over the completed facilities and equipment

The consultant shall execute above items and report to the related authorities of the Japanese Government about the progress of this project, the payment procedure and handing over of the completed facilities.

(3) Construction firm(s) and equipment supply and installation firm(s)

The construction firm(s) and the equipment procurement firm(s) shall be selected through the open tender for the Japanese corporations that are qualified to the specific requirements. In principle, the lowest tenderer shall win the tender and execute a construction contract or procurement contract with the executing organization.

The construction firm(s) and the equipment supply and installation firm(s) shall construct the facilities, supply, deliver and install necessary construction materials and equipment according to the terms and provisions of contracts, and provide technical guidance for operation, maintenance and management of the installed equipment to the Lao side.

Also, even after the facilities and equipment have been handed over, they shall cooperate at the rear with the help of the manufacturers and dealers so that the spare parts and consumables of the main equipment are supplied without charge (during the warranty period) or with charge (otherwise) and technical assistance is provided.

(4) Japan International Cooperation Agency

The Grant Aid System Division of Japan International Cooperation Agency shall give due guidance to the consultant, construction firm(s) and equipment supply and installation firm(s) so that the project is implemented in conformity with the Grant Aid System. Also, it shall hold consultations with the executing organization of this project as necessary for untroubled implementation of the project.

(5) Preparation of implementation plan

The representatives of the executing organization on the Lao side and the consultant shall review the implementation plan during the implementation design period. They shall make clear the scopes of the construction work Japan and Laos take charge, confirm through consultations the starting time and the method of each work and discuss so that all the works can be carried out smoothly according to the implementation schedule in this report. In this plan, there is no specific work that must be performed on the Lao side prior to construction of the facilities. However, it is desirable that the part related to the construction site of this project among the drainpipe laying under the Master Plan of ADB be completed before commencement of the construction work.

### 3-1-2 Implementation Conditions

Described below are those items to be noted for implementation of the project. They should be fully taken into consideration when making the implementation plan.

(1) Schedule control

Laos has a dry season and a rainy season. During the rainy season (mid-April to mid-October), it rains by 80% or more of the total annual rainfall (the average of these past ten years is 1,700 mm or more). In order to complete the construction successfully as scheduled, the work must be done efficiently during the dry season. For this, those concerned on the Lao side, the consultant and the representative of the construction firm should hold a meeting periodically to control and adjust the schedule.

(2) Safety control

The construction of this project takes place on the NUOL campus. If the construction of the main building of the new university based on the ADB fund support also takes place as scheduled, both constructions would go on simultaneously. On the other hand, as the university as well as its attached kindergarten, elementary school and high school keep their regular schedule, full care must be taken to ensure safety of students, pupils and employees on the campus. It is necessary to partition off the construction area including where temporary facilities are built from the rest of the campus. At the same time, the consultant and those concerned on the Lao side should cooperate and make careful arrangements to ensure the access route for construction vehicles, safety passages, etc. with the construction firms of this project and the ADB project.

3-1-3 Scopes of works

It is mutual cooperation between Japan and Lao People's Democratic Republic that makes implementation of this project successful. When this project is implemented under the Japan's Grant Aid, it is advisable that governments of Japan and Laos undertake the scopes of works as described below respectively.

(1) Undertakings borne by Japanese Government

Japanese Government undertakes consultation of this project and the works related to construction of the facilities, procurement and installation of equipment as described below.

1) Consultation

- A. To prepare implementation design document for the facilities and equipment subject to this project and their tender terms document.
- B. To cooperate in selecting the construction firm(s) and equipment supply and installation firm(s) and executing contacts for the project.

C. To supervise instructions for the construction of facilities and delivery, installation, operation and maintenance of the equipment.

2) Construction of facilities, supply and installation of equipment

A. To construct facilities subject to this project

B. To procure construction materials and equipment subject to this plan, transport and deliver them to the site

C. To instruct installation of the equipment subject to this project, conduct a trial run and make adjustments.

D. To explain and instruct operation and maintenance methods for the equipment subject to this project

(2) Undertakings borne by Lao Government

Lao Government undertakes works related to the exterior site, laying of the cables for the internet system connection as well as transactions required for the tax exemption as described below.

1) Exterior site work

To garden in the site where FEM and the Center are to be built

2) To purchase furniture and equipment as well as transfer of existing machines, furniture and equipment

3) To take measures so that Japanese firms will be exempted from the tax, local tax and various financial loads imposed by Lao Government on purchase of goods and provision of services executed according to the formally approved contracts.

4) To provide measures to facilitate speedy custom clearance and surface transportation procedure for the equipment and materials to be exported from Japan or other foreign countries according to the approved contracts.

5) To provide measures to facilitate procedures for those Japanese who enter Laos and stay there to carry out their roles for the project.

6) To issue approvals and permissions required for implementation of this project

7) To pay all the necessary expenses other than those borne by Japanese Government

### 3-1-4 Consultant supervision

#### (1) Implementation supervision policy

Under the policy of the Grant Aid System of Japanese Government, the consultant forms, based on the concept of the basic design, a team that is responsible to execute the project including preparation of the implementation design to achieve smooth and successful implementation. The implementation supervision policy for this project is outlined below.

- 1) To keep close contact with those who are in charge of the project representing related organizations of both countries so that construction of the facilities and installation of equipment will be completed without delay.
- 2) To provide quick and appropriate guidance and suggestions from the neutral standpoint to the construction firm, equipment supply and installation firm and others concerned.
- 3) To provide appropriate advice and suggestions as to installation of equipment, handling and management after it is handed over, to confirm that construction of the buildings and installation of equipment have been completed and terms of each contract are fulfilled, to observe handing over the facilities and equipment and obtain an approval of receipt from Lao side. This completes the consultation operation.

#### (2) Construction supervision plan

As the types of construction works involved in this project are versatile, a resident supervisor (in charge of construction) is appointed and the following engineers are dispatched from time to time, keeping step with the progress of the construction works.

- Manager of general affairs (Overall coordination, process control)
- Engineer in charge of construction (Confirmation of construction methods, design concept, construction drawings, specifications of materials, etc.)
- Engineer in charge of structure (Verification of the ground conditions, foundation work, framework)
- Engineer in charge of electrical installation (Power supply & distribution system, electric service and substation, etc.)
- Engineer in charge of mechanical installation (Utility supply and processing system, air conditioning, water supply, drainage and hygiene system, etc.)
- Engineer in charge of equipment (Instruction for equipment installation, adjustment with the facility, confirmation of operation instructions, etc.)



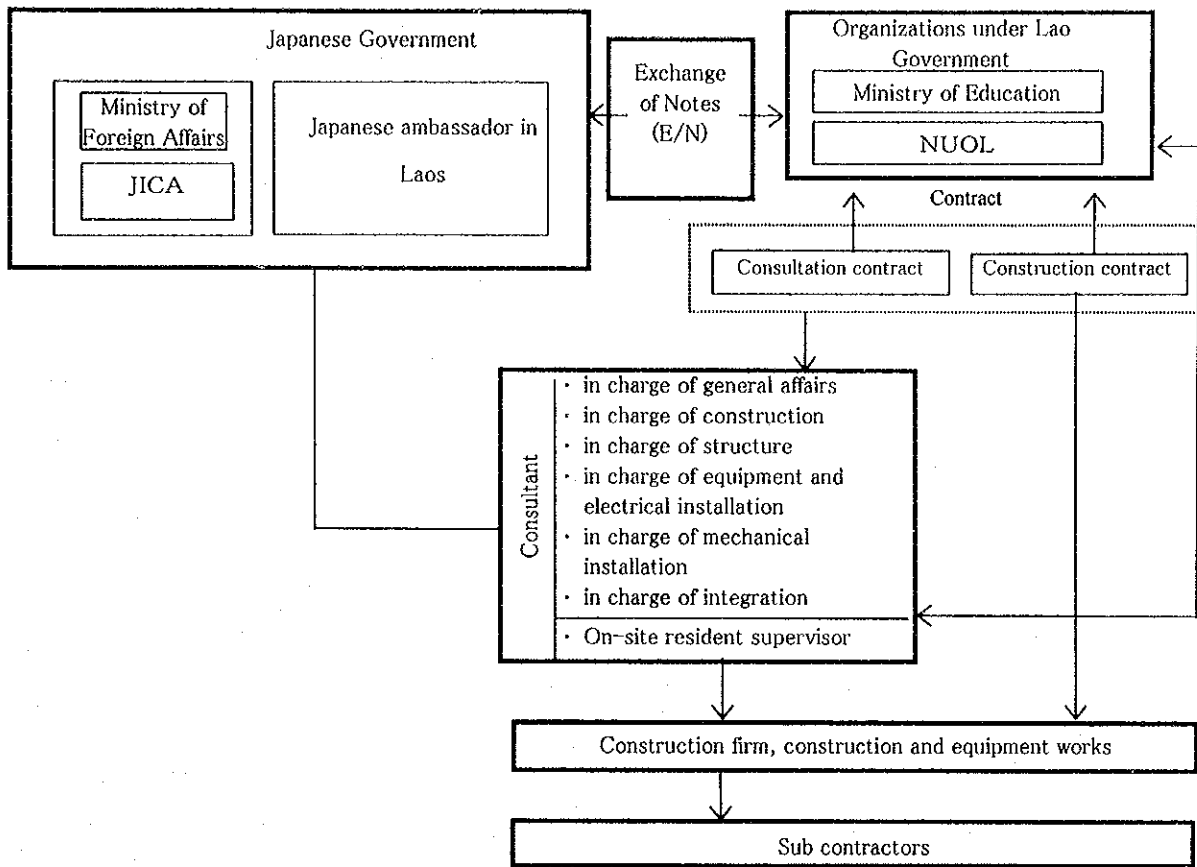


Fig.3.1.1 Construction Administration System

### 3-1-5 Procurement plan

#### (1) Construction material

In principle, the construction materials are procured locally. However, Lao products among them are sand and gravel as solidification material for concrete, bricks, wood, concrete products, logs for support and other than these are imported. Those items that are difficult to procure and those that are necessary to assure the required quality and level for the project are procured from Japan. The table below shows how each construction material is procured.

Table 3.1.1 Procurement of construction and equipment materials

Procurement of construction materials					
Material	Local condition		Procurement plan		
	Status (Note)	Imported from	On-spot	Thailand	Japan
(Construction material)					
1. Solidification material for concrete (gravel, sand)	◎		○		
2. Cement	◎	Thailand	○		
3. Reinforcing rods	◎	Thailand	○	○	
4. Concrete blocks	◎		○		
5. Lumber	◎		○		
6. Terazo	◎		○		
7. Tiles for floor and wall	◎	Thailand	○	○	
8. Wooden fittings	◎	Thailand	○	○	
9. Metal fittings	◎	Thailand	○	○	
10. Fixtures for fittings	○	Thailand, Japan		○	○
11. Paint (general material)	◎	Thailand	○	○	
12. Water-proofing agent	○	Thailand, Japan		○	○
13. Glass	◎	Thailand	○	○	
14. Concrete products	◎		○		
15. Wooden furniture	◎	Thailand	○	○	
16. Metal sheets for roof	◎	Thailand	○		
17. Plywood	◎	Thailand	○	○	
18. Steel frames	○	Thailand		○	○
Procurement of equipment materials					
Material	Local condition		Procurement plan		
	Status (Note)	Imported from	On-spot	Thailand	Japan
((Equipment material)					
1. PVC cable tubes	◎	Thailand	○	○	
2. Wires, cables	○	Thailand	○	○	
3. Control panels, transformer	△	ASEAN, Japan		○	○
4. Lighting equipment	○	Thailand	○	○	○
5. Telephone system equipment	○	Thailand		○	
6. Special light electrical equipment	△	Thailand, Japan		○	○
7. Sanitary earthenware	◎	Thailand	○	○	
8. Pumps	○	Thailand, Japan		○	○
9. Air-conditioning system	○	Thailand, Japan		○	
10. Fans	○	Thailand, Japan		○	○

Note) ◎ : Easily available in the Lao market  
 ○ Available in the Lao market but limited  
 △ Hard to obtain in the Lao market

## (2) Equipment material

Summarized in this section is the basic concept concerning procurement of the equipment materials taking their availability in Laos and ease of service and maintenance which may be needed in the future into consideration. Also described here are the specific reason applicable to the material procurement in Japan or a third country and the route to be taken.

### 1) Local procurement

As far as copying machines, stencil duplicators and computer related devices are concerned, local procurement is adopted in principle, since there are authorized dealers in Vientiane whose supply of consumables and after-sale service are expectable continuously.

With the electric appliances such as TV and VTR sets, there are many shops that can supply them. However, as they are not authorized by manufacturers and their technical level is doubtful, it is not advisable to use them as local suppliers. Therefore, the electric appliances should be procured in Japan or a third country and it should be assured that the firms that receive the orders provide proper after-sale service without fail. In case a failure occurs with such equipment and if it is not a critical one, it can be corrected within Laos because there are a number of private shops in the city and it is also possible to entrust the Electronics Engineering and Electric Engineering Departments in National University of Laos for repair. In case of a failure that cannot be repaired locally, many of the manufacturers of these equipment assured that their authorized dealers in Thailand can provide after-sale service and cope with troubleshooting in Laos as well.

### 2) Procurement from Japan

For the economical reason, supposedly many of the planned equipment are mainly procured from third countries like Thailand but special equipment such as tatami mats, book binders and cutters are procured from Japan.

### 3) Procurement from third countries

These past years, many of Japanese manufacturers have shifted their plants to the countries in South-East Asia. With the equipment manufactured in these countries, it is cost-saving to procure them where they are manufactured. Also as their authorized dealership network has been established in the neighboring countries (e.g., Thailand and Singapore), most of the equipment can be procured at less transportation costs.

(3) Transport method and point of delivery

When any equipment or material is shipped from Japan, the construction material should be, in principle, packed in wood frames or a container and transported by sea and the equipment should be shipped in a container by sea. Laos uses Bangkok Port in Thailand as its receiving port as there is frequent regular service from major ports in Japan and other ASEAN countries to the Bangkok Port.

The most typical transportation route for the material and equipment procured from Japan or other ASEAN countries is as follows.



When materials and equipment are procured in Japan, it takes, by estimation, two months from shipping to arrival at the including the custom clearance procedures. When they are procured in Thailand, one week for the surface transport through both countries plus one week for the custom clearance. In the latter case, the Thai carrier must have a license for export to Laos. At Tana Lein, the goods should be stored in the bonded warehouse and after passing the custom inspection, they are carried to the site by the Lao carrier. The tax exemption procedure should be taken in Laos in advance.

3-1-6 Implementation Schedule

(1) Project implementation schedule

In the case of FEM, implementation is carried out in two main stages. One is the detail design stage in which the tender document is prepared and the main stage in which the tender and construction are executed. After signing of the Exchange of Notes (E/N) for the detail design stage, the tender document is prepared and after signing the E/N for the main stage, construction and equipment procurement works are carried out.

The table below shows the specific time scheduled for each period.

Implementation Schedule of FEM

	Detail design stage	Main stage
Detail design period	3.5 months	---
Tender period	---	3.5 months
Construction, equipment procurement period	---	12.0 months
<b>Total</b>	<b>3.5 months</b>	<b>19.0 months</b>

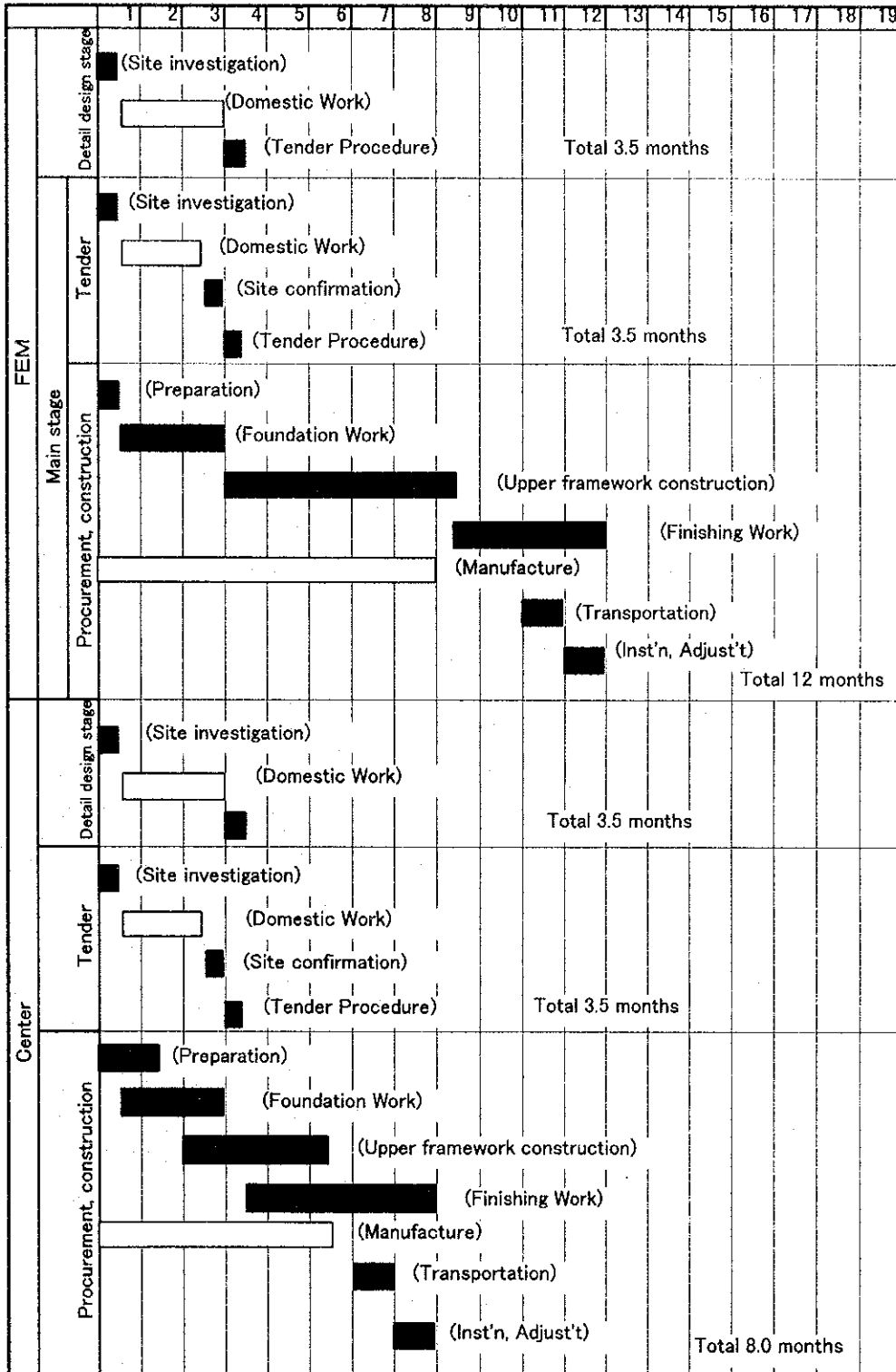
Implementation Schedule of Center

	Design stage	Main stage
Detail design period	3.5 months	---
Tender period	---	3.5 months
Construction, equipment procurement period	---	8.0 months
<b>Total</b>	<b>3.5 months</b>	<b>15.0 months</b>

(2) Implementation Schedule Table

The diagrammed schedule for this project is shown on the following page.

Table 3.1.2 Implementation Schedule Table



### 3-1-7 Obligations of Recipient Country

Undertakings borne by Lao Government are as described in Section 3-1-3 "Scope of Works". The expenses of the exterior work and the purchase of furniture and fixtures are estimated kip. 295,423,000 in total.

The breakdown of the estimation is shown in Table 3.1.3.

Table 3.1.3 Expenses borne by Lao side

Item	Amount (unit : 1000 Kip.)
<b>【Center】</b>	
①Exterior work including planting trees	35,160
②Purchase of furniture and fixtures	62,682
Sub-total	97,842
<b>【RFM】</b>	
①Exterior work including planting trees	76,960
②Purchase of furniture and fixtures	120,621
Sub-total	197,581
Total	295,423

### 3-2 Maintenance Plan

#### 3-2-1 Maintenance and Administration Organization

At present, the Facility Control Department of NUOL is solely in charge of maintenance and administration of the facilities and equipment on its Don Dock Campus. In the north-west section of the campus, there is a maintenance workshop for wood working and metal working where maintenance and repair of the buildings and furniture are handled. On the other hand, orders are placed outside of the campus for the maintenance and repair work of the electric and mechanical devices. For this reason, a special consideration has been taken for the selection procedure of the furniture and equipment that are procured for this project, so that the workshop on Don Dock Campus can select them by itself or through the system that makes use of the local dealers. Particularly, the top priority is placed on the maintenance-free models to minimize possibility of trouble after the project is implemented. Therefore any measures for the maintenance management of facilities and equipment can be taken locally when the project is implemented.

### 3-2-2 Maintenance Expenses

#### (1) Facility related expenses

The budget for the heat and light expenses is not calculated for each department but the total amount for the entire Don Dock Campus is paid by the university head office. Implementation of this project will increase the heat and light expenses of NUOL Don Dock Campus and the estimated amount is as follows.

	FEM	Center
•Power expense	Kip. 75,517,000	Kip.78,769,000
•Water expense	Kip. 492,000	Kip. 513,000
Total	Kip. 76,009,000	Kip.79,282,000

No additional telephone charges are included because the outside lines remain unchanged. Small amount of expenses required for small repairs such as lamp replacement is not included in calculation, either.

#### (2) Equipment related expenses

Annual operation and maintenance expenses of the equipments that will be implement by this project will be estimated as follows.

FEM : Kip. 17,398,500(not including depreciation expense or power expense)

Center : Kip.2,710,000( not including depreciation expense or power expense)

#### (3) Financial analysis

Described below is a financial analysis of the expenses of NUOL increased due to improvement of the facilities and equipment.

##### 1) Income

The most part of the income of NUOL is the budget allotment from the Ministry of Education and only about 10% is from its own revenue source which consists of the tuition from the special pay students and the real estate rent income.

##### 2) Expenditure

The estimated increase in expenses due to implementation of this project is itemized below. The total increase is about Kip.150,043,500 as compared with the total expenses of the year 1999 to 1999. In terms of the NUOL budget,3.7 % increase is estimated.

##### ① Personnel expenses

According to the planned number of personnel, the faculty staff and clerks are increased by ten people, total of twenty people. Calculation of the pay for one person (Kip./month) based on the salary of a typical public official (a high-school graduate) result in the following figures.

Basic pay	:	130,000	
Pay attached to a post (Chief clerk)	:	7,000	
Spouse allowance	:	5,000	
Dependency allowance (2 children)	:	18,000	
Danger money	:	5,200	Total: 165,200

Thus, the increase in the personnel expenses amounts to Kip.165,200/month • person x 12 months x 20 people = Kip.39,648,000, which means 2.92% increase of “Basic pay + pay attached to a post + various allowances”.

② Heat and light expenses

As described in the above (1) “Facility related expenses”, it is Kip.93,407,500(76,009,000+17,398,500).

③ Other basic expenses (Communication expenses, transportation expenses, consumable expenses, etc.) :

Supposing that these expenses increase in proportion with increase in the number of personnel, the amount increased is obtained by the following calculation.

$$\text{Kip.581,740,000}(\times 1) \times 0.0292 = \text{Kip.16,987,000}$$

(×1: General expense of NUOL 1998~99)

All the above add up to Kip.150,042,500.

The increase in expenses as described above raises the expenditure of NUOL by 3.7 %. If that amount is paid by the national budget, it means an increase in the budget of the Ministry of Education by 2.4 %.

The Lao Government has stated, “The top priority should be placed on the development of talent to create labor force that will meet the requirements for the national development” and has increased her investment to education. The fact is, however, the expenditure in the field of education remains at a little less than 10% of the public investment. What is more, propagation of the elementary and junior high school education has a priority in terms of the distribution of the investment.

The Ministry of Education should increase the budget for NUOL so that its policy target will be complemented. After all, the estimated amount of increase is fully within the obtainable range.

On the other hand, according to the Master Plan of the Laos Advanced Education Rationalization Plan supported by ADB, “self administration of the university” is its major concept. The target held currently is “to increase the self financial source to 50%”. For that, a proposal has been made to execute the “fair benefit principle” and to pursue complete collection of tuition while preventing any student from losing his/her enrollment opportunity for a financial reason. NUOL



should not only adopt and execute this proposal immediately but also make efforts to increase its income by holding paid special lectures during vacations and promoting use of the facilities by outside organizations.

It is a challenge and of high importance for NUOL to develop itself by lessening its reliance on the increase of the budget allotted by the Ministry of Education, adopting the market economy principle and achieving profits.

## **Chapter 4 Project Evaluation and Recommendations**

4-1 Project Effect

4-2 Recommendation

## Chapter 4 Project Evaluation and Recommendations

### 4-1 Project Effect

FEM was established in NUOL in 1996 in order to solve the shortage of human resources who are required for promotion of transition to a market economy of Laos and who can lead the market economy society whether government employees engaged in institution of regulations, administration, investment and accounting control or private citizens (according to ADB's calculation, there is a shortage of 20,000 people educated in higher-level institutes) and to educate such people in need continuously. Also, an agreement was reached between Laos and Japan for the plan to establish the Center which will initiate its activities within the year of 2000 to bring up people who can transact market economy affairs, to promote mutual understanding between Laos and Japan and to strengthen human relationship. The project based on this agreement covers construction of facilities and provision of equipment to establish activities and management of FEM and the Center. The effects that can be expected by implementation of this project are as follows.

- 1) The educational activities in FEM will be activated, their quality improved and a model place for improvement of the entire NUOL provided.
- 2) FEM and the Center will serve as institutes with a stable capacity to supply sufficient number of high-level personnel to the society.
- 3) The Center will be able to offer training courses as listed below periodically, efficiently and effectively.
  - ① Business training course to provide trainees to be engaged in business in Laos with practical business knowledge.
  - ② Computing course to provide trainees with computer operation technique for business application
  - ③ Business Japanese training course to teach business Japanese necessary for trainees to be engaged in business in Laos
  - ④ Japanese training course for study in Japan to teach Japanese necessary for trainees planning to study in Japan
- 4) A place for promotion and activation of Japan-Laos exchange projects will be available.

When the above expected effects are achieved, the firm foundation for human resources that will be relied upon for the future Lao economy will be successfully formed, transition to the market economy will be advanced and NEM which Laos is aiming at will be achieved in a shorter period of time.

At the same time, friendly relation between Laos and Japan will be strengthened and their mutual understanding will be enhanced.

The first beneficiaries of implementation of this project are students of FEM, employees and citizens engaged in business in Vientiane. However, the students and members of the society educated there will be involved in transition to a market economy in Laos, lead the Lao economy and be in the position giving influences to all citizens in Laos. In this way, it can be said that all the citizens will eventually receive benefits indirectly.

As described above, the purpose of this project matches with upbringing of human resources which is required urgently in Laos and it is possible to control and maintain the facilities and equipment provided through this project on the Laos side independently. Therefore, it is considerable to implement this project upon Japanese grant aid.

#### 4-2 Recommendation

(1) Operation of FEM as well as NUOL

To increase the efficiency of self-supported recovery of expenses related to operation of NUOL is one of the most important matters in the "Post-Secondary Education Rationalization Project" of ADB. It recommends that the attendant benefit principle should be adopted to compensate for shortage of the funding capacity of the government and to achieve independent management of NUOL while taking consideration so that no one will lose an opportunity to be enrolled because of financial reasons. The contents of the proposal of this project are shown in Table 4.2.1 "Plan for recovery of operation expenses".

Table 4.2.1 Plan for recovery of operation expenses

Measure	Principal contents	
Collection of tuition	Collection of tuition	50,000 Kip at minimum per year per student (currently 20,000 Kip) Annual total 175 million Kip from 3,500 students
	Expense recovery rate	This amount is equivalent to about 50% of 341.4 million Kip (estimated by ADB), which is the annual upkeep expenses required for NUOL.
Entrance fee	All students	Collection of 2,000 Kip per person
Collection of facilities usage fees	Applicable item	Fees for use of facilities such as library and laboratories
	Expense recovery rate	The target is recovery of 50% of operation and upkeep expenses of applicable facilities by 2001.
Self-bearing of living expenses	Applicable item	Personal living expenses such as dormitory fees, which were formerly covered by subsidy.
	Expense recovery rate	The target is self-bearing of 100%.
Grant of scholarship	Grantees	Students unable to pay expenses
	Fund source for scholarship	A part of collected tuition and public education funds. Increase of the public education funds for grant of scholarship can be covered by less than 1% amount of the current ordinary budget for education.
	Other assistance to students	Introduction of a student loan scheme is to be examined.

Source: ADB; Report and Recommendation ....

In fiscal of 1989-99, however, only 35.3% of the estimated recovery amount proposed in the plan stated above, which was calculated on the basis of fiscal 1997, was achieved. In addition, the plan to collect tuition from students (excluding special excellent students), which is proposed in said plan, has not yet been started. Furthermore, the plans of collection of fees for special lectures, collection of facilities usage fees and collection of dormitory fees, etc. for covering 50% of university operation expenses have not yet been implemented. The interim report of ADB that evaluates progress of the program, which was issued in January 1999, strongly urges to review the planned amounts because of major variation of currency exchange rate and implementation of the program.

When this project is implemented for FEM, the expenses will surely increase with its facilities completed, equipment provided and necessary human resources recruited. To secure the revenue source to cope with such expenses is the most important matter. According to the calculation of expenses to be increased (see 3-2-2 "Upkeep and management plan" of this report), if such expenses are born by the Lao Government, operation will be possible by increasing the budget of the Ministry of Education by 3.7%. However, reform of consciousness and scheme is required, aiming at "establishment of benefit principle" and "securing of own revenue source", to ensure sound self-supported operation of NUOL as a whole.

(2) Securing transportation for the Center users

Training courses scheduled at the Center are mainly for members of society, and holding of evening courses is also taken into account. The public means of transportation which currently connect the center of the city (bus terminal) with the Dong Dok campus are limited to bus lines only, and at present, the bus service is available in three routes. According to the operation time schedule, as the bus in each route makes two trips per hour in such a pattern as to start from the bus terminal and to return there after making a round in the Dong Dok campus. It means that one bus passes through the Dong Dok campus approximately every ten (10) minutes. The bus makes 13 or 14 stops on the way, and the required traveling time is 40 to 50 minutes each way. Operation of one additional route is scheduled, but the date of commencement of operation has not yet been determined.

Table 4.2.2 Bus operation time schedule (Dong Dok campus routes departing from bus terminal)

	Route 1	Route 2	Route 3	Route 4 (being planned)
06 hours	30,50	00,15,30,50	40	20
07 hours	10	00,30,50	00,20,30	10
08 hours	10,50	10,30,50	00,30	20
09 hours	10	20,40	00,30	10
10 hours	10	00,20,40	00,30	20,50
11 hours	10,40	10,30,50	00,30	
12 hours	10	10,30,45	00,30	20,40
13 hours	20,50	00,20,40	00,30	
14 hours	40	00,40	00,30	40
15 hours	20,50	00,20,40	00,30	10
16 hours	20	00,15,30,50	00,30	40
17 hours	10,40	10,30	00,30	10
18 hours	30			

The last trip of these bus routes is scheduled to depart the bus terminal at 18:30, to pass through Dong Dok campus at around 19:20 and to return to the bus terminal at around 20:10. As the closing hour of government employees of Laos is 16:00 and it is usual that the normal closing hour is 17:00 for workers of the private enterprises, it is anticipated that evening courses at the Center are set between 18:00 and 21:00. Therefore, if the current bus time schedule remains unchanged, it is hard for those who do not have their own means (such as motor cycles and private cars) to attend evening courses. Two methods are available for solving this problem.

1) Extension of public bus operation time:

To increase one or two trips in the time zone of 20:00 -21:00 in each route, after the current last trip. This increase requires negotiations with the Bus Public Corporation, and the judgment of the operator on the demand and boarding rate will probably determine the feasibility. Furthermore, extra-ordinary trip scheme, that is, the Center leases public buses as matched with evening course schedule, can also be considered. But negotiations with Bus Public Corporation are required including the leasing cost.

2) Operation of Center's school buses:

Since NUOL possesses minibuses, which are operated for the entire university and for other faculties, these NUOL's buses are to be leased by the Center together with the driver during the period in which evening courses are held. This is an internal matter of NUOL and it is considered to be feasible if a driver can be arranged. However, it is necessary to be studied in NUOL about the conditions of use of these buses bound by ADB.

(3) Upkeep and management of facilities, equipment and machines:

Upkeep and management of facilities, equipment and machines will be executed by the Facilities Management Section of NUOL Headquarters, after construction of facilities and procurement of equipment are completed and they are delivered to NUOL as implementation of this project. This section has a workshop of wood working and metal working on the Dong Dok campus for implementation of maintenance and repair to facilities, equipment and machines. The works done at this workshop are what belong to the scope of works of so-called carpenters, furniture and fitting craftsmen and sheet metal and metal working craftsmen. Maintenance and repair to electrical and electronic equipment and machines are out-sourced.

Creation of a plan that eliminates the necessity of maintenance to the most possible extent is intended in this project. However, periodic inspection and servicing are essential for facilities, equipment and machines such as air-conditioning system and pumps and for machines such as copying machines. Implementation of periodic inspection and servicing will extend service lives of these equipment and machines and will save the upkeep and management expenses as a result. What require periodic inspection among the facilities,

equipment and machines included in this project are as follows:

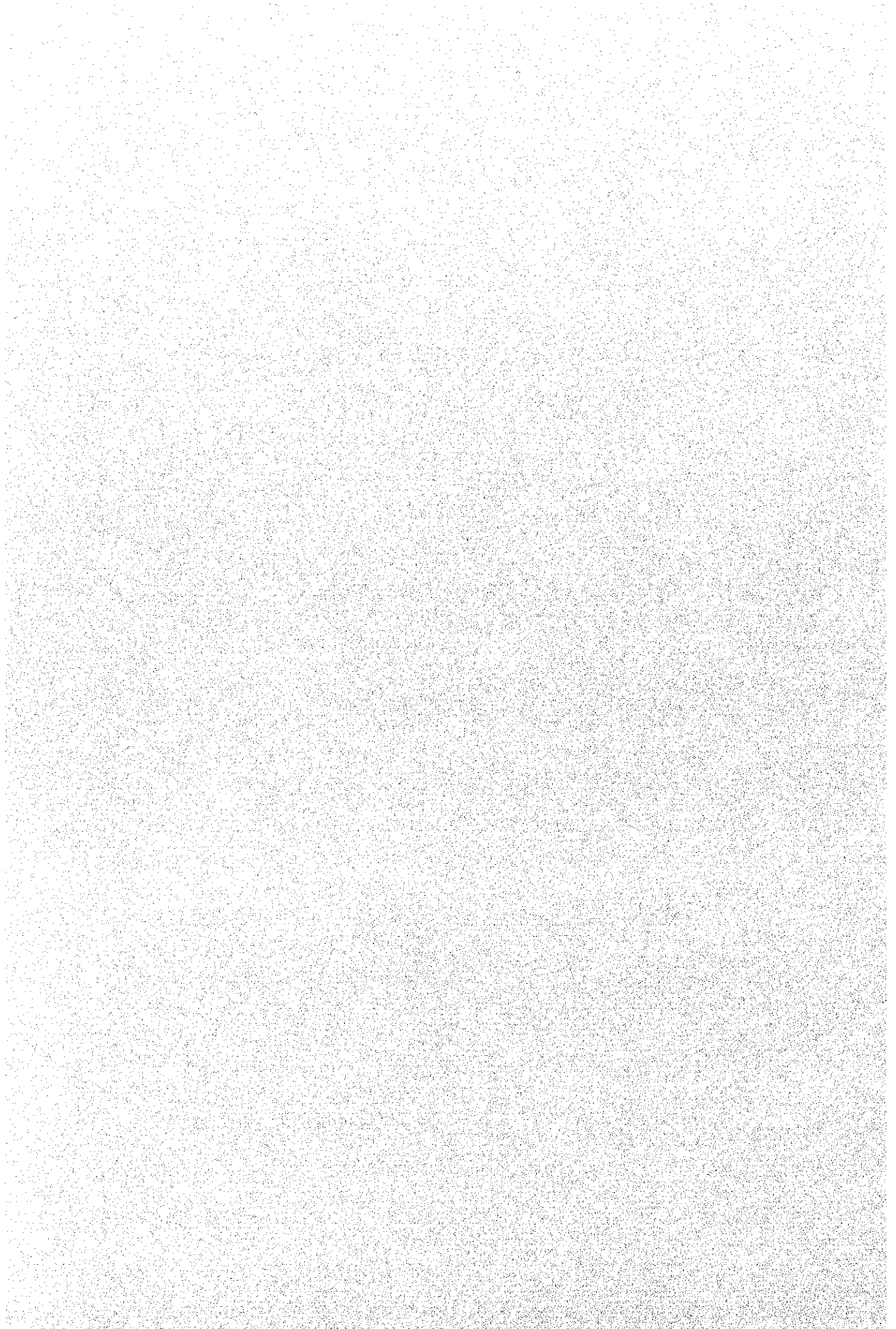
- 1) Facilities and equipment: Sewage purifying tank, air- conditioning system, fire alarming equipment
- 2) Machines: Copying machine

All these are what are installed, not only at FEM, but also in other faculties, university headquarters and common facilities on the NUOL campus. It is therefore desirable that NUOL establishes the maintenance frame including conclusion of contracts with outside companies for periodic inspection and servicing in the entire Dong Dok campus.



## **Appendices**

1. Member List of the Survey Team
  - 1-1 The Basic Design Study
  - 1-2 The Draft Report Explanation
2. Survey Schedule
  - 2-1 The Basic Design Study
  - 2-2 The Draft Report Explanation
3. List of Party Concerned in Lao P.D.R.
4. Minutes of Discussion
5. Cost Estimation Borne by the Government of Lao P.D.R.
6. Result of Geographic and Geologic Survey on the Project Site



## 1. Member List of the Survey Team

### 1-1 The Basic Design Study

	Position	Name	Organization
1	Leader	Mr. Makoto Aoki	Resident Representative JICA Lao Office
2	Project Coordinator	Mr. Hidenori Nakamura	Third Project Management Division, Grant Aid Management Department, JICA
3	Chief Consultant / Architectural Planner	Mr. Yoshio Kawai	Azusa Sekkei Co., Ltd.
4	Facilities Planner	Mr. Yoshifumi Hoshiai	Azusa Sekkei Co., Ltd.
5	Equipment Planner	Mr. Yasumichi Doi	Azusa Sekkei Co., Ltd.
6	Construction Planner / Cost Estimator	Mr. Nobuyuki Sugawara	Azusa Sekkei Co., Ltd.

### 1-2 The Draft Report Explanation

	Position	Name	Organization
1	Leader	Mr. Kouichi Yamada	Third Project Management Division, Grant Aid Management Department, JICA
2	Chief Consultant / Architectural Planner	Mr. Yoshio Kawai	Azusa Sekkei Co., Ltd.
3	Equipment Planner	Mr. Yasumichi Doi	Azusa Sekkei Co., Ltd.

## 2. Survey Schedule

### 2-1 The Basic Design Study

No.	Date	Activity
1	Aug. 2 Mon.	Departure from Tokyo by TG641 (11:00) Arrival at Bangkok (15:30) (Mr. Kawai & Mr. Hoshiai & Mr. Doi & Mr. Sugawara)
2	Aug. 3 Tue.	Departure from Bangkok by TG690 (08:20) Arrival at Vientiane (09:30) Meeting at JICA Laos Office Courtesy call to Embassy of Japan and CIC
3	Aug. 4 Wed.	Courtesy call to Ministry of Education (MOE) and NUOL and FEM Site Survey
4	Aug. 5 Thu.	Site Survey
5	Aug. 6 Fri.	Site Survey
6	Aug. 7 Sat.	Site Survey
7	Aug. 8 Sun.	Departure from Tokyo by JL717 (11:00) Arrival at Bangkok (15:15)(Mr. Nakamura) Site Survey
8	Aug. 9 Mon.	Departure from Bangkok by TG690 (08:20) Arrival at Vientiane (09:30) Site Survey Meeting at JICA Laos Office and Courtesy call to Embassy of Japan
9	Aug. 10 Tue.	Joint Meeting with FEM and NUOL Meeting with Project Type Technical Cooperation Study Team
10	Aug. 11 Wed.	Joint Meeting with FEM and NUOL Meeting with Project Type Technical Cooperation Study Team
11	Aug. 12 Thu.	Internal Meeting Explanation of Inception report to FEM, NUOL, MOE and Site Survey
12	Aug. 13 Fri.	Meeting with FEM and NUOL Survey
13	Aug. 14 Sat.	Internal Meeting
14	Aug. 15 Sun.	Internal Meeting
15	Aug. 16 Mon.	Meeting with FEM and NUOL Survey
16	Aug. 17 Tue.	Discussion on the Minutes at MOE Survey
17	Aug. 18 Wed.	Signing on the Minutes of Discussion Survey
18	Aug. 19 Thu.	Departure from Vientiane by TG691(10:30) Arrival at Bangkok(11:35)(Mr. Nakamura) Continuing Survey
19	Aug. 20 Fri.	Departure from Bangkok by JL708(08:45) Arrival at Tokyo(16:35) Continuing Survey
20	Aug. 21 Sat.	Departure from Vientiane by TG691(10:30) Arrival at Bangkok(11:35) (Mr. Kawai & Mr. Hoshiai & Mr. Doi & Mr. Sugawara)
21	Aug. 22 Sun.	Departure from Bangkok by TG772(07:35) Arrival at Tokyo

## 2-2 The Draft Report Explanation

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No.	Date	Activity
1	Oct. 21 Thu.	Arrival at Vientiane by TG690 (09:30) (Mr. Kawai & Mr. Doi) •Meeting at JICA Laos Office •Courtesy call to Embassy of Japan •Courtesy call to Ministry of Education
2	Oct. 22 Fri.	Courtesy call to NUOL and FEM Meeting with FEM
3	Oct. 23 Sat.	Internal Meeting
4	Oct. 24 Sun.	Internal Meeting
5	Oct. 25 Mon.	Arrival at Vientiane by TG690 (09:30) (Mr. Yamada) •Meeting at JICA Laos Office and Courtesy call to Embassy of Japan •Courtesy call to Embassy of Japan •Courtesy call to NUOL •Meeting with NUOL and FEM
6	Oct. 26 Tue.	Discussion on the Minutes at NUOL
7	Oct. 27 Wed.	Signing on the Minutes of Discussion Report to JICA and Embassy of Japan
8	Oct. 28 Thu.	Departure from Vientiane by TG691 (10:30) Arrival at Bangkok (11:35) (Mr. Kawai & Mr. Doi) Departure from Vientiane by VN820(13:00) Arrival at Hanoi(14:05) (Mr. Yamada)

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### 3. List of Party Concerned In Lao P.D.R.

Organization	Position	Name
Committee of Foreign Investment Management & Economic Cooperation with Foreign Countries (CIC)	Director General , Dept. of International Economic Cooperation (DOIEC)	Dr. Bountheuang MOUNLASAY
	Deputy Director General, DOIEC	Dr. Soulasith OUPRAVANH
	Division Chief, Bilateral Cooperation Div., DOIEC JICA Expert	Mr. Latsamy KEOMANY Mr. Watanabe
Ministry of Education	Director, Cabinet	Mr. Bounthavy IMSIEMMAY
	Director, Dept. of Planning and Cooperation (DOPC)	Dr. Sikhamtata MITARAY
	Deputy Director, DOPC	Mr. Ouam SENGCHANDAVONG
	Official of External Relations, DOPC Director, Dept. of Vocational and Higher Education	Mrs. Laongkham KOUFHOL Mr. Douangta BOUNLAVONG
The National University of Laos	Rector	Dr. Bosengham VONGDARA
	Vice-Rector	Mr. Sayamang VONGSAK, Ph.D.
	Vice-Rector	Mr. Tuyen DONGVAN
	Dean, Faculty of Economics and Management (FEM)	Mr. Khamlusa NOUNSAVANH
	Vice-Dean, FEM	Mr. Singkham BOUNLUTAY
	Vice-Dean, FEM	Mr. Khampheui PHOMMACHNH
	Deputy Head of Building & Service Office Deputy Head of International Affairs Office	Mr. Bounpheng SOMCHANMAVON Mr. Bounseng KANYAVONG
Laos Embassy of Japan	Counselor	Mr. Hiroshi Manabe
	First Secretary	Mr. Shigeki Kobayashi
JICA Lao Office	Resident Representative	Mr. Makoto Aoki
	Deputy Resident Representative	Mr. Nobuaki Miyata
	Staff	Mr. Nobuhiro Kumagaya
	Staff	Mr. Norihiro Ikeda
Electricite Du Laos (EDL)	JICA Expert	Mr. Hitoshi Koyabu
Enterprise of telecommunication Laos	JICA Expert	Mr. Takehiko Adachi
Lao Water Supply Authority	JICA Expert	Mr. Yasuhiro Kawashima
Meteorological Department, Ministry of Agriculture	JICA Expert	Mr. Toshio Hiroto
Ministry of Communication, Transport, Post and Construction (MCTPC)	JICA Expert	Mr. Hirotsada Matsuki
Science Technology & Environment Organization	Deputy Head of Secretariat Division	Pouvong LUANGXAYSANA
Urban Cleansing Unit Vientiane Municipality	JICA Expert	Mr. Saito
State bus Company	Plan Manager	Mr. Kham Phao NYPACA
National School of Administration and Management (NSAM)	Division of Management and Economics	Mr. Masahisa Suzuki
RABAC(Rattana Business Administration College)	Managing Director	Mr. Somphet RATTANASIM

4. Minutes of Discussion

MINUTES OF DISCUSSIONS  
ON THE BASIC DESIGN STUDY  
ON THE PROJECT FOR  
IMPROVEMENT OF THE FACULTY OF ECONOMICS AND MANAGEMENT  
OF THE NATIONAL UNIVERSITY OF LAOS  
IN THE LAO PEOPLE'S DEMOCRATIC REPUBLIC

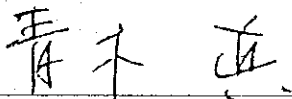
In response to a request from the Government of the Lao People's Democratic Republic (hereinafter referred to as "the Lao P.D.R."), the Government of Japan decided to conduct a Basic Design Study on the Project for Improvement of the Faculty of Economics and Management of the National University of Laos in the Lao People's Democratic Republic (hereinafter referred to as "the Project") and entrusted the study to the Japan International Cooperation Agency (hereinafter referred to as "JICA").

JICA sent to the Lao P.D.R. the Basic Design Study Team (hereinafter referred to as "the Team"), which is headed by Mr. Makoto Aoki, Resident Representative, JICA Laos Office, and is scheduled to stay in the country from August 3, 1999 to August 21, 1999.

The Team held discussions with the officials concerned of the Government of Lao P.D.R. 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.

Vientiane, August 17, 1999



Mr. Makoto Aoki  
Leader  
Basic Design Study Team  
Japan International Cooperation Agency



Dr. Bosengkham Vongdara  
Rector  
National University of Laos



Mr. Bounthavy Insisienmay  
Director, Cabinet  
Ministry of Education

## ATTACHMENT

### 1. Objective of the Project

The Government of Lao P.D.R. and the Japanese Preliminary Study Team have confirmed by the Minutes of Discussions dated August 12, 1999, that the Government of Lao P.D.R. will implement the Project for Development of the Faculty of Economics and Management (hereinafter referred to as "FEM") of the National University of Laos (hereinafter referred to as "NUOL") and for establishment of the Lao-Japan Human Resource Cooperation Center (hereinafter referred to as "the Center") in technical cooperation with the Government of Japan.

Both sides also agreed the outputs of the technical cooperation project as follows:

#### (1) For Development of the FEM of the NUOL

- 1) Quality of undergraduate education at the FEM will be improved.
- 2) Research activities of the FEM will be started and activated.
- 3) Administrative and management system of the FEM will be strengthened.

#### (2) For Establishment of the Center

- 1) Management system of the Center will be established.
- 2) Lao business persons who have practical knowledge on business will be continuously supplied through the business courses.
- 3) Graduates with sufficient ability on Japanese will be continuously supplied through the Japanese courses.
- 4) The Center will contribute to the human resources development keeping closer relation with the FEM.
- 5) The Center will be financially and technically sustainable.
- 6) The Center will be fully utilized for activities to promote mutual understanding between Lao and Japanese people.

The objective of the Grant Aid Project is to contribute the implementation of the technical cooperation project, which aims to continuously supply necessary human resources for the market-oriented economy in Lao P.D.R. and to promote mutual understandings and to strengthen the relationship between Lao and Japanese people, by constructing buildings and providing equipment for the FEM and the Center in cooperation with the Japanese technical cooperation.

### 2. Project site

The site of the Project is Dong Dok Campus of the NUOL. Construction place of buildings is shown in Annex-1.

### 3. Responsible and Implementing Agency

3-1. The Responsible Agency is Ministry of Education.

3-2. The Implementing Agency is the National University of Laos.

The organization charts of above agencies are shown in Annex-2.



#### 4. Items requested by the Government of Lao P.D.R.

After discussions with the Team, the items described in Annexes 3 and 4 were finally requested by the Lao side. JICA will assess the appropriateness of the request and will recommend to the Government of Japan for approval.

##### (1) Procurement of the Equipment

Details of items are listed in Annex-3.

##### (2) Construction of the Buildings

Details of items are listed in Annex-4.

#### 5. Japan's Grant Aid Scheme

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

5-2. The Lao side will take the necessary measures, as described in Annex-6, 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 Lao P.D.R. until August 21, 1999.

6-2. JICA will prepare the draft report in English and dispatch a mission in order to explain its contents around October, 1999.

6-3. In case that the contents of the report is accepted in principle by the Government of Lao P.D.R., JICA will complete the final report and send it to the Government of Lao P.D.R. by January, 2000.

#### 7. Other relevant issues

##### 7-1. Necessary equipment for the Center which will not be procured under the Grant Aid Project

Procurement of textbooks and video teaching materials for the Japanese language courses will be examined under the project-type technical cooperation scheme after designing of courses in the technical cooperation scheme. These materials, therefore, will not be procured under the Grant Aid Project.

##### 7-2. Necessary equipment for the Center which might not be procured under the Grant Aid Project

The Study Team will investigate a possibility of procurement of "standard books and videos" contributing to promotion of understanding Japan under the Grant Aid Project without magazines and periodicals for the library in the Center after returning in Japan. Both sides, however, confirmed that these equipment might not be procured under the Grant Aid Project after the investigation.

##### 7-3.

The Lao side commented that rooms for administrative staffs who support the overall Project-type Technical Cooperation Project are necessary in addition to rooms for administrative staffs of the FEM and the Center. The Team will confirm absence or presence of such kind of staffs to the team for Technical Cooperation Project, and will examine the necessity of independent rooms for these staffs after returning to Japan.

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7-4.

The Lao side commented that a vehicle is necessary for the Center to realize effective and efficient administration and management of the Center, while the Team explained that vehicles for administrative activities are not procured under the Japan's Grant Aid Project as a policy.

7-5.

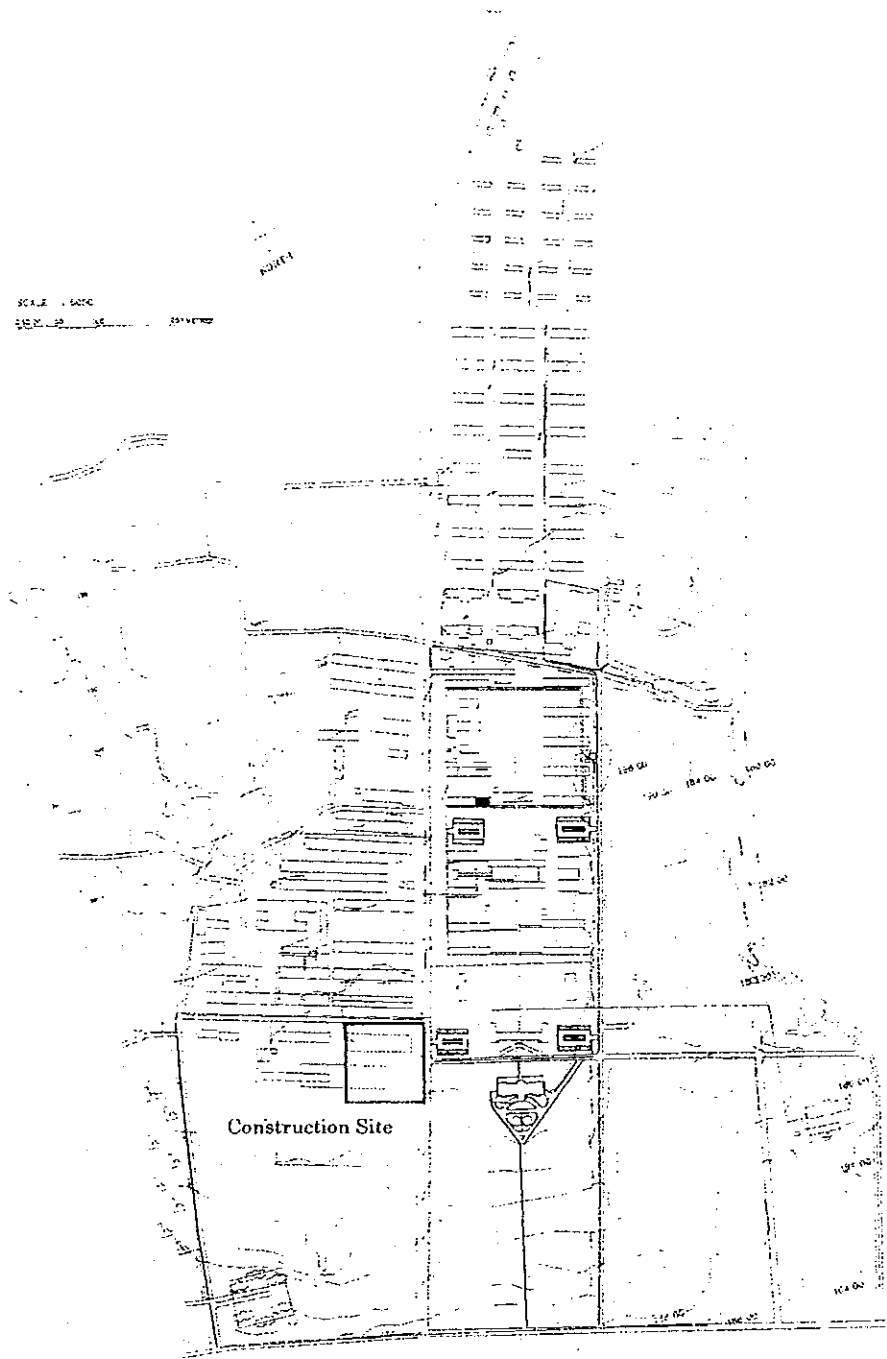
The Lao side requested to add a large lecture room with a capacity of 500 seats to the building components of the FEM, while the Japanese side considered that such a room is too large to be constructed in the FEM in the aspect of low frequency of utilization and that this is against the policy of effective utilization of facilities with minimum cost under the Japan's Grant Aid.

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ANNEX-1  
Construction Site

SCALE 1:500  
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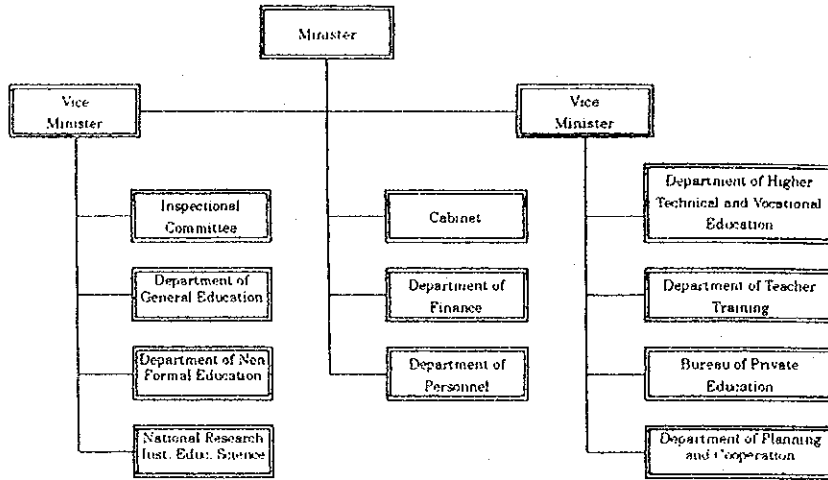


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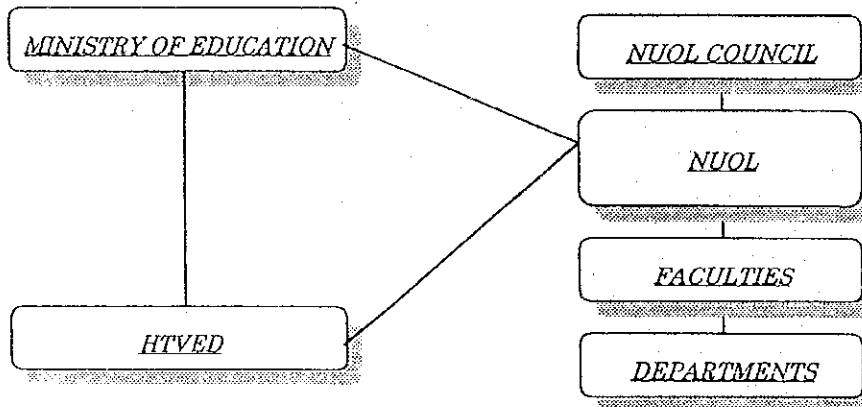
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ANNEX-2  
Organization Charts

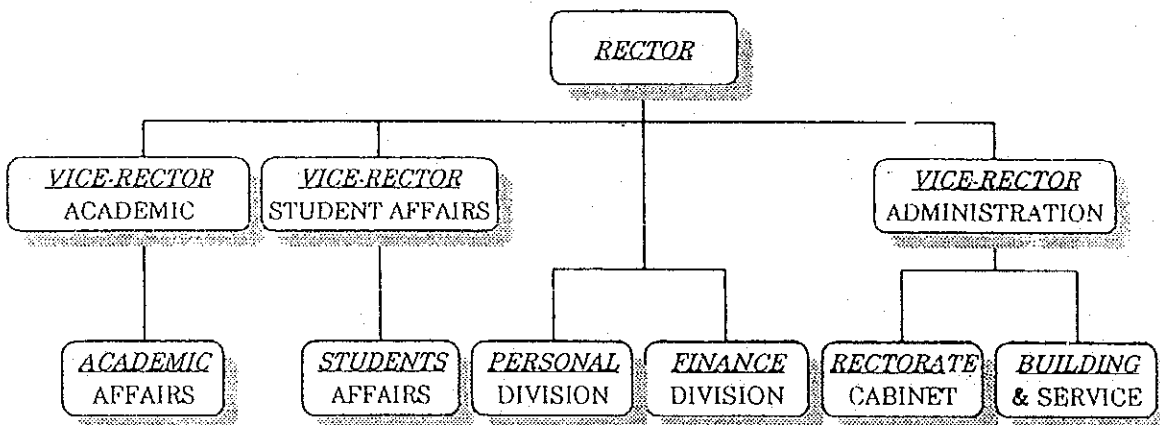
ORGANIZATION STRUCTURE of MOE



ORGANIZATION STRUCTURE



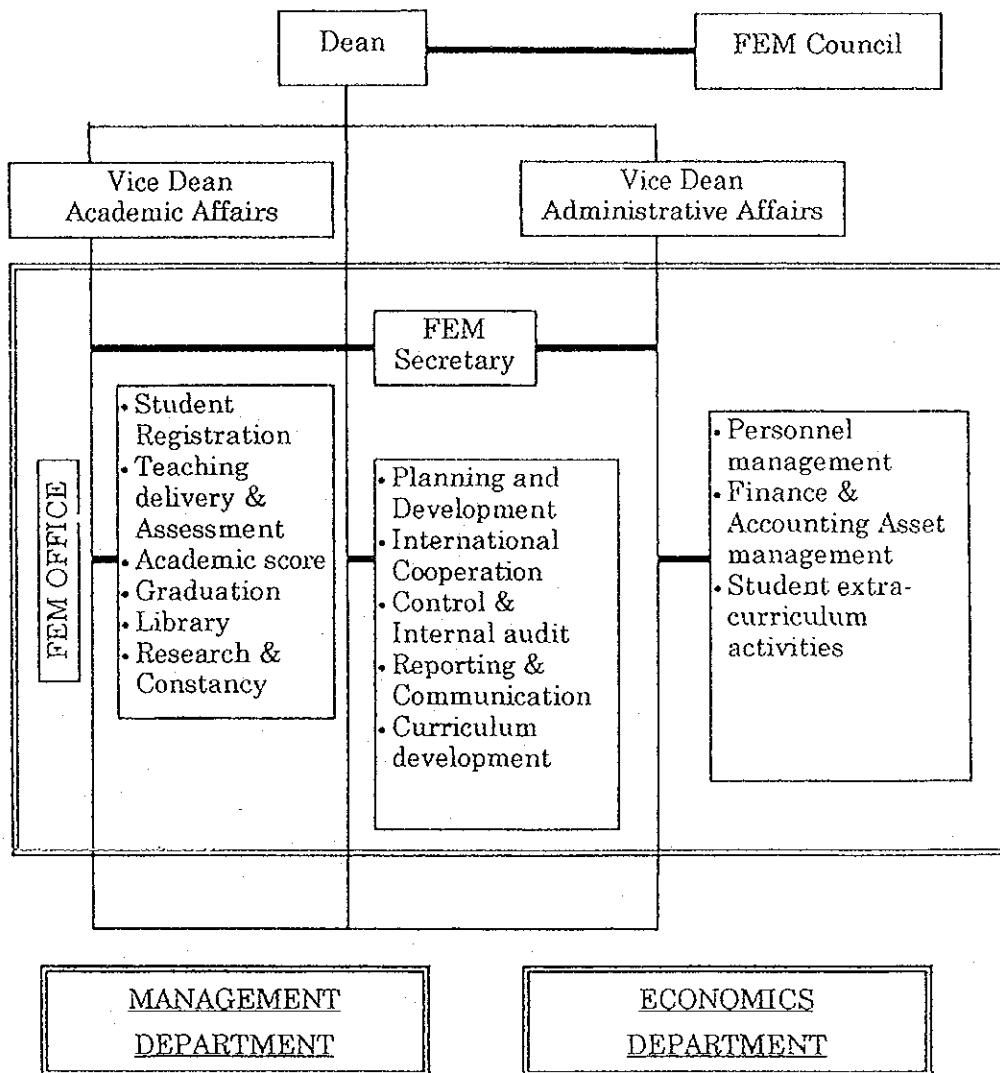
ADMINISTRATIVE ORGANIZATION of NUOL



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## FEM organization chart



Note: FEM Council is an Advisory body to the Dean. It is composed of Dean chairman – Vice Deans – Senior Lecturers – Students representatives – Head of FEM Lao Youth Revolutionary People – Head of FEM Women Federation – Head of FEM Lao Union.

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ANNEX-3  
Equipment List

[Faculty of Economics and Management]	[Lao-Japan Human Resource Cooperation Center]
1 Desk for Classroom	1 Desk for Class room
2 Chair for Classroom	2 Chair for Class room
3 Teaching Platform	3 Teacher's Desk & Chair
4 Teacher's Desk & Chair	4 Black Board
5 Black Board	5 White Board
6 White Board	6 Meeting Desk
7 Meeting Desk	7 Meeting Chair
8 Meeting Chair	8 Cabinet
9 Cabinet	9 Reading Desk for Library
10 Reading Desk for Library	10 Reading Chair for Library
11 Reading Chair for Library	11 Counter Desk for Library
12 Counter Desk for Library	12 Bookshelf for Library
13 Bookshelf for Library	13 Magazine Rack
14 Magazine Rack	14 News Paper Rack
15 News Paper Rack	15 PC Desk
16 PC Desk	16 Chair
17 PC Chair	17 Booth Partition Wall & Desk Set
18 Copy Printer	18 Sofa & Table
19 Bookbinding Equipment	19 TATAMI Mat
20 Cutting Machine	20 Photocopy Machine
21 Photocopy Machine	21 Personal Computer
22 Personal Computer	22 Printer for PC
23 Printer for PC	23 Screen for Projector
24 Scanner	24 VCR
25 Screen for Projector	25 Video Projector
26 VCR	26 TV
27 Video Projector	27 OHP
28 TV	28 Slide Projector
29 OHP	29 Visual Presenter
30 Slide Projector	30 LL System
31 Visual Presenter	31 Vehicle
32 Cassette Tape Recorder	32 Book
33 Vehicle	33 Video Software

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# ANNEX-4

## Buildings

The Faculty of Economics and Management		
Room Name	Number of Room	Capacity
Rector, Vice-Rector		
Dean room	1	1 person
Vice-Dean room	2	1 person
Reception room	1	5 person
Secretary room	1	1 person
Teaching staff		
Teaching staff room	2	15 person
Head of teaching staff room	2	1 person
Temporary lecturer room	1	5 person
Meeting room	1	40 person
PC's room	1	10 person
Administration of Departments		
Chief of Adm. Dep. Room	1	1 person
Staff room	1	10 person
Sweepers Room	1	2 person
Security Gurd's Room	1	2 person
Classroom		
Class room (L)	1	160 person
Class room (M)	2	90 person
Tutorial room	6	30 person
PC's room	2	30 person
Audio visual room	1	90 person
Study-Hall		
Study-Hall with Library	1	75 person
Stack and Admi. for Library	1	3 person
Sub-total		
Commons		
Hallway, Storage, Toilet etc.		
Total		
Lao-Japan Human Resource Cooperation Center		
Room Name	Number of room	Capacity
Community, lobby area		
Lobby	1	
Information		
Reference Corner	1	10 person
Audio Visual Booth	1	5 person
Internet Booth	1	5 person
Reading room of Library	1	10 person
Copy room	1	
Stack room	1	
Staff room	1	2 person
Consultation booth	1	2 person
Canteen	1	
Training Course		
Multi-purpose space	1	100 person
Seminar room	2	30 person
Computer training room	1	20 person
Language Laboratory	1	15 person
Community Center	1	15 person
The Japan Club (Volunteer's Room)	1	15 person
Administration		
Director Room	2	1 person
Secretary Room	1	1 person
Reception room	1	5 person
Administration room	1	7 person
Japanese language lecturer room	2	2 person
Temporary lecturer room	1	5 person
Meeting room	1	20 person
Sub-total		
Common Space		
Hallway, Storage, Toilet, etc.		
Total		

## JAPAN'S GRANT AID SCHEME

## 1. Grant Aid Procedures

1) Japan's Grant Aid Program is executed through the following procedures.

- Application (Request made by the recipient country)
- Study (Basic Design Study conducted by JICA)
- Appraisal & Approval (Appraisal by the Government of Japan and Approval by the Cabinet)
- Determination of Implementation (The Note exchanged between the Governments of Japan and the recipient country)

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

Fourthly, the project, once approved by the Cabinet, becomes official with the Exchange of Notes signed by the Governments of Japan and the recipient country.

Finally, for the implementation of the project, JICA assists the recipient country in such matters as preparing tenders, contracts and so on.

## 2. Basic Design Study

## 1) Contents of the study

The aim of the Basic Design Study (hereafter referred to as "the Study") conducted by JICA on a requested project (hereafter referred to as "the Project") is to provide a basic document necessary for the appraisal of the Project by the Government of Japan. The contents of the Study are as follows :

- a) Confirmation of the background, objectives, and benefits of the Project and also institutional capacity of agencies concerned of the recipient country necessary for the Project's implementation.
- b) Evaluation of the appropriateness of the Project to be implemented under the Grant Aid Scheme from a technical, social and economic point of view.
- c) Confirmation of items agreed on by both parties concerning the basic concept of the Project.
- d) Preparation of a basic design of the Project.
- e) Estimation of costs 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 the Japan's Grant Aid Scheme.

The Government of Japan requests the Government of the recipient country to take whatever measures are necessary to ensure its self-reliance in the implementation of the Project. Such measures must be guaranteed even though they may fall outside of the jurisdiction of the organization in the recipient country actually implementing the Project. Therefore, the implementation of the Project is confirmed by all relevant organizations of the recipient country through the Minutes of Discussions.

## 2) Selection of Consultants

For smooth implementation of the Study, JICA uses (a) registered consultant firm(s). JICA selects (a) firm(s) based on proposals submitted by interested firms. The selected firm(s) carry(ies) out a Basic Design Study and write(s) a report, based upon terms of reference set by JICA. The consultant firm(s) used for the Study is(are) recommended by JICA to the recipient country to also work on the Project's implementation after the Exchange of Notes, in order to maintain technical consistency.

## 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 facilities, equipment and services (engineering services and transportation of the products, etc.) for economic and social development of the country under principles in accordance with the relevant laws and regulations of Japan. Grant Aid is not supplied through the donation of materials as such.

### 2) Exchange of Notes (E/N)

Japan's Grant Aid is extended in accordance with the Notes exchanged by the two Governments concerned, in which the objectives of the Project, period of execution, conditions and amount of the Grant Aid, ect., are confirmed.

3) "The period of the Grant Aid" means the one fiscal year which the Cabinet approves the Project for. Within the fiscal year, all procedures such as exchanging of the Notes, concluding contracts with (a) consultant firm(s) and (a) contractor(s) and final payment to them must be completed. However, in case of delays in delivery, installation or construction due to unforeseen factors such as weather, the period of the Grant Aid can be further extended for a maximum of one fiscal year at most by mutual agreement between the two Governments.

4) Under the Grant Aid, in principle, Japanese products and services including transport or those of the recipient country are to be purchased.

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

However, the prime contractors, namely, consulting, constructing 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 "Verification"

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

6) Undertakings required of 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:

- (1) To secure land necessary for the sites of the Project and to clear, level and reclaim the land prior to commencement of the construction.
- (2) To provide facilities for the distribution of electricity, water supply and drainage and other incidental facilities in and around the sites.
- (3) To secure buildings prior to the procurement in case the installation of the equipment.
- (4) To ensure all the expenses and prompt excursion for unloading, customs clearance at the port of disembarkation and internal transportation of the products purchased under the Grant Aid.
- (5) 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.

7) "Proper Use"

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

8) "Re-export"

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

9) Banking Arrangements (B/A)

- a) The Government of the recipient country or its designated authority should open an account in the name of the Government of the recipient country in a bank in Japan (hereinafter referred to as "the Bank"). The Government of Japan will execute the Grant Aid by making payments in Japanese yen to cover the obligations incurred by the 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 Grant Aid	To be covered by Recipient side
1	To secure land		●
2	To clear, level and reclaim the site when needed		●
3	To construct gates and fences in and around the site		●
4	To construct the parking lot	●	
5	To construct roads		
	1) Within the site	●	
	2) Outside the site		●
6	To construct the building	●	
7	To provide facilities for the distribution of electricity, water supply, drainage and other incidental facilities		
	1)Electricity		
	a.The distributing line to the site		●
	b.The drop wiring and internal wiring within the site	●	
	c.The main circuit breaker and transformer	●	
	2)Water Supply		
	a.The city water distribution main to the site		●
	b.The supply system within the site ( receiving and/or elevated tanks )	●	
	3)Drainage		
	a.The city drainage main ( for storm, sewer and others ) to the site		●
	b.The drainage system ( for toilet sewer, ordinary waste, storm drainage and others ) within the site	●	
	4)Gas Supply		
	a.The city gas main to the site		●
	b.The gas supply system within the site	●	
	5)Telephone System		
	a.The telephone trunk line to the main distribution frame / panel (MDF) of the building		●
	b.The MDF and the extension after the frame / panel	●	
6)Furniture and Equipment			
a.General furniture		●	
b.Project equipment	●		
8	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		●
9	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 customs clearance of the products at the port of disembarkation:		●
	3) Internal transportation from the port of disembarkation to the project site	●	

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10	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		●
11	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		●
12	To maintain and use properly and effectively the facilities constructed and equipment provided under the Grant Aid		●
13	To bear all the expenses, other than those to be borne by the Grant Aid, necessary for construction of the facilities as well as for the transportation and installation of the equipment		●

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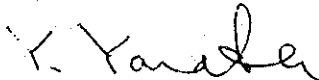
MINUTES OF DISCUSSIONS  
ON BASIC DESIGN STUDY ON THE PROJECT FOR CONSTRUCTION OF  
FACILITIES OF THE FACULTY OF ECONOMICS AND MANAGEMENT AND  
THE LAO-JAPAN HUMAN RESOURCE COOPERATION CENTER IN  
THE NATIONAL UNIVERSITY OF LAOS  
IN THE LAO PEOPLE'S DEMOCRATIC REPUBLIC  
(EXPLANATION ON DRAFT REPORT)

In August 1999, the Japan International Cooperation Agency (hereinafter referred to as "JICA") dispatched a Basic Design Study Team on the Project for Construction of Facilities of the Faculty of Economics and Management and Lao-Japan Human Resource Cooperation Center in the National University of Laos in the Lao People's Democratic Republic (hereinafter referred to as "the Lao P. D. R."), and through discussion, field survey, and technical examination of the results in Japan, JICA prepared a draft report of the study.

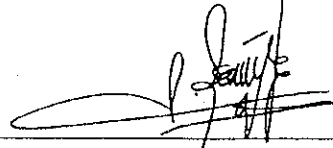
In order to explain and to consult the Lao P. D. R. on the components of the draft report, JICA sent to the Lao P. D. R. the Draft Report Explanation Team (hereinafter referred to as "the Team"), which is headed by Mr. Yoshikazu Yamada, Director, Third Project Management Division, Grant Aid Management Department, JICA, from October 21, 1999 to October 28, 1999.

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

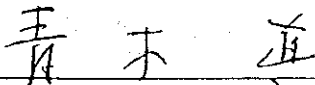
Vientiane, October 27, 1999



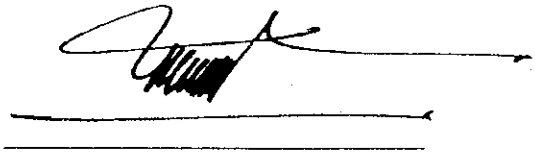
Mr. Yoshikazu Yamada  
Leader  
Draft Report Explanation Team  
Japan International Cooperation Agency



Mr. Sayamang Vongsak, Ph.D.  
Vice Rector  
National University of Laos



Mr. Makoto Aoki  
Resident Representative in Laos  
Japan International Cooperation Agency



Mr. Bounthavy Insisienmay  
Director, Cabinet  
Ministry of Education

## ATTACHMENT

### 1. Components of the Draft Report

The Government of Lao P. D. R. agreed and accepted in the components of the draft report explained by the Team.

### 2. Japan's Grant Aid Scheme

The Lao side understands the Japan's Grant Aid Scheme and the necessary measures to be taken by the Government of Lao P. D. R. as explained by the Team and described in Annex-5 and Annex-6 of the Minutes of Discussions signed by both parties on August 17, 1999.

### 3. Schedule of the Study

JICA will complete the final report in accordance with the confirmed item and send it to the Government of Lao P. D. R. by January 2000.

### 4. Other relevant issues

#### 4-1 Necessary equipment for the Center which will not be procured under the Grant Aid Project

After studying of the possibility and propriety of procurement, it was determined that (1) standard books and videotapes on Japan for the library in the Center and (2) personal computers for the computer training course in the Center will not be procured under the Grant Aid Project. Personal computers will not be procured under the Grant Aid Project because there is a possibility that the computer course starts in the fiscal year of 2000 in the technical cooperation project before construction of the Center using a temporary building and procurement of computers under the Grant Aid Scheme will not be in time if the computer course starts in the fiscal year of 2000. Procurement of (1) standard books and videotapes on Japan for the library and (2) personal computers for the computer course will be examined under the technical cooperation scheme.

#### 4-2

The Team handed on copy of the draft detailed specification of the equipment to Mr. Tuyen Dongvan, Vice Rector, National University of Laos. Both sides agreed that this draft specification is confidential and should not be duplicated or released to any outside parties.

#### 4-3

The Lao side will bear the general administration expense such as maintenance costs of the facility, costs for electricity and water supply, local communication, office supplies and etc.

5. Cost Estimation Borne by the Government of Lao P.D.R

1. Center portion

1-1 Planting and other exterior construction

Planting is required at the center side, and no other construction would be needed. Middle and tall trees will be planted on the South and North outer circle in 1 line at 5 meter pitch and on the West outer circle in 2 line at 5 meter pitch.

$$60m \div 5m/tree \times 2 = 24 \text{ trees}$$

$$45m \div 5m/tree \times 2 = 18 \text{ trees} \quad \text{Total 42 trees}$$

$$Kip.160,000/tree \times 42 \text{ trees} = Kip.6,720,000$$

Short trees and grass will be planted at the East side.

$$20 \times 15 + 18 \times 3 \times 2 + 26 \times 8 = 316 \text{ (m}^2\text{)}$$

$$Kip.90,000/m^2 \times 316 = Kip.28,440,000$$

Total: Kip.35,160,000

1-2 Each Purchases Cost

Purchases include general office furniture and the details are listed down blow.

Room	Furniture	Quantity	Unit Price (000Kip.)	Price (000Kip.)	Notes
1. Director room (1)	Desk	1	1,674.0	1,674.0	
	Chair	1	1,023.0	1,023.0	
	Table and sofa	1	4,650.0	4,650.0	
2. Director room (2)	Desk	1	1,674.0	1,674.0	
	Chair	1	1,023.0	1,023.0	
	Table and sofa	1	4,650.0	4,650.0	
3. Secretary room	Desk	1	1,488.0	1,488.0	
	Chair	1	930.0	930.0	
4. Reception room	Table and sofa	1	9,300.0	9,300.0	(10 People)
5. Office	Desk	6	1,488.0	8,928.0	
	Chair	6	930.0	5,580.0	
6. Library Office	Desk	2	1,488.0	2,976.0	
	Chair	2	930.0	1,860.0	
7. Temporary lecturers' room	Desk	5	1,488.0	7,440.0	
	Chair	5	930.0	4,650.0	
8. Japanese lecturers' room	Desk	2	1,488.0	2,976.0	
	Chair	2	930.0	1,860.0	
Total				62,682.0	

2. FEM portion

2-1 Planting and other exterior construction

Planting is required at the FEM side, and no other construction would be needed. At the North side, Roadside trees have planted already and no more trees are needed. Trees will be planted concentrically at the Northeast and Southwest side of the library.

$$25 \text{ trees} + 15 \text{ trees} = 40 \text{ trees}$$

$$\text{Kip.}160,000/\text{tree} \times 40 \text{ trees} = \text{Kip.}6,400,000$$

Short trees and grass will be planted at the East side.

$$20 \times 28 + 26 \times 14 = 784 \text{ (m}^2\text{)}$$

$$\text{Kip.}90,000/\text{m}^2 \times 784 = \text{Kip.}70,560,000$$

Total: Kip.76,960,000

2-2 Each Purchases Cost

Purchases include general office furniture and the details are listed down blow.

Room	Furniture	Quantity	Unit Price (000Kip.)	Price (000Kip.)	Notes
1.Office (1)	Desk	10	1,488.0	1,488.0	
	Chair	10	930.0	930.0	
2.Teachers'room (1) (2)	Desk	30	1,488.0	44,640.0	
	Chair	30	930.0	27,900.0	
3.Long-term experts' room (1) (2)	Desk	1	1,674.0	1,674.0	
	Chair	1	1,023.0	1,023.0	
4.Reception room	Table and sofa	1	9,300.0	9,300.0	(10 people)
6.Library office	Desk	3	1,488.0	4,464.0	
	Chair	3	930.0	2,790.0	
7.Temporary lecturers' room	Desk	5	1,488.0	7,440.0	
	Chair	5	930.0	4,650.0	
Total				120,621.0	



6. Result of Geographic and Geologic Survey on the Project Site



LAO PEOPLE'S DEMOCRATIC REPUBLIC  
PEACE INDEPENDENCE DEMOCRACY UNITY PROSPERITY

MINISTRY OF COMMUNICATION, TRANSPORT, POST AND CONSTRUCTION

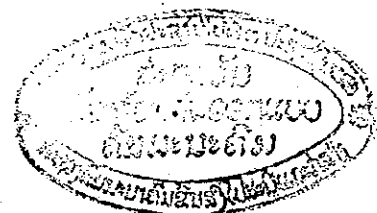
COMMUNICATION DESIGN AND RESEARCH INSTITUTE

TOPOGRAPHICAL SURVEY REPORT  
ON NUOL CAMPUS  
(Dong Dok)



PREPARED BY:  
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CDRI  
VIENTIANE  
AUGUST, 1999

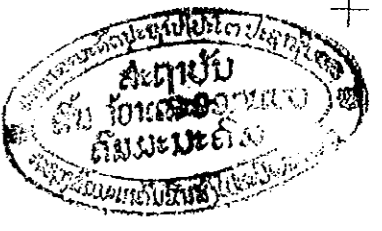


VI GENERAL MAP



**SYMBOLS**

	EXISTING ROAD
	BENCH MARK
	NORTH
	ELECTRIC POLE
	TREE
	CONCRETE SLAB



<b>21151</b>		MINISTRY OF COMMUNICATION, TRANSPORT, POST AND CONSTRUCTION COMMUNICATION DESIGN AND RESEARCH INSTITUTE	
<b>LAO NATIONAL UNIVERSITY</b>		DONG DOK	
<b>PLAN AND CONTOUR LINE</b>		DATE: August 1988	SCALE: 1:1000
		DRAWING No. PL-01	
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DESIGNED:	APPROVED:		



LAO PEOPLE' S DEMOCRATIC REPUBLIC

PEACE INDEPENDENCE DEMOCRACY UNITY PROSPERITY

MINISTRY OF COMMUNICATION TRANSPORT POST AND CONSTRUCTION.

COMMUNICATION DESIGN AND RESEARCH INSTITUTE

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## REPORT ON SUBSURFACE EXPLORATION

PROJECT : BASIC DESIGN SURVEY FOR THE PROJECT FOR  
ESTABLISHMENT OF THE FACULTY OF ECONOMIC  
AND MANAGEMENT OF THE NATIONAL UNIVERSITY  
OF LAOS

PREPARED BY



COMMUNICATION DESIGN AND RESEARCH INSTITUTE (C.D.R.I.)

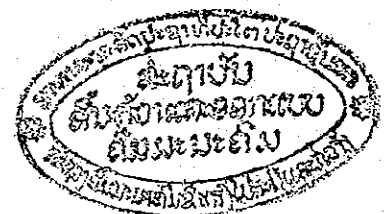
THA DEUA ROAD KM 5

Tel. : ( + 856-21) 313510,  
313761, 312840.

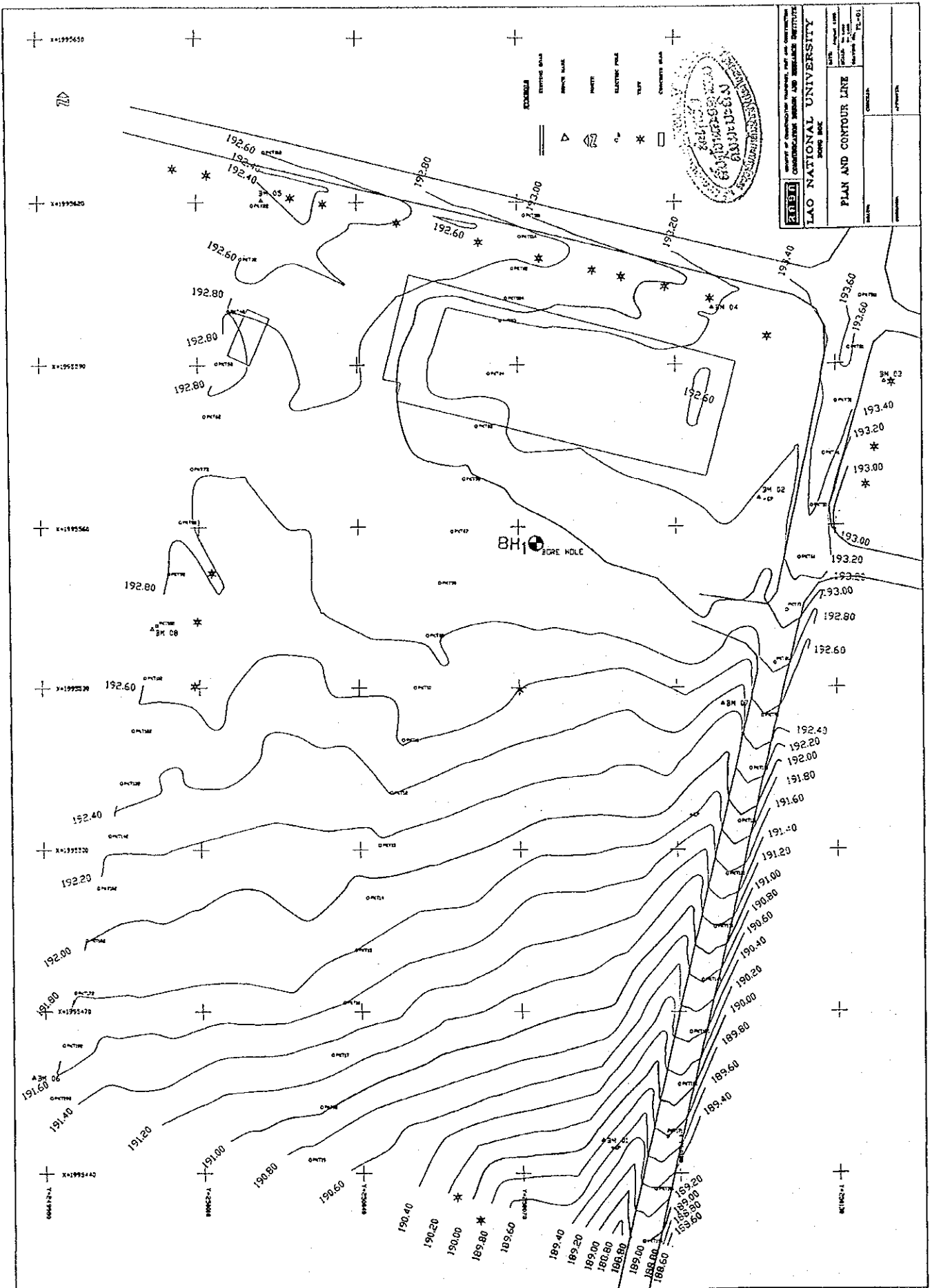
Vientiane, Lao P. D. R.

Fax : ( + 856-21) 314811.

VIENTIANE  
SEPTEMBER 1999



## Location of Bore Hole plan



## **Geological Profile of Bore Hole**

REPORT SHEET

DATE : 27/8/1999

ENGINEER : Linthong VISOUNALAT

BORING LOG

ASTM METHOD D. 1586 FOR PENETRATION TEST

PROJECT : Basic design survey for the project for establishment of the faculty of economic and management of the national university BORING BH 1 (Dong Dok national University)

DEPTH (m)

ELEVATION (m)

DEPTH (m)

LAYER THICKNESS (m)

SYMBOL

SOIL DESCRIPTION

DEPTH (M)

QU (kg/cm<sup>2</sup>)

NUMBER OF BLOW PER 30 cm

N VALUE

Consistency

SCALE (m)	ELEVATION (m)	DEPTH (m)	LAYER THICKNESS (m)	SYMBOL	SOIL DESCRIPTION	DEPTH (M)	QU (kg/cm <sup>2</sup> )	NUMBER OF BLOW PER 30 cm	N VALUE	Consistency
1	192.048	0.15	0.15	5	Embankment	7				11
1			2.45		CL Clayey silts and sands	1.20 1.50	1.6 1.7	17 —		Firm Firm
2					AS above	2.25	1.0	10		Firm
3	190.388	2.60			SC	3.30	2.1	20		Firm
4					Clayey silts some gravel + laterite	4.25	2.7	26		Firm
5						5.50	2.8	28		Firm
6						6.30	2.9	28		Firm
7			6.20		Clayey silts some gravel + laterite	7.20	2.3	22		Firm
8	184.168	8.80			CH	8.25	3.8	37		Stiff
9						9.30	3.8	37		Stiff
10			2.05		Clayey silts trace gravel + laterite	10.25	4.1	39		Stiff
11	182.118	10.85								

REMARKS : N: BLOW PER FT (140 LB HAMMER, 30" DROP 2" SAMPLER)  
QU: UNCONFINED COMPRESSIVE STRENGTH (Kg / cm<sup>2</sup>)

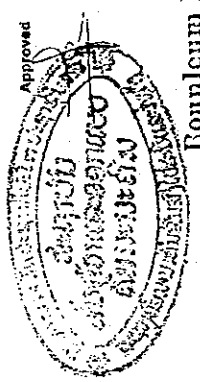
Vientiane 27/8/1999

Drawn By:

*Linthong*  
Linthong VISOUNALAT

Checked By:

*S. Boukaseum*  
Seuk SOUKASEUM



Bounleum KEOPHASEUTH

## **Summary of test Results**











JICA