

**BASIC DESIGN STUDY REPORT
ON
THE PROJECT FOR CONSTRUCTION OF FACILITY
AND
THE LAO-JAPAN HUMAN RESOURCE COOPERATION CENTER
IN
THE NATIONAL UNIVERSITY OF LAOS
IN
THE LAO PEOPLE'S DEMOCRATIC REPUBLIC**

DECEMBER, 1999

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MINISTRY OF EDUCATION
LAO PEOPLE'S DEMOCRATIC REPUBLIC

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PREFACE

In response to a request from the Government of the Lao People's Democratic Republic, the Government of Japan decided to conduct a basic design study on the Project for Construction of Facility and the Lao-Japan Human Resource Cooperation Center in the National University of Laos and entrusted the study to the Japan International Cooperation Agency (JICA).

JICA sent to Laos a study team from 3 to 21 August, 1999.

The team held discussions with the officials concerned of the Government of Laos, and conducted a field study at the study area. After the team returned to Japan, further studies were made. Then, a mission was sent to Laos in order to discuss a draft basic design, and as this result, the present report was finalized.

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

I wish to express my sincere appreciation to the officials concerned of the Government of the Lao People's Democratic Republic for their close cooperation extended to the team.

December, 1999



Kimio Fujita
President

Japan International Cooperation Agency

December, 1999

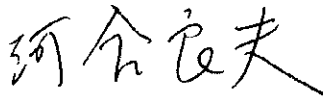
Letter of Transmittal

We are pleased to submit to you the basic design report on the Project for Construction of Facility and the Lao-Japan Human Resource Cooperation Center in the National University of Laos in the Lao People's Democratic Republic.

This study was conducted by Azusa Sekkei Co., Ltd., under a contract to JICA, during the period from July 26, 1999 to December 24, 1999. In conducting the study, we have examined the feasibility and rationale of the project with due consideration to the present situation of Laos and formulated the most appropriate basic design for the project under Japan's grant aid scheme.

Finally, we hope that this report will contribute to further promotion of the project.

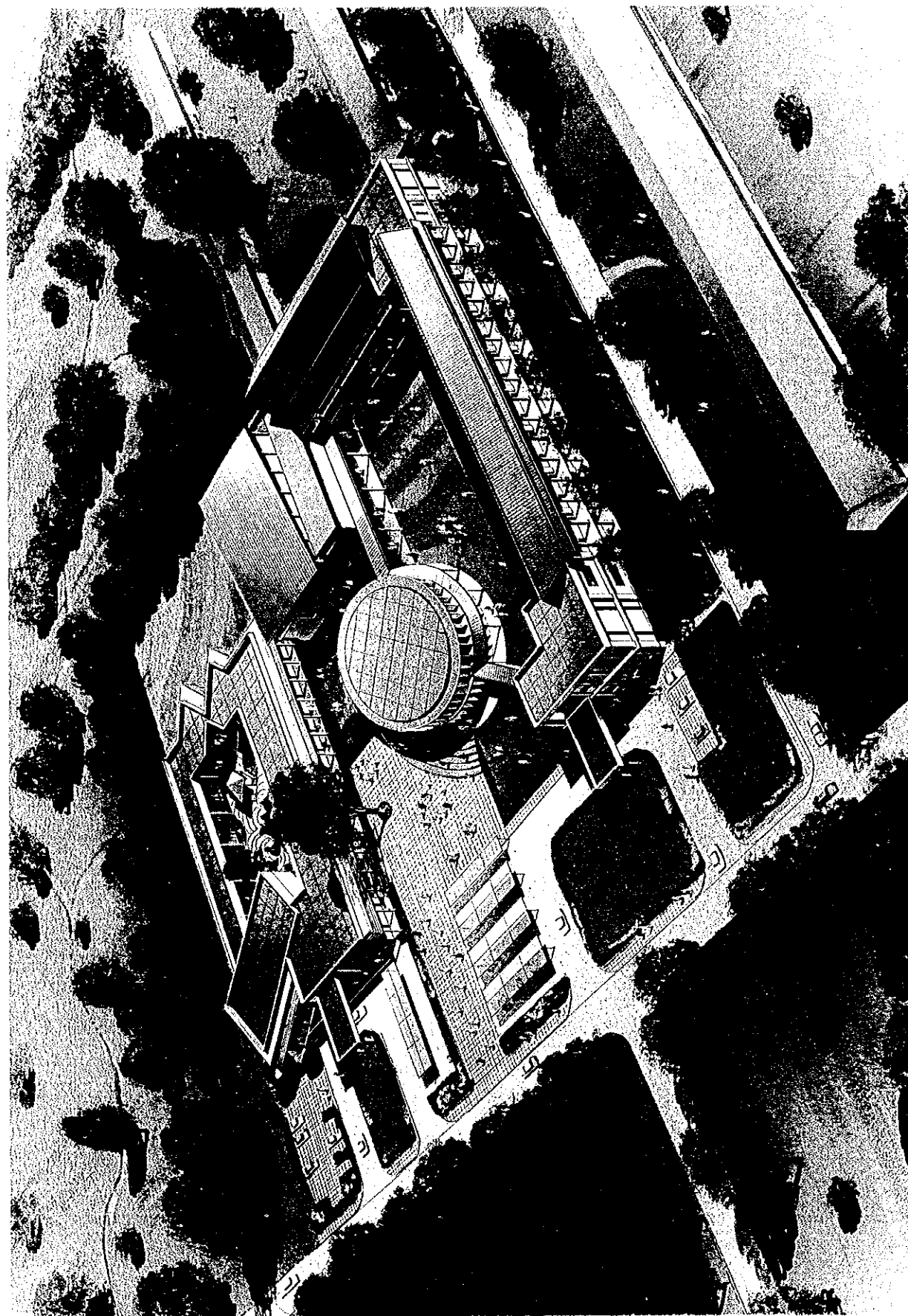
Very truly yours,



Yoshio Kawai
Project Manager,
Basic design study team on
the Project for Construction of Facility and
the Lao-Japan Human Resource Cooperation
Center in the National University of Laos
Azusa Sekkei Co., Ltd.

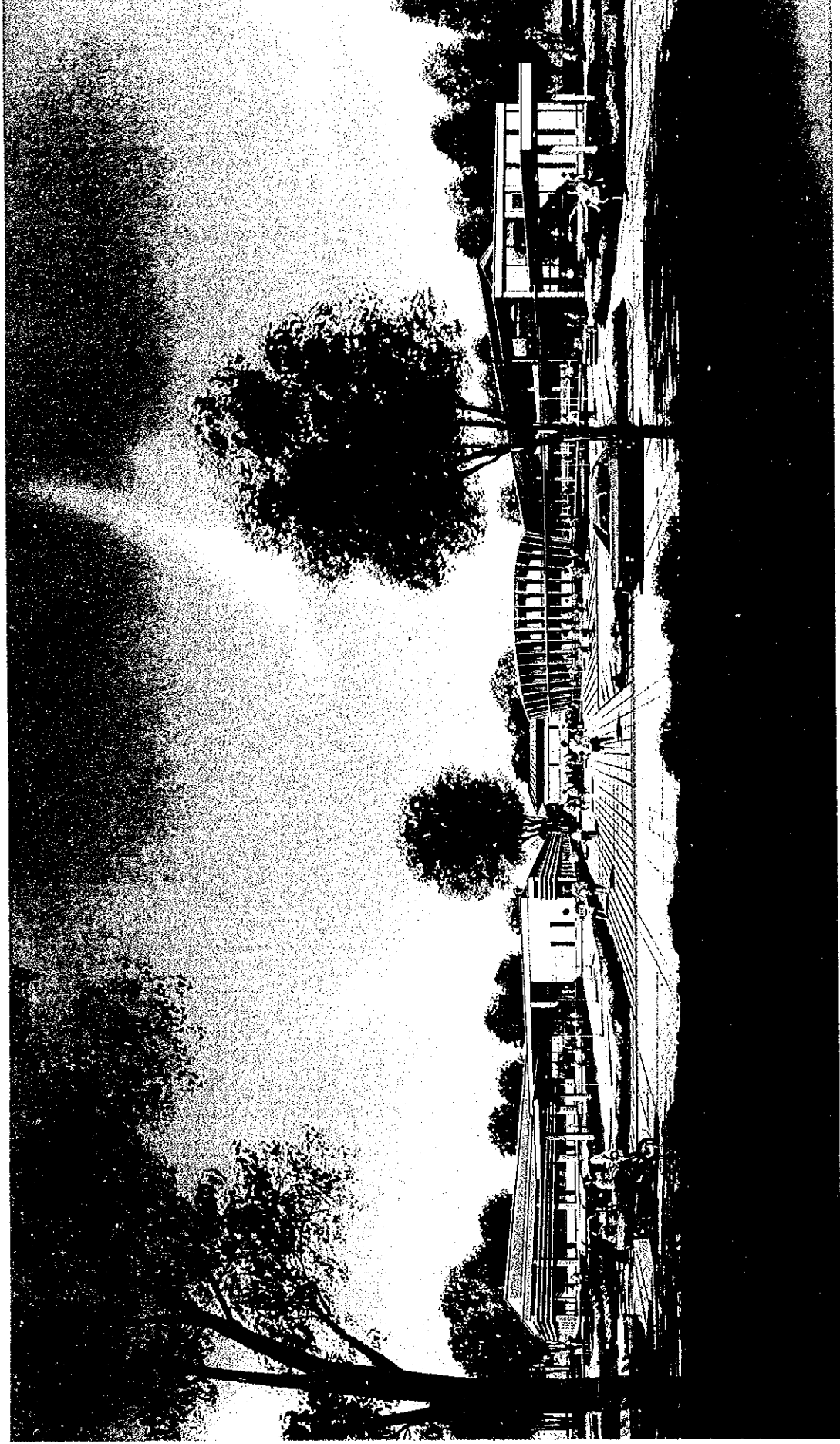
Location Map





ラオス国立大学施設・日本・ラオス人材協力センター建設計画

The Project for Construction of Facility and the Lao-Japan Human Resource Cooperation Center in the National University of Laos



ラオス国立大学施設・日本・ラオス人材協力センター建設計画

The Project for Construction of Facility and the Lao-Japan Human Resource Cooperation Center in the National University of Laos

Abbreviations

Abbreviation	Idiom	Original Name
ADB	English	Asian Development Bank
AFTA	English	ASEAN Free Trade Area
ASEAN	English	Association of Southeast Asian Nations
ENAG	French	Ecole Nationale d'Administration et Gestion
FEM	English	Faculty of Economics and Management
GDP	English	Gross Domestic Product
GNP	English	Gross National Product
HTVET	English	Higher Technical Vocational Education Department
IMF	English	International Monetary Fund
ILO	English	International Labor Organization
NUOL	English	National University of Laos
NEM	English	New Economic Mechanism
NGO	English	Non-Governmental Organization
NSAM	English	National School of Administration and Management
UNDP	English	United Nations Development Programme

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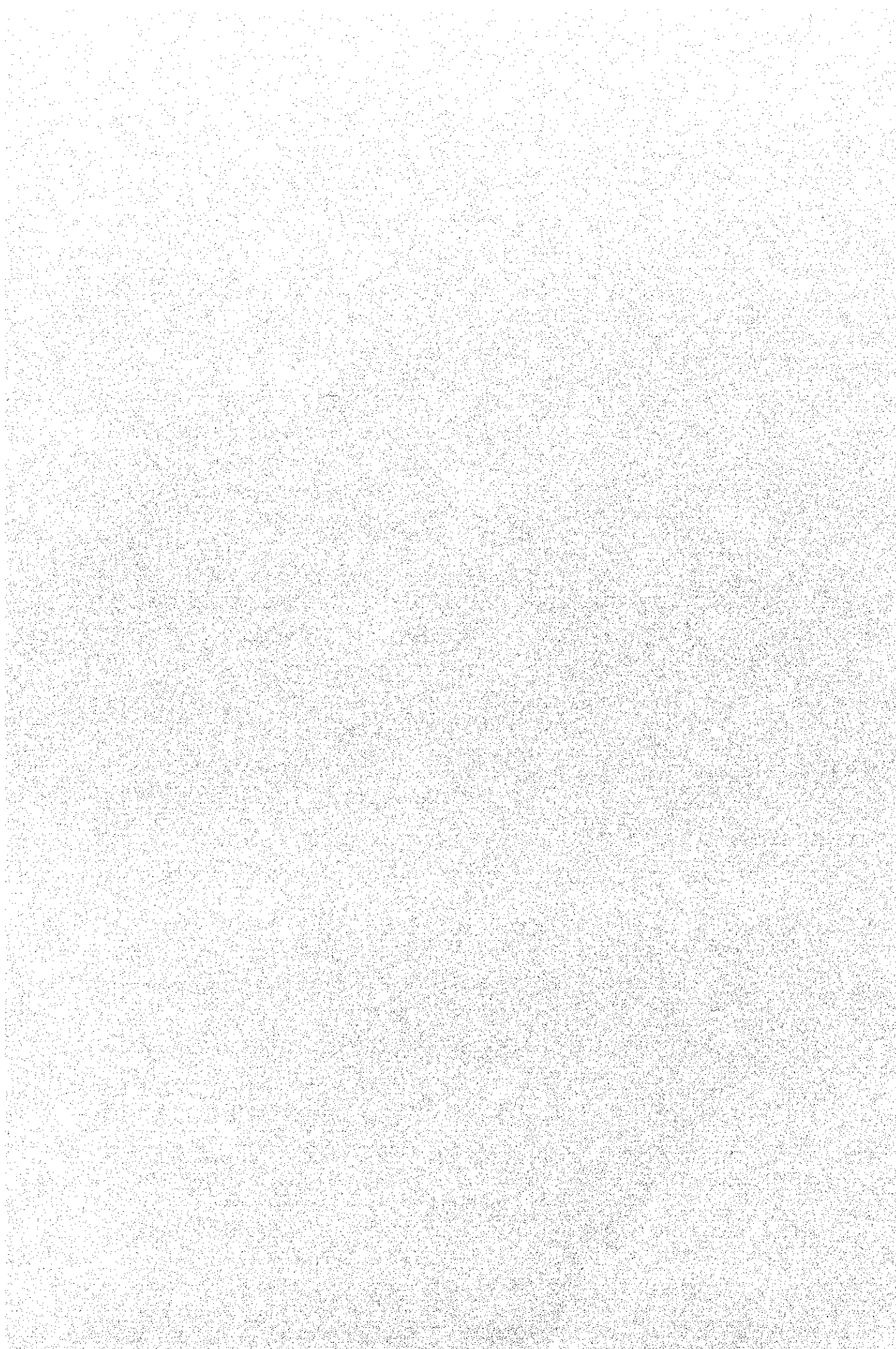
Chapter 1 Background of the Project

1-1 Background of the Project

1-2 Contents of Request

1-2-1 Contents or Original
Request

1-2-2 Modification of the
contents of request made
during the basic design
survey



Chapter 1 Background of the Project

1-1 Background of the Project

Lao People's Democratic Republic is an inland country located in the center of the Indochina Peninsula bordered by five countries; Thailand, Cambodia, Vietnam, Myanmar and China. The land area is approximately 236,800km² which is nearly equivalent to the main island of Japan. As there is a mountain range from the north to south all along the eastern border with Vietnam, 70% of the land is plateau and mountain areas. The Mekong River flows in the west of the land as long as 1,900km forming a part of the border with Thailand, giving influence to the life style of the people in Laos and serving as the base of their lives in many aspects. The population is 4.9669 million (569,000 people in the metropolitan area of Vientiane, that is 11.46% of the total population : 1998 estimated data). The GNP per capita is US\$413 (1997 estimated data). The current major industries are agriculture, forestry and fisheries which occupy about a half of GDP (51% in 1997) and 85% of the total population are engaged in these industries. The Lao Government has been concentrating its efforts in building up the manufacturing and service industries so as to reduce the composition ratio of the current major industries to GDP to less than a half (48%). As far as the trade balance is concerned, a large excess of imports has been recorded (double of exports in 1997) resulting in chronic deficits. The major export items are woodwork products, coffee and apparel products and a unique item taking advantage of the geographical feature is electric power produced by hydroelectric power generation system. On the other hand, a wide range of items from daily necessities to machines and fuel are imported.

Lao People's Democratic Republic became independent as a socialist country in 1975 with supports from such countries as old USSR and Vietnam. However, as these countries came to give up the socialist centralized planned economy policy, Laos also had to make a sharp turn toward the liberalization policy.

The Lao Government adopted a new policy called "New Thinking" in 1986 and omnidirectional foreign policy. It also introduced "New Economic Mechanism" (hereinafter referred to as NEM) as a new target in the same year. The basic concept of these policies was to adopt the principles of economic liberation and market economy. In addition, Laos

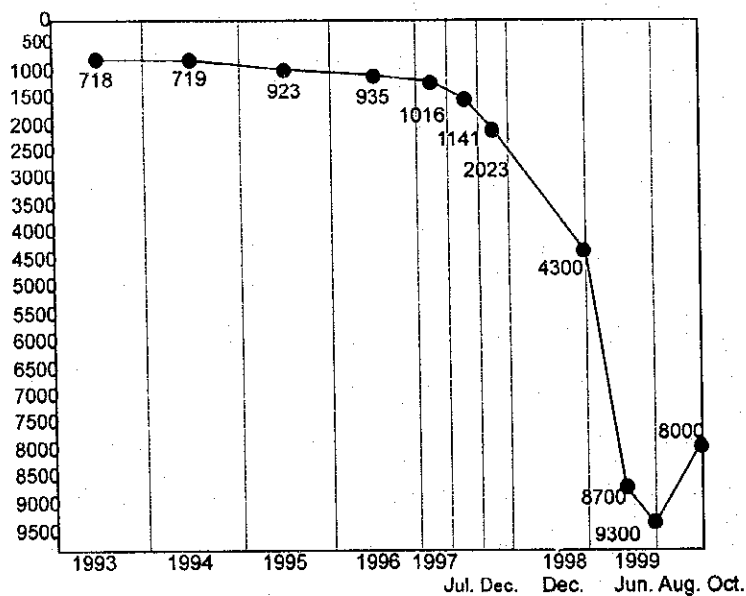
jointed Association of South-East Asian Nations (ASEAN) and Association of South-East Asian Nations Free Trade (AFTA) in 1997, trying to pursue economic development by taking a part in economic consolidation with the south-eastern Asian nations.

Immediately after adoption of NEM, inflation advanced suddenly and the financial deficits increased for a time but owing to the structural adjustment funds provided by the World Bank and IMF in 1989, GDP, prices and exchange rate began to be stable in early 1990's.

In July 1997, the Thai currency, baht, dropped and affected the economy of the entire Asia as a monetary crisis. Not being an exception, Laos experienced a quick depreciation of its currency, kip, and skyrocketing of the prices as well. In particular, the changes in the exchange rate were drastic. In official rate, 1 US dollar was around 720 kip in 1993 and 1994, a little less than 1,000 kip in 1995 and 1996 but depreciation continued at a higher speed, resulting in 2,023 kip at the end of 1997, 4,300 kip at the end of 1998 and 9,800 kip in August 1999. In October, however, 1 US dollar was 8,000 kip, seemingly indicating a sign of stop in further depreciation. After all, the value of kip has dropped to approximately one tenth in these past 4 years. (See Fig. 1.1.1 Changes in kip (to US dollar) exchange rate.)

Fig. 1.1.1 Changes in kip (to US dollar) exchange rate

(Unit : kip/\$)



While the economic environment has changed for the worse rapidly on one hand, adoption of NEM successfully has made liberalization of the market progress rapidly at the level of individuals as well as firms. However, there has remained an issue to be coped with. That is, very little progress has been made as to reformations in the system and administration to promote social and economical bases such as well-balanced development in both cities and rural areas and stabilized macro-economy for the country as a whole.

The major reason for the delay in reformations as described above, can be said to lie in lack of the number of persons who have received the college level education in specialized fields which would enable them to lead the society. The rate of students who go on to colleges and higher level vocational schools is about 2.7% of the population of the same generation (1998 data). This data is evidently low when compared with that of Vietnam which is 4.5% (1991) and that of Thailand which is 11% (1993) even without including open colleges and correspondence colleges. Upbringing of human resources on this level is an urgent issue.

The Lao Government in 1994 set the national goals of "enhancement of the education system, improvement of medical care and continuation of cultural development" and drafted a national development plan with "development of human resources commensurate with the needs of national development as the highest priority task," which was approved by the People's Assembly. Furthermore, at the request of the Lao Government in June 1995, the Asian Development Bank (hereinafter referred to as "ADB") formulated a "Post-Secondary Education Rationalization Project" and prepared the master plan for it. The main subject of this plan was to integrate educational institutes that had conventionally belonged to various government authorities rationally so as to enhance the quality of the college level education.

In line with the master plan, establishment of the National University of Laos (hereinafter referred to as "NUOL") was decided, and in June 1996, three colleges and eight higher educational institutes were integrated under the Ministry of Education and NUOL consisting of eight faculties was established. Since then, cooperation has been extended continuously by France, Germany the U.S., Australia, New Zealand, China, Japan and others for the different faculties on the basis of the master plan. However, since it has not been long enough after establishment of NUOL, not only does it lack adequate "hardware" in terms of equipment, apparatus, etc., but it also has problems on the "software" side such as insufficient integration of faculties that were directly under the

former Ministry of Education with faculties that were under other government agencies (specifically, differences in the number of credits being required, compulsory subjects, etc.) and insufficient specialized knowledge on the part of university teaching staff, inadequate English proficiency on the part of both teachers and students, etc.

When it comes to the Faculty of Economics and Management (hereinafter referred to as "FEM"), it was newly created at the NUOL's Dong Dok campus at the time of establishment of the university itself. Also, without any predecessor organization or personnel, it lags behind even the other faculties in terms of development of both the "hardware" and "software" aspects. Since creation of the FEM, the ADB has been cooperating with it from the beginning by among other things, dispatching long-term advisors and temporary instructors, but such cooperation is scheduled to end in September 2001. Japan has also dispatched short-term specialists for "software" support, including curriculum formulation and has started dispatching long-term advisors in 1999. It is now studying possibility of implementing technical cooperation of a project-type or in some other form starting from fiscal year 2000 aiming at the FEM's independent operation. However, presently the FEM does not have any facilities of its own for its exclusive use, and its 300 third- and fourth-year students are receiving lectures on the basis of borrowing of facilities from the Faculty of Education, including two 30-place classrooms, a 160-place lecture hall and a computer room equipped with 14 computers. (All students receive general basic education in the faculty of Liberal Arts in the first and second years and then go into their major fields for three years from the third to fifth years.) With acceptance of new students, the total number of students in the FEM is expected to increase to 450 in October 2000, the urgent resolution is required for serious shortage of its own facilities and apparatus considering what is needed for its education as intended.

In consideration of such situation, the Laotian government requested the assistance of Japanese government in the field of training people in market economy practical affairs. Taking up the above request, the Japan International Cooperation Agency (JICA) dispatched a project formation study team to Laos in July 1998. The team suggested and discussed with Lao side the plan to establish "Lao-Japan Human Resource Cooperation Center" (here in after referred to as "Center") as the efficient support to the countries undergoing transition to a market economy. The Center will be for the purpose of upbringing of persons who can contribute to comprehensive strengthening of relation between Laos and Japan through such activities as training of people in market economy

practical affairs, providing guidance for study in Japan, strengthening of Japanese language education, promotion of cultural exchanges and furnishing of information on Japan. Specifically, it will offer two training courses in business and in Japanese language as its main activities but personal computer and other ancillary courses as well. Furthermore, it will implement measures for promoting understanding of Japan such as presentations introducing Japan through books, audio-visual aids and the Internet, advice to those who are interested in studying in Japan, presentation of Japanese culture through demonstrations and other support activities for exchange programs.

Under such circumstances, the Lao Government requested Japanese Government for Grant Aid for construction of facilities of FEM and the Center as well as procurement of their equipment.

1-2 Contents of Request

1-2-1 Contents of original request

Listed below are the items included in the facilities plan and equipment plan as requested by the Lao Government.

(1) NUOL

1) Facilities :

- Administration building
- Auditorium
- Multi-purpose hall
- Classroom building of FEM

2) Equipment

- Computer system (computers, printers, LAN, etc.)
- Classroom furniture (desks, chairs, blackboards, etc.)
- Audio-visual equipment
(OHP's, video sets, broadcasting equipment, etc.)
- Office equipment (desks, chairs, document lockers, etc.)
- Meeting equipment, furniture (desks, chairs, white boards, etc.)
- Vehicles (microbuses, etc.)

(2) Center

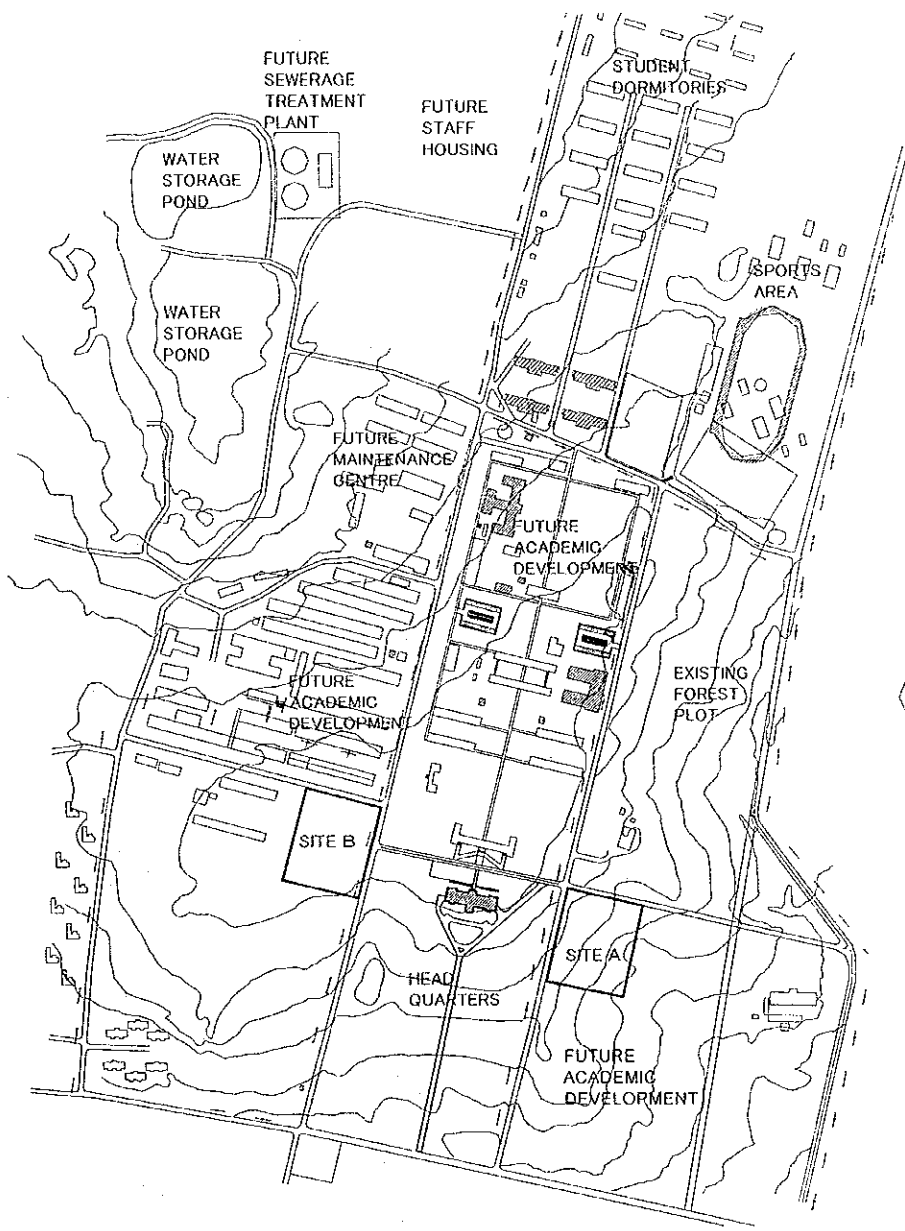
- 1) Facilities : •Center building (approximately 1,000m²)
- 2) Equipment : •Audio-visual educational equipment (computers, etc.)
 •Management office equipment (desks, chairs, copying machine, telephones, facsimile machine, etc.)
 •Vehicles (microbuses, etc.)

1-2-2 Modification of the contents of request made during the basic design survey

At the meetings held during the basic design survey, it was confirmed with the Laos side that this plan will contribute to the development plan for the NUOL's Dong Dok campus as a whole but the plan itself was initiated as a part of the construction of facilities necessary for independent management of FEM and therefore construction of facilities and procurement of equipment for the entire campus including the administration building, auditorium and multi-purpose hall will be excluded from this plan. Based on this confirmation, it was decided that the plan would cover construction of facilities of FEM including the seminar rooms, classrooms, large classroom, management section, library, etc., procurement of equipment to complement functions of these facilities, construction of the Center and procurement of its equipment.

The project site is located near to the head quarter of NUOL in Dong Dok campus and "Site A" in Fig. 1.1.2 "Sites planned for construction of facilities" was indicated in the original request, but after checking the sites actually, it was determined to use "Site B" in Fig. 1.1.2 for the reasons that it would require very little ground preparation costs which will be charged to the Laos side and that it has the same functional conditions as Site A.

Fig. 1.1.2 Sites planned for construction of facilities



Chapter 2 Contents of the Project

- 2-1 Objectives of the Project
- 2-2 Basic Concept of the Project
 - 2-2-1 Setting of the Scale
 - 2-2-2 Master Plan for
Development of the Dong
Dokk Campus and the
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 - 2-2-3 Basic Concept of Each
Component of the
Facilities of the FEM
 - 2-2-4 Basic Ideas Regarding the
Different Components of
the Center
 - 2-2-5 Basic Concept Regarding
Equipment and Apparatus
- 2-3 Basic Design
 - 2-3-1 Design Concept
 - 2-3-2 Basic Design

Chapter 2 Contents of the Project

2-1 Objectives of the Project

In the process of transition to a market economy promoted by the Lao Government, shortage of human resources that would lead such transition must be solved. The objectives of this project are to develop and enhance the higher level education in the related fields by constructing the facilities and providing equipment for FEM which was newly established when a number of educational institutions were integrated into NUOL and to construct the facilities and provide equipment for the Center that would serve for upbringing people who can transact market economy practical affairs, improving mutual understanding between Laos and Japan and strengthening the person-to-person relationship.

2-2 Basic Concept of the Project

2-2-1 Setting of the Scale

(1) NUOL/FEM

The system at the NUOL is a total of five years of study, starting from two years of general education in the faculty devoted to that purpose and continuing on to three years of study in specialized faculties. That being the case, the FEM, too, provides specialized education starting from the student's third year.

Presently third and fourth year students are enrolled in the FEM since October 1998 was the first time it received students—those who enrolled in the university in October 1996 and had become third-year students by then. The number is around 300 (about 45 % men, 55% women). In the case of 1998 the percentage of those held back from advancement to the next year was 4% (7 students), and that percentage is expected to be about 2% when the class that entered in 1996 reaches the fifth year. Furthermore, because of insufficient preparation of facilities, apparatus and instructors, only 120 third-year students were actually admitted to the faculty in 1999, whereas the ADB master plan calls for 150 students in the faculty for each of the three years (third, fourth and fifth years), for a total enrollment in the faculty of 450 students.

The FEM considers of two departments: the Economics Department and the Management Department, all the students in the faculty having the same curriculum in their third year before being separated into those two departments for their, fourth and fifth years.

The instruction is divided into two semesters, the curriculum being is indicated in Table 2.2.1, "Curriculum Chart." The curriculum for third-year students basically consists of lectures attended by everyone, small-scale seminars and practical instruction, that same structure also applying in the curriculum for the fourth and fifth years. Once a month there is "conference" for all of the students in the faculty as a part of its curriculum. Basically the students are divided into groups of about thirty each for small-scale seminars and practical instruction and into groups of less than ten for guidance concerning their graduation papers.

The teaching staff presently consists of seventeen instructors, but the master plan sets the goal of thirty instructors, for a student/instructor ratio of 15:1.

In this study the targets set in the ADB master plan are taken as rough goals, but the scale of facilities and apparatus is set on the assumption of a maximum ratio of 90:60 for the number students in each year between the Economics Department and the Management Department considering that the number in each department need not necessarily be the same. Furthermore, considering that the standard number of students in each seminar and practical instruction group is thirty, in each student year each department is divided into three groups of students for implementation of instruction on the basis of a total of six groups.

Table 2.2.1 CURRICULUM CHART

YEAR-3 (COMMON COURSES)	I	English 1 (0/4)-2cr	Mathematics (2/2)-2cr	Accounting (2/2)-3cr	Micro-economics I (2/2)-3cr	Macro-economics I (2/2)-3cr	Economy of Laos (2/0)-2cr	Computing I (0/2)-2cr	Conference once a month	24 h/w 17 credits
	II	English 2 (0/4)-2cr	Statistics - 1 (2/2)-2cr	Managerial Accounting (2/2)-3cr	Micro-economics II (2/2)-3cr	Macro-economics II (2/2)-3cr	Comparative Economics (2/0)-2cr	Computing II (0/2)-2cr	Conference once a month	24 h/w 17 credits
YEAR-4 MANAGEMENT	I	English 3 (0/4)-2cr	Mgt. And Organizational Behavior (3/1)-3cr	Marketing-I (3/1)-3cr	Business Law (3/0)-3cr	Information Management (3/1)-3cr	Elective in Economics I (3/1)-3cr		Conference once a month	24 h/w 17 credits
	II	English 4 (0/4)-2cr	Human Resources Management (2/0)-2cr	Marketing-II (3/1)-3cr	Strategic Management (3/1)-3cr	Production & Operation s.Mgt. (3/1)-3cr	Corporate Finance & Investment (3/1)-3cr	Elective in Economics II (3/1)-3cr	Conference once a month	24 h/w 19 credits
YEAR-5	I	English 5 (0/4)-2cr	Int'l Business Management-I (3/1)-3cr	Project Management (3/1)-3cr	Small Business Management (3/1)-3cr	Agri. Business Management (3/1)-3cr	Seminar on Graduating Project		Conference once a month	20 h/w 14 credits
	II	English 6 (0/4)-2cr	Int'l Business Management-II (3/1)-3cr	Banking Management (3/1)-3cr	Tourism Management (3/1)-3cr	Elective in Economics 3 or Natural Resources Mgt (3/0)-3cr	Graduating Project Report 10cr		Conference once a month	20 h/w 24 credits
YEAR-4 ECONOMICS	I	English 3 (0/4)-2cr	Statistics 2 (2/0)-2cr	Development Economics-I (3/0)-3cr	Agricultural Economics-I (3/0)-3cr	International Economics-I (3/0)-3cr	Money & Banking (4/0)-4cr	Elective in Management 1 (3/1)-3cr	Conference once a month	22 h/w 17 credits
	II	English 4 (0/4)-2cr	Computer-Aided statistics (2/0)-2cr	Development Economics-II (3/0)-3cr	Project Planning & Appraisal (3/0)-3cr	International Economics-II (3/0)-3cr	Public Economics & Finance (3/1)-4cr	Elective in Management 2 (3/1)-3cr	Conference once a month	22 h/w 20 credits
YEAR-5	I	English 5 (0/4)-2cr	Economic Policies (3/1)-4cr	Agricultural Economics-II (3/0)-3cr	Industrial Polices (3/0)-3cr	International Finance (3/1)-4cr	Seminar on Graduating Project	Econometrics or Elective in Management 3 (3/1)-3cr	Conference once a month	22 h/w 19 credits
	II	English 6 (0/4)-2cr	Asian Economies (3/0)-3cr	Environment & Nat. Resource Economics (3/0)-3cr	Labour & Employment Economics (3/0)-3cr		Graduating Project Report 10cr		Conference once a month	13 h/w 21 credits

* (/) - cr : (No. of lecture/ No. of practice) - Credit

(2) Human Resources Cooperation Center

The scale in this study is set on the basis of the findings of the project-type technical cooperation preliminary study carried out in August 1999. The courses that are scheduled to be held are as indicated in Table 2.2.2.

Table 2.2.2 Courses Scheduled to Be Held

Name of course	For whom:	Complement par a series of sessions	Frequency par a year	Period
Business course 1	Non-student adults	30	2~6	30 hours (3 hours/day x 10 days)
Business course 2	Students	80	2	Same as above
Computer course	Non-student adults and students	20 (15 at first)	Several times	Same as above
Japanese language course	Non-student adults and students	20	Not yet decided	Not yet decided

The business courses are intended to support to upgrade the careers of young people whether private citizens, government employees or students. They will offer lectures periodically on finance, accounting, marketing, business plan, trade practice, management consulting, financial securities and others as well as practical courses to train computer operators and secretaries. Development into a business school is taken into consideration for the future plan including establishment of the economic qualification system. Different levels of Japanese language courses are being planned, for beginners, business Japanese and studying and training in Japan.

A particular feature of the Center is that it is expected to be used as a facility widely open also to others than those that participate in the courses held at it. It needs to have adequate amenity space to make it easy for not only university students but also non-student Lao people who are interested in Japan and Japanese who want to become better acquainted with Lao people to visit it. Specifically, besides the training zone where the above-mentioned courses will be held, there will be provision of such areas as a lobby for personal exchanges, exhibitions (including video), social mixing of visitors, etc. and an information area for perusal of books (including video presentations) and access to Internet information.

2-2-2 Master Plan for Development of the Dong Dok Campus and the Construction Site for the Project.

The first master plan for development of the Dong Dok campus was drawn up in 1961 with U.S. aid when that place was Sisavang Vong University (founded in 1958). The main streets on the campus at the present time are based on that master plan. The year 1975 saw the establishment of the present People's Democratic Republic of Laos, and with introduction of the market economy in 1986, the government requested assistance from the ADB in terms of both funds and technical cooperation for educational reform. In that connection since 1994 the ADB has been giving support for drafting of a master plan for reforming higher education in Laos, and such cooperation is continuing to this day.

Rather than campus development, in the ADB master plan the leading role is assigned to development on the "software" side, i.e. regarding curriculum and teaching methods, but the plan also calls for construction of the necessary facilities and improvements in the existing infrastructure needed for implementation of the "software" side. That being the case, it does not go farther than indicating rough zoning as regards the land use planning of the Dong Dok campus (see Figure 2.2.1, "Layout Plan of Facilities Scheduled to Be Built on the Basis of ADB Loans").

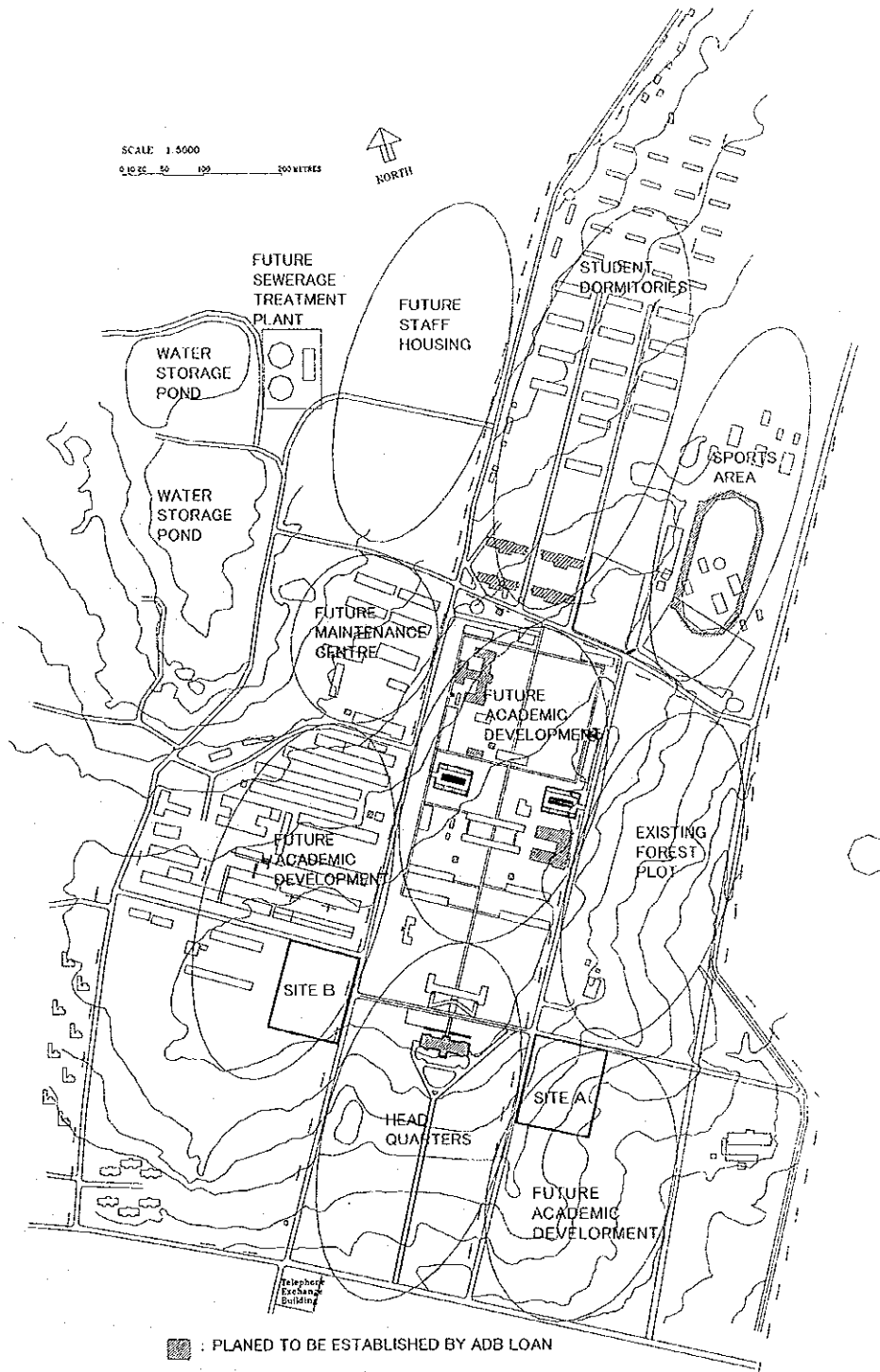
Initially the request indicated "Site A" in the figure as the construction site for the Project, but the result of site survey led to the conclusion that "Site B" was the best as shown in Table 2.2.3, "Site Comparison Table." The biggest reason to recommend "Site B" is that would not require any site preparation cost, which would be borne by the Lao side.

Furthermore, it was decided to make the facilities of the FEM and the Center contiguous to each other in view of what they have in common as regards the fields of information and personnel.

Table 2.2.3 Site Comparison Table

Item of comparison	Site A		Site B	
Easiness of access from the outside	It faces on the internal street where public buses run, which means that there is no particular problem in that respect.	-	Same as for Site A	-
Ease of visual recognition of the facilities	Recognition from the internal streets cannot be said to be easy in view of the fact that there are a lot of trees along those streets and the fact that the site becomes sharply lower.	△	There is good visual recognition thanks to absence of lots of trees along the internal streets and the fact that the site is on the same level as the surrounding land.	◎
Cost of land preparation of the site	The Lao side will have to bear construction cost (approximately US\$56,000) due to the need for land cuts and fills resulting from the fact that the site is sharply lower than the surrounding land.	●	The plan can be implemented as per the present condition of the terrain since there is a gentle southern slope with a maximum difference in height of less than 2 m.	◎
Infrastructure	The distance from the site to the nearest existing step-down transformer station is about 240 m, which means that it would be necessary to lay another cable. Nor is there a high-voltage line in the vicinity. Other than that, there is no problem.	○	The distance from the site to the nearest existing step-down transformer station is less than 70 m, a high-voltage line runs along the site, and there are no other problems either.	◎
Location of the site within the campus	It is contiguous to the university headquarters area, but it will be isolated with respect to the future development area. The only facilities in its vicinity will be an elementary school and an middle school attached to the university.	○	It is contiguous to the university headquarters area and is an area of future development. The north side is contiguous with the academic area, and it will be a point of contact between inside and outside of the university.	◎

Figure 2.2.1 Layout Plan of Facilities Scheduled to Be Built on the Basis of ADB Loans



2-2-3 Basic Concept of Each Component of the Facilities of the FEM

The facilities are divided by function into the major groups (1) classrooms and seminar rooms, (2) library (study hall) and (3) faculty member offices and administrative offices. In addition there is a plaza linking those different function and serving as a place for communication between students. The structure of combination and separation of them is based on the following thinking:

- 1) Considering the fact that the large classroom will have to accommodate a large number of people and will have to have a different height and width than the other facilities and the fact that it will be used at different times and for different purposes than normal instruction, such as for events, it will be a separate building and be directly contiguous with the plaza.
- 2) Considering the fact that the library (study hall) will be used mainly during hours when there are no classes, including after the last classes of the day and the fact that it will be used by all of the faculties, the library (study hall), will be a separate building just like the large classroom and will also figure centrally in the plaza.
- 3) The faculty member offices and administrative offices will be in a zone separate from the classrooms and seminar rooms so that work there will not be adversely affected by student movement and other distractions.

(1) Classrooms and Seminar Rooms

In this area 1 large classroom, 2 medium-size classrooms, 6 seminar rooms, 2 computer rooms and 1 audio-visual room have been requested. The rate of use of the different classrooms, except for the audio-visual room, is indicated in Table 2.2.4, "Calculation of Necessary Number of Classrooms and Their Rates of Use," on the basis of the planned curriculum. In the table "lectures" means classes attended by all of the students in the FEM in the case of third-year students and classes attended by all of the students in each of the two departments in the case of fourth-year and fifth-year students, and "practical sessions" means sessions held in the seminar rooms and computer rooms

with 30 students each. However, regarding the rate of use of the seminar rooms, guidance for graduation research papers is not taken into account, and therefore the actual rate is expected to be higher, in fact nearly 100% in the case of fifth-year students.

1) Large Classroom

The large classroom will be used mainly as a lecture room for third-year students, all of them (150 students) attending. It will also accommodate the monthly classes called "conferences," which are special lectures attended by all of the students in the faculty (450) and given mainly by outside people active in real society who are invited for that purpose.

The large classroom has to be big enough to accommodate 450 students for such conferences. That is because there is no other place in the university large enough to accommodate that many persons, the lecture theater for the general education faculty which is scheduled to be constructed on the basis of an ADB loan being able to accommodate a maximum of only 150. However, although third-year students receive almost all of their instruction at the campus, the fact that fourth-year and fifth-year students have a considerable amount of field work, particularly the fact that fifth-year students go out into the field even more frequently for the purpose of working on their graduation research papers, can be surmised from the fact that the Lao side is requesting vehicles for such field work movement by students. Therefore, on the basis of an assumption for the number of students attending the conferences of all the third-year students, 80% of fourth-year students and about 60% of fifth-year students, it should be appropriate to assume a total attendance of about 360.

At the same time, since the FEM is for the purpose of grooming people who will be directly responsible for development of the market open economy in Laos, there is a high degree of interest in it on the part of students. In particular, since the classes of third-year students consist mainly of basic courses concerning economics and management, it can be expected that many students in other faculties as well will want to attend such lectures, particularly "Microeconomics I & II," "Macroeconomics I & II" and "Lao Economics," and that many of the students in the FEM, too, will take those courses again. At the Dong Dok campus there are 5,686 registered students besides those in the FEM. Assuming that about 1% of them (about 50-60 students) will want to attend those lectures

and that about 20% of the fourth-year students of the FEM (about 30) and about 5% of its fifth-year students (7-8 students) take them again, it is expected that about 240-250 students will attend the lectures for the third-year students of the FEM in the large classroom.

From the above, the large classroom will normally be provided with enough desks and chairs to make possible lectures for 240-250 students, and its size will be such as to make it possible to accommodate 360 students at the time of conferences by changing a part to chairs only.

The furniture of the large classroom will include a stage, an instructor's desk, classroom desks and chairs (permanently installed type and removable type), a large blackboard, a screen and a blackout curtain.

2) Medium-size classrooms (2)

The medium-size classrooms will be used for lectures for fourth-year and fifth-year students, with respective use rates for the two of 65.7% and 63.8% and use up to the very limit of the range make possible by the timetable structure. The limit number of students newly enrolled each year is 150, and when they become fourth-year students they are to be divided into the economics department and the management department, but imbalance in which department they opt for cannot be avoided, and the university, too, wants to respect their choice as far as possible. That being the case, the numbers of students in the two departments will not be the same, and they will vary from year to year.

At the same time, since English, computers use and other practical instruction and seminars will be based on the premise of no more than 30 students in each group, each department will have three groups in each year, which means that it will be possible to accept up to 90 students in a department for each year.

From the above, each medium-size classroom will be such as to accommodate 90 students and in the way of furniture will be equipped with a platform, an instructor's desk, classroom desks and chairs, a medium-size blackboard, a screen, and simple blackout curtain, etc.

3) Seminar rooms (6)

Besides English, the seminar rooms will be used for the group practical instruction, group research, seminars in specialized subjects, etc. of each year of students. For each year of students, the curriculum structure is such as to make use of the seminar rooms in groups of up to 30 students, making for very high rates of use of 66.3% for fourth-year students and 68.8% for fifth-year students. In particular, since this university does not have a system such as that in Japan of a research room for each instructor, it is considered that the seminar rooms will also be used as the places for fifth-year student graduation research paper guidance and work in joint research groups, but such use is not taken into account in those use rates.

Since graduation research is to be undertaken in groups of less than 10 students, there should be formation of about 20 such groups with 7-8 students each. Assuming that each group engages in research activity or receives instructor guidance 2 hours a work and that the seminar rooms are used for that purpose, the use rate of the 6 planned rooms will rise to 85.4%, the figures thus showing that the capacity will be adequate.

From the above, each seminar room is to have an accommodation capacity of 30 students and be provided, in the way of furniture, with an instructor's desk, classroom desks and chairs, a small blackboard, etc., the space being sufficient to be able to change the arrangement of the desks and chairs according to the method of use.

4) Computer classrooms (2)

The computer classrooms will be used for computer use and information processing instruction for third-year students and practical instruction of fourth- and fifth-year students in their specialized departments. In the request both the case of two classrooms for 30 students each and four classrooms for 15 students each are given, but since computer practical training in the university consists mainly of practical training and exercise on common themes and therefore there is not any individual guidance in small groups, implementation on the basis of an accommodation capacity of 30 students is more efficient and therefore a more appropriate scale. The use rates of 52.5% for fourth-year students and 75.5% for fifth-year students are within the appropriate range. Each

computer classroom is to be equipped with a computer desk and chair for the instructor, computer desks and chairs for students, a small blackboard, etc. in the way of furniture.

5) Audio-visual classroom

Although an audio-visual classroom was not included in the initial request, provision of one as a special room has since been requested in view of the fact that many lectures use audio-visual equipment and particularly video teaching materials. The accommodation capacity is the same as that of the medium-size classrooms: 90 students. The number of class hours that it is scheduled to be used is 76 for both fourth-year students and fifth-year students, for an average of 4.75 hours a week and a use rate of 11.9%. In view of the low figure for the rate of use, one proposal was for one of the medium-size classrooms to be equipped as an audio-visual classroom. However, the medium-size classrooms will be the main lecture rooms for fourth- and fifth-year students, and even just considering lectures, the use rate will be 67.5% for fourth-year students. Therefore in terms of arrangement of class hours it would be extremely difficult to add another element to that of lectures. Furthermore, the use rate of the audio-visual classroom is equivalent to once a day, and that not at all low for a special classroom. It makes more sense to consider that there are, including the audio-visual classroom, three medium-size classrooms, which makes for flexibility in arrangement of class hours. Even in that case the average use rate of the three medium-size classrooms comes to 49.0% for fourth-year students, and one can expect the actual use rate to be considerably higher than that taking into account other events than normal instruction, such as special lectures, small-scale public lectures and graduation paper and thesis presentations.

The audio-visual classroom is to be equipped with the same furniture as the medium-size classrooms: a platform, an instructor's desk, classroom desks and chairs, a medium-size blackboard, a screen, a simple blackout curtain, etc.

(2) Library (study hall)

This library is a faculty library for the purpose of keeping and consulting specialized books concerning economics and management. Also, considering the student living environment, i.e. the fact that many of them live in dormitories without private rooms and that the day students, too, usually do not have private spaces in their homes, emphasis should be placed on use of the reading room as a place where student can do their studying as well.

If things progress smoothly, the number of books in the FEM library is expected to amount to 7,500 in five years because the ADB's development plan for FEM includes procurement of about 300 books, procurement of about 2,000 books is expected of Japanese technical cooperation and there are 52 kinds of textbooks that will be revised every semester and their backnumbers will be saved in stock, 10 copies each. The target number of books is set at 10,000 taking the space available for future increase of books into consideration.

The number of places in the reading room has been set at 15% of the total number of students plus 7 places for faculty members, for a total of 75 seats.

The furniture is to consist of reading desks and chairs, counters for obtaining and returning books, book shelves, bulletin boards, etc.

Table 2.2.4

Requirement of Classrooms

450_students	NUMBER OF TEACHING HOURS PER WEEK												Tot. hours/week by type of classroom									
	YEAR III						YEAR IV						YEAR V									
	Lecture		Tutorial		PC Lab		Lecture		Tutorial		PC Lab		Lecture		Tutorial		PC Lab		LR1	LR2	TR	PC
No.	a	b	a	b	a	b	a	b	a	b	a	b	a	b	a	b	a	b	seats	seats	seats	seats
Subjects taught in the 1st semester																						
COMMON SUBJECTS																						
1	2	2	2	12																		
2	2	2	2	12																		
3	2	2	2	12																		
4	2	2	2	12																		
5	2	2	2	12																		
6	2	2	2	12																		
7	2	2	4	24																		
8	2	2	4	24																		
9	1	1					1	1														
10																						
11																						
12																						
ECONOMICS																						
1							2	2	2	6	2	6										
2							3	3														
3							3	3														
4							3	3														
5							4	4														
6							3	3	1	3	1	3										
7							3	3														
8							3	3														
9							3	3	1	3	1	3										
10																						
11																						
MANAGEMENT																						
1							3	3	1	3												
2							3	3	1	3												
3							3	3	1	3												
4							3	3	1	3	1	3										
5							3	3	1	3	1	3										
6																						
7																						
8																						
9																						
10																						
																		PROPOSED NUMBER OF CLASS ROOMS:		UTIL. RATE OF THE CLASSROOMS:		
																		1		0.25		
																		2		0.675		
																		6		0.6625		
																		2		0.525		

a: hours per week per group ; b: total hours per week for all groups
 - working time: 8 hours per day, 40 hours per week
 - Ideal Utilization Rate of a Classroom is 65%
 - GMR: General meeting room of 500 places

Requirement of Classrooms

450 students	NUMBER OF TEACHING HOURS PER WEEK																		Tot. hours/week by type of classroom			
	YEAR III						YEAR IV						YEAR V						LR1	LR2	TR	PC
	Lecture	Tutorial	PC Lab	Lecture	Tutorial	PC Lab	Lecture	Tutorial	PC Lab	Lecture	Tutorial	PC Lab	a	b	a	b	a	b	seats	seats	seats	seats
COMMON SUBJECTS																						
1	2	2	2	2	2																	
2	2	2	2	2	2																	
3	2	2	2	2	2																	
4	2	2	2	2	2																	
5	2	2	2	2	2																	
6	2	2	2	2	2																	
7	4	4	4	4	4																	
8																						
9																						
10	1	1		1	1																	
11																						
12																						
ECONOMICS																						
1			2	2	2																	
2			2	2	2																	
3			2	2	2																	
4			3	3	3																	
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7																						
8																						
9																						
10																						
11																						

a: hours per week per group ; b: total hours per week for all groups
 - working time: 8 hours per day, 40 hours per week
 - Ideal Utilization Rate of a Classroom is 65%
 - GMR: General meeting room of 500 places

PROPOSED NUMBER OF CLASS ROOMS: 11
 UTIL. RATE OF THE CLASSROOMS: 0.25 0.6375 0.6875 0.7125

(3) Instructor Offices and Administrative Offices

The planned personnel breakdown of the FEM will be as indicated in Table 1.2.5 below:

Table 2.2.5 FEM Personnel Breakdown

Number of persons	Job title	Remarks
1	Dean	
2	Vice Dean	One for academic affairs and one for administrative affairs
1	Secretary	One for all of the above-mentioned three
30	Faculty members	Including both full-time and part-time
1	Head office worker	
10	Office work employees	
2	Janitors	
1	Guard	

As necessary facilities for operation of the faculty by such personnel there will be provision as necessary of individual offices, offices for the two long-term Japanese experts (to be used in the future as office for the department heads), a lobby for temporary instructors, a conference room and a reception room as common facilities for all of the personnel, etc. Although this area will be quite separate so that its work can be accomplished independently from the classroom area, consideration is also given to the part for contact with students since there is also work involving visits by students for academic and administrative purposes.

Furthermore, although the work of preparation and revision of textbooks and teaching materials, including tests and examinations, is important to the teaching staff and computers are essential to such work, presently they have to use the same computers as the students. Considering the fact that they are not able to find sufficient time to use those common computers because of overlapping of instruction time and the fact that test and examination questions and other information treated is confidential, it has been decided to provide a teaching materials preparation room with computers for their exclusive use. It will be large enough to accommodate ten of the existing computers.