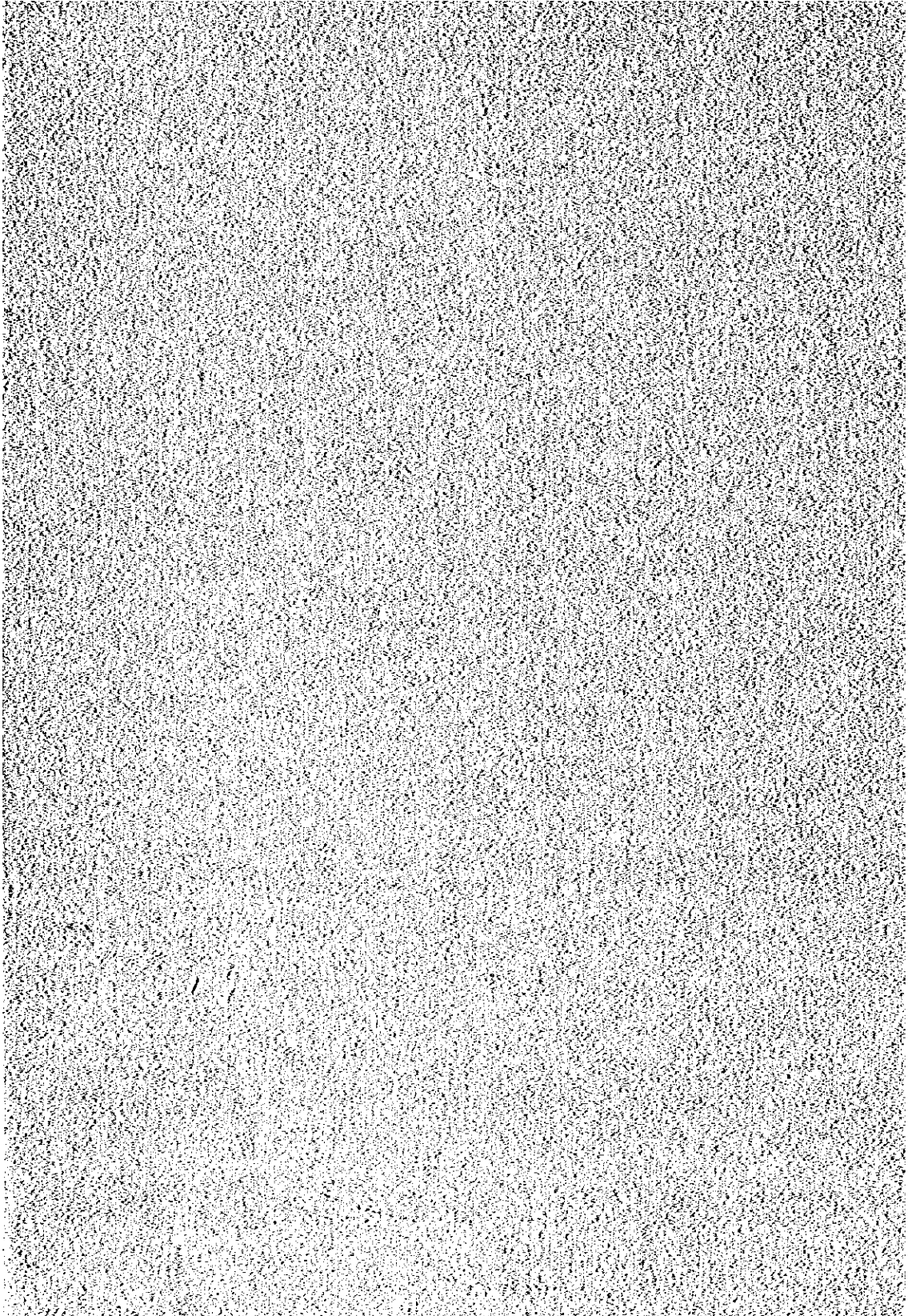


付 表



REPUBLIC OF VIETNAM

MINISTRY OF EDUCATION

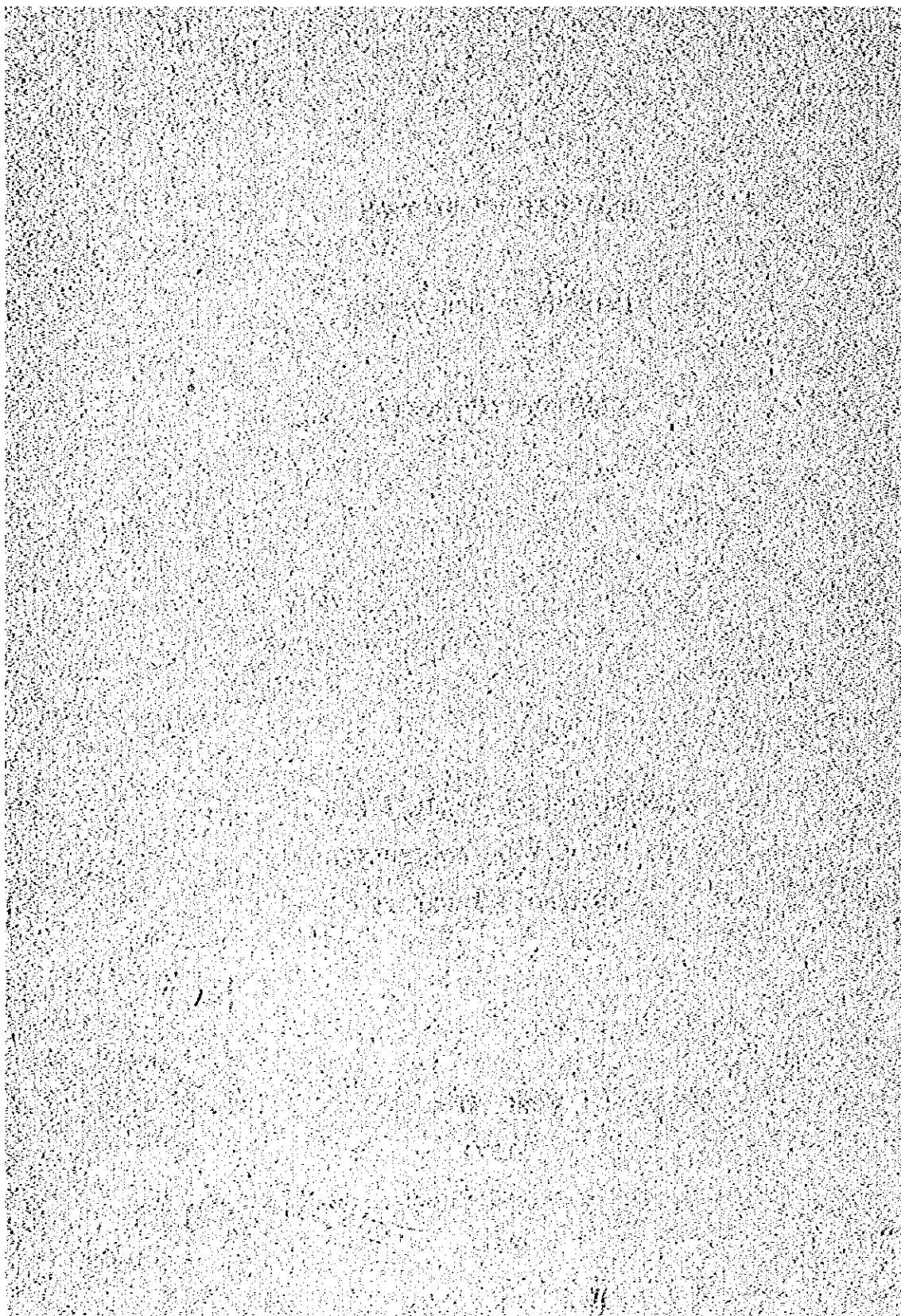
CANTHO UNIVERSITY

CONSTRUCTION PROJECT FOR
THE FACULTY OF AGRICULTURE
CANTHO UNIVERSITY

September

1972

(49)



I N T R O D U C T I O N

Although primarily being an agricultural country, Viet-Nam has yet to build up an agricultural education system suitable for its present needs. Moreover the post war economic development will certainly require a large number of agricultural technicians.

There are two existing agricultural colleges, one in Saigon and the other in Cantho. Saigon's National Agricultural Center was inaugurated 10 years ago, and its present student enrollment is about 600. The United States Government has been assisting the Center in terms of developmental planning and physical construction.

Operated since 1968, the Faculty of Agriculture University of Cantho graduated its first batch of Engineers in Agricultural Science, Equivalent to Bachelor level in 1972. Its present enrollment is 220. The school is particularly noted for its important role in agricultural development because it is situated right in the center of the Mekong Delta.

Regarded important as such, the Cantho Faculty Agriculture does not have sufficient budget to cope with the demands for physical facilities such as teaching and research and administrative services.

Recognizing those essential needs, the Government of Japan has acted favourably to the request of the

Government of the Republic of Viet-Nam to assist the CanTho Faculty of Agriculture. According to the agreements signed on March 3, 1970, the Government of Japan will assist the Faculty, for a period of 6 years, in the forms of laboratory equipments, agricultural machinery, visiting professors and experts, as well as a number of scholarships. This assistance program is well in progress. So far, 5 Japanese visiting professors and 2 experts have been assigned to CanTho. In addition, the Faculty has received from the Government of Japan laboratory equipment and agricultural machinery valued at ¥50 million - ¥70 million in the academic years 1970 - 1971 and 1971 - 1972 respectively.

With so much of newly acquired valuable equipment at the present rate, the Faculty cannot absorb fully and efficiently the assistance program from Japan without additional constructions. Unfortunately the Vietnamese national budget is far from sufficient to make it possible. The Faculty has requested from the Japanese assistance program, as an emergency measure, a number of pre-fabricated houses. This is only a temporary solution and the development program of Faculty depends heavily on the Government of Japan to finance the construction of the physical facilities for the CanTho Faculty of Agriculture. This assistance from the Government of Japan will enable the Faculty to make full use of the equipment already received or to be received, and to prepare itself for a better and more efficient agricultural education.

The existing buildings of the Faculty are two small and temporary. The development program for the University of Can Tho envisions some 45 out of 87 hectares for the Faculty of Agriculture. The new campus is located 1.5 km from the present one, and is being filled by dredging.

The proposed construction program for the Faculty when completed, will enable the enrollment of 400 undergraduate and 40 graduate agriculture students. Moreover, the next development program would be an Agricultural Research Institute affiliated to the Faculty.

ORGANISATION OF THE FACULTY OF AGRICULTURE

1. Present organisation:

The organisation and administration of the Faculty of Agriculture is set forth by decree No. 658/GDTN/PC/ND promulgated on April 9, 1969.

The school is administered by a Dean who is assisted by an Assistant Dean for Academic Affairs and a secretarial staff headed by an Administrative Assistant. To date, the school has 3 departments: Bio-Agronomy, Animal Husbandry, and Agricultural Engineering. In addition, there is an Experimental Farm. A Faculty committee was formed to assist in managing the various activities of the school. This committee consists of the following members:

- | | |
|---|---------------|
| - Dean | Chairman |
| - Assistant Dean | Vice Chairman |
| - Department Heads | Members |
| - Instructional staff with ranks from lecturers up. | " |
| - Experimental Farm Manager | " |
| - A representative of instructors | " |
| - Coordinator for student Affairs | " |
| - Faculty Secretary (no voting Committee Secretary privilege) | |

2. Future development:

Future plan will include 3 more departments: Agricultural Economics, Agricultural Chemistry, and Fishery, the latter being a new addition to the Faculty.

The Department of Graduate Studies will also be organized under the direction of an Assistant Dean for Research. This department will take care of the post graduate as well as research programs.

DEVELOPMENT PROGRAM FOR TEACHING STAFF

The Junior teaching staff of the Faculty of Agriculture is recruited from the National Agricultural Center and from the National Technical Center. Besides, the Faculty is trying to recruit Vietnamese graduates from abroad. Authorized by the Prime Minister, the Faculty recruits 8 new staff members per year to replace those taking up studies abroad.

Training of local teaching staff is being done at the University of Can Tho. Starting from the academic year 1971-1972, the Faculty of Science opens post graduate study program for teaching staff who are interested in doing research work. The post graduate program of the Faculty of Agriculture is planned to start in 1973 with the cooperation of the Faculty of Sciences, then later it will operate independently in 1975.

Each year, a number of staff members are sent abroad to study. The Government of Japan has agreed to grant 5 scholarships per year, and the Government of Great Britain, 3 scholarships per year in the Colombo plan. Moreover, other scholarships from South East Asian Center for Agricultural Research Philippines, Thailand, Holland, and other countries are also available.

THE GRADUATES AND PROSPECT FOR THEIR EMPLOYMENT

At the end of the academic year of 1971-1972 the Faculty graduated its first batch of 33 Engineers in Agriculture Science. It is too early to ascertain their employment situation. However the Faculty shall recruit six of them to work as instructors. The Ministry of Agriculture will accept 15 at most; and the Institute of Agricultural Research, two. A number of new graduates are applying for scholarships to study in the Philippines, Korea, and other countries.

Proposed plan for employment of future graduates.

The Development Program of the Faculty of Agriculture is planned along the projected need for Agricultural technicians in Vietnam. However since there are two agricultural colleges in Vietnam, the National Agriculture Center and the CanTho Faculty of Agriculture, we feel our role is more important in the Mekong Delta. Our graduates, majoring in Agronomy, Animal Husbandry, or Agricultural Engineering, may be employed in the following programs:

- The 5-year agricultural development program of the Ministry of Agriculture.

- Lower Basin of the Mekong Delta development program. In the very near future the Lower Mekong Delta Basin development program of the United Nations will set up agricultural pioneer projects at Go-Cong, Cai-San, Tiep-Nhut and An-Truong.

- CanTho Industrial Center, with a fertilizer plant, and food processing plants.

- Teaching jobs at Agricultural High schools.

- Teaching jobs at Rural technical high schools.

- Teaching jobs at Community University for the Upper Mekong, University of Hoa-Hao, and University of Cao-Dai.

- The post war economic development program.

REQUIREMENT FOR
LABORATORIES AND EXPERIMENTAL FARM FACILITIES

I. General :

1. Botany
2. Zoology
3. Microbiology
4. Physics
5. Screen houses
6. Glass houses
7. Biometrics

II. Dept. of Bio. Agronomy

8. Horticulture
9. Crops Science
10. Plant physiology
11. Crop improvement
12. Plant Pathology
13. Entomology
14. Soil Sciences

III. Dept. of Animal Husbandry

15. Animal Physiology
16. Animal Nutrition
17. Animal Pathology
18. Fishery
19. Animal Husbandry

IV. Dept. of Agricultural Engineering

20. Agricultural Machinery
21. Irrigation

22. Surveying

23. Thermodynamics-Engines

V. Dept. of Agri. Chemistry

24. General Chemistry (including organic and inorganic)

25. Soil chemistry

26. Biochemistry

27. Food processing

28. Nutrition and Fertilizers

VI. Dept. of Agricultural Economics

29. Agri. Economics, Farm Management, and Agricultural Statistics

30. Rural sociology, Agricultural Extension

VII. Experimental farm

1. Agri. Machinery workshop

2. Warehouse for farm machinery

3. Cereal warehouse

4. Stockroom for Agricultural chemicals

5. Animal Houses

6. Milking shed

7. Experimental farm office

CONSTRUCTION AREA AND COSTS

I. Area (Total)

- Buildings 24,290m²
- Testing grounds, sport grounds,
and parking lots 1,600m²
- Experimental field 30 hectares

II. Estimated cost

- Buildings (24,290m² x ¥52,000/m²) = ¥1,263 Million
- Grounds (1,600m² x ¥15,000/m²) = 24 Million
- Roads 45 M
- Water, electricity, gas, and
telephone facilities 60 M
- Furniture 75 M
- Unforeseen expense 40 M

Total: ¥1,507 Million

CONSTRUCTION SCHEDULE

The construction schedule is divided into three phases matching the academic development of the Faculty.

Phase I: 1973-1974 Cost
(Million yen)

1. Access road 20.0
 2. Buildings:
 - Administrative Quarter : 1800m²
 - Library, printing and data processing center : 2500m²
 - 3 large lecture rooms : 540m²
(180m²)
 - 7 small lecture rooms : 700m²
(100m²)
 - 20 student laboratories: 4800m²
(240m²)

Total area : 10340m²
Cost (10340m² x ¥52,000) = 537.6
 3. Unforeseen expense 20.0
- Total Cost for phase I: 557.6 Million yen

Phase II: 1974-1975

1. Roads 15.0
2. Buildings:
 - 2 large lecture rooms : 360m²
(180m²)
(62)

- 3 small lecture rooms : 300m²
(100m²)
- Small auditorium : 500m²
- 11 student laboratories: 2640m²
(240m²)
- Experimental farm : 2500m²
(Office, stock room,
machinery shed, screen
house, glass house,
irrigation system,
animal houses etc. ..)
- Student dormitory : 2400m²
- student cafeteria : 700m²
- staff cafeteria : 250m²
- Student union : 150m²
- Garage : 150m²

Total area : 9.950m²
 Cost (9.950m² x ¥52,000) = 517.4

- 3. Utilities (electricity, water, gas
etc. ..) for phase I buildings 30.0
- 4. Furniture for phase I buildings...40.0
- 5. Unforeseen expenses 10.0

Total cost for Phase II: 612.4 Million yen

Phase III: 1975-1976

- 1. Roads 10.0

2. Buildings:

- Large auditorium : 1000m²
- 10 research laboratories : 2400m²
(240m²)
- Corridors : 600m²
- Total area : 4000m²
- Cost (4000m² x 52,000) = 208.0

3. Grounds:

- Farm machinery test ground : 400m²
- Parking area : 200m²
- Sport grounds : 1000m²
- Total area : 1600m²
- Cost (1600m² x ¥15,000) = 24.0

4. Utilities (electricity, water, gas, etc.) for phase II and III buildings. 30.0

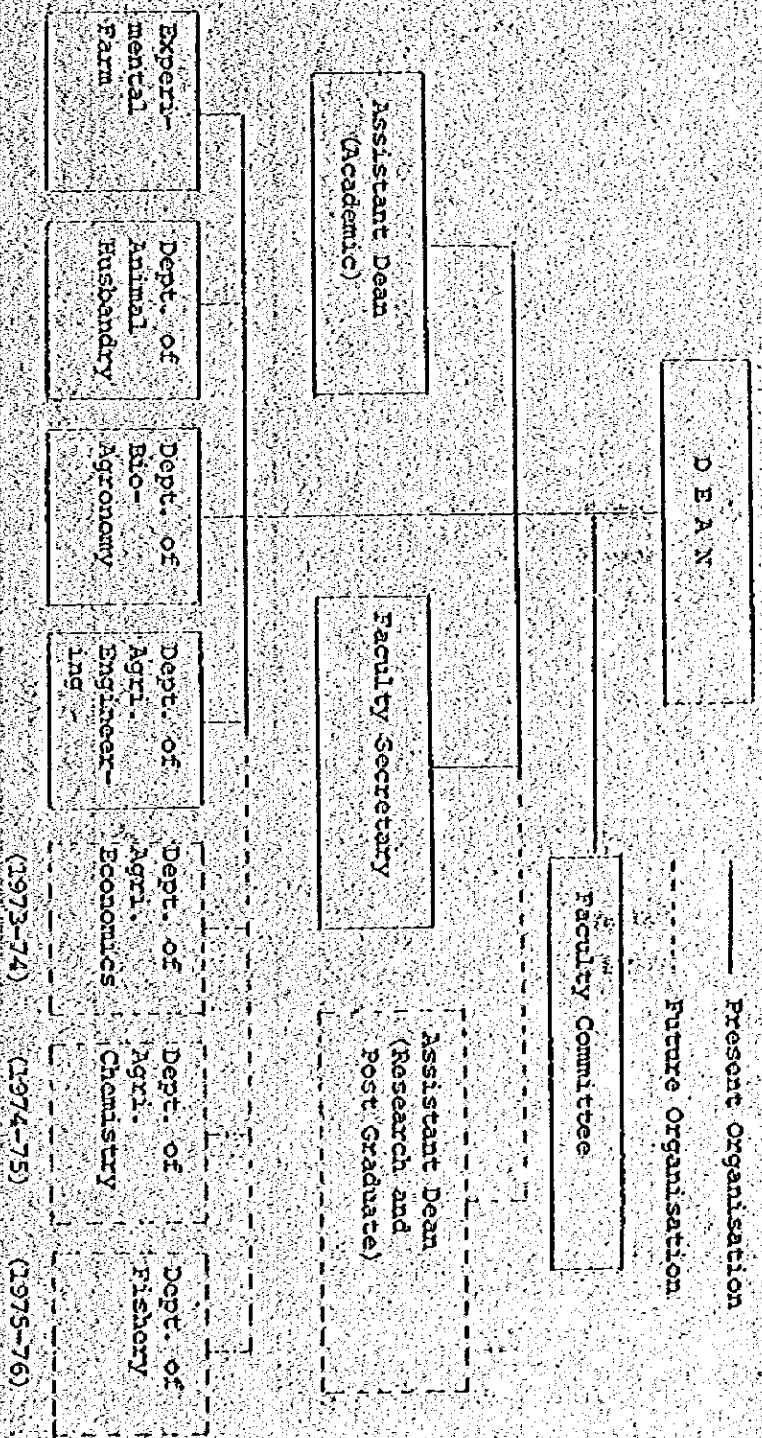
5. Furniture for phase II and III buildings. 35.0

6. Unforeseen expense. 10.0

Total cost for phase III. 317.0 Million

GRAND TOTAL COST : 1,507.0 Million yen

PRESENT AND FUTURE ORGANISATION OF THE FACULTY OF AGRICULTURE



附表二 教官別教科內容

		年次	講義	實驗	實習
Phan Thanh Bach NAC 年 內燃機開學	夏期學自	1			30
	農場實習	1			30
	內燃機開學	2	20	10	70
	夏期實習	2			40
	小論文指導	3		30	
	實地指導			30	
	半論指導	4		60	
	農場實習	1			20
Phan Van Chuong NAC 年 植物生理學	植物生理學IIA	2			135
	小論文指導	3		60	
	遺傳及改良	4	10	15	135
	半論指導	4	4	60	
	農場實習	1			20
	夏期實習	1			45
	"	2			40
	植物生理學IIA	2			90
遺傳學	4			90	

		年次	構數	實驗	實習
Châu Văn Dũng NAC牛 畜產學	家畜飼養學	1	10		
	實地指導	1		30	
	農場實習	1			40
	家畜飼養學(物)	2		30	40
	實地指導	2		30	
	家畜飼養學(豚)	3		20	50
	小論文指導	3		60	
	家畜飼養學(鴿)	4		30	40
	(水牛)	4		10	
	學論指導	4		120	
Trần Đăng Hồng NAC牛 油厝植植學	實地指導	1		30	
	農場實習	1			40
	農業概論	2	20		135
	植物生理學 II B	2			40
	氣象學	2	15		45
	實地指導	2		30	
	小論文指導	3		60	
	植物加工	4			60

		年次	講義	実験	実習
Hà Huy Hoàng NAC 平 農業経済学	年論指導	4		70	
	夏期実習	1			10
	農場実習	1			30
	夏期実習	2			40
	小論文指導	3		60	
	農業経済管理学	4		30	
Trần lam Huyền NAC 平 養豚学	年論指導	4		60	
	夏期実習	1			10
	農場実習	1			10
	夏期実習	2			60
	家畜飼養学(豚)	2			45
	"	3			30
	小論文指導	3		60	
	家畜飼養学(水牛)				45
///	实地指導			30	
Phạm Văn Kim NAC 平 植物病理学	西部農業	1	10		
	实地指導	1		30	
	"	2		30	

		年次	講義	実験	実習
	農場実習	1			20
	環境学	3		30	10
	小論文指導	3		60	10
	作物保全学	11		15	45
	環境学	11		30	90
	小論文指導	11		60	
Mong-phuoc Minh	夏期実習	1			30
カント大学	農場実習	1			10
植物生理学	夏期実習	2			40
	植物生理学	3			120
	農業水理学	3			30
	小論文指導	3		30	
	農業水理学	11			20
	実地指導	11		30	
Nguyen Van Nhiem	夏期実習	2			40
NAC大学	土壌学	3	60	30	
蔬菜学	小論文指導	3		60	
	園芸学	11	30		90

		年次	講義	実験	実習
Nguyễn Văn Ni NAC 年 農業機械学	土壌保全学	4	45	20	
	実地指導			30	
	夏期実習	1			30
	農場実習	1			40
	夏期実習	2			40
	農業機械学	3	5	5	60
	実地指導	3		30	
	小論文指導	3		60	
	測地学	4		10	30
	卒論指導	4		60	
Nguyễn Thành Nghiệp 小一大年 稻学	農場実習	1			30
	夏期実習	1			45
	"	2			40
	環境生態学	2			45
Nguyễn Thị Nghiem 小一大年 植物病理学	農場実習	1			30
	夏期実習	1			45
	"	2			40
	小論文指導	3		60	

		年次	講義	実験	実習
Lé d'nh Qui NAC 卒 果樹学	環境学	3			10
	作物保全学	4			15
	環境学	4			90
	農場実習	1			20
	夏期実習	1			60
	"	2			40
	植物生理学 IIB	2			110
	土壌学	3			45
	小論文指導	3		60	
	土壌保全学	4			115
Ba lê th Sen	植物栄養学	4			110
	植物保蔵学	4		20	120
	小論文指導	4		60	
	農場実習	1			10
	昆虫学	2		15	180
	作物保全学	3		15	120
	小論文指導	3		70	

		年次	講義	実験	実習
Trần Minh Tâm NAC年 畜産学	農場実習	1			20
	夏期実習	1			30
	"	2			40
Nguyễn Phú Thiên NAC年 農業機械	統計学	2	30	10	45
	農業水利学	3	45	20	60
	農業機械学	3	15	06	60
	実験実習法	3	15		20
	実地指導	3		30	
	小論文指導	3		30	
	農業水利学	4		20	40
	年論指導	4		120	
Nguyễn Văn Thường NAC年 圃場整備機械化	夏期実習	1			30
	"	2			40
Huỳnh Công Thọ NAC年	農場実習	1			20
	土壌学	3			45
	小論文指導	3		20	
	土壌保全学	4			45
	花き学	4		10	90

		年次	講義	実験	実習
	卒業指導	4		60	
Huyền Công Tiên	土壤学	3			115
NAC 学位 土壤化学	生化学	2			90
Trần Thành Tinh	農場実習	1			20
NAC 学位 養鶏学	夏期実習	1			60
		2			60
	小論文指導	3		30	
	家畜飼養(鶏)	4			70
	卒業指導	4		60	
Nguyễn Việt Trường	農業概論	1	10		
オーストラリア 植物栄養、熱帯牧野	植物生理学 II A	2	45	20	
	B	2	45	20	
	植物生理学 III	3	45	20	
	実地指導	3		30	
	小論文指導	3		60	
	植物栄養学	4	30	10	
	卒業指導	4		120	
Trần Minh Trường	農場実習	1			10
カンボ大学					

在 概		年次	講義	実験	実習
	夏期実習	1			30
	"	2			40
	小論文指導	3		30	
	農業水利学	3			30
	"	4			20
Vu ngoc Ruân HAC 学 水産学	農場実習	1			20
	夏期実習	1			60
	"	2			60
	養魚学	3	20		40
	卒論指導	4		30	
Vo tong Xuan フリスン 農芸化学	夏期実習	2			15
	稲	3	60	30	150
	実験実習法	3	05		10
	小論文指導	3		30	
	稲の栄養	4	15	10	70
	~~~~~	4	15		
	実地指導	4		30	
	卒論指導	4		180	



		年次	講義	実験	実習
	七	1		30	
Phạm Văn Chó	農場実習	1			30
Cô Cao Ngọc Diệp	農場実習	1			30
Hàng An	植物分類学	2	20	10	40
Bùi Kim Bách	life and death	2		30	40
Nguyễn Văn Tình	農業地質学	2			40
Trần Văn Đạt	小論文指導	3		30	
	年論指導	4		30	
Trần Phước Dương	環境学	3	60		
	"	4	60		
Nguyễn Long Giang	農業林学	3	10	10	
	年論指導	4		30	
Lưu Trọng Hiếu	生化学	2	30		
Trần Văn Lân	昆虫防除学	3	45		
Nguyễn Đăng Long	植物病理学	4	30		
Vô Đình Long	花工学	4	30		
Châu Tâm Luân	農業経済管理学	4	60		
Cô Nguyễn Bích Liễu	昆虫学	2	30		

		年次	積算	次役	実習
Phùng Trung Ngân	植物生態学	2	30		
Trần Văn Thu	測地学	4	30		90
Tôn Thất Trình	植物工業	4	30		
Nguyễn Thanh Tường	教 学	1	30	45	
Lê Quang Xáng	農業地質学	2	30	10	
Cổ Phan Mỹ Chương	農村社会学	4	30		
Steven Dille	家畜飼養学(鶏)				
	" (牛)				
Mitsuo Ikeda	小論文指導	3		60	
"	植物保蔵学	4	45		
	牛 飼 指導	4		40	
Takao Kashiwabara	小論文指導	3		60	
	遺伝と改良	4	20		
	家畜飼養学(科)	4	30		
	" (牛)	4	10		
	牛 飼 指導	4		60	

		年次	講義	実驗	実習
Yoshitane Nagata	家畜飼養 (概)	2	30		
	"	3	30		
	牛論指導	//		30	



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2  
1