

## 付 属 資 料

1. ミニッツ (英文)
2. PCMワークショップ資料
3. プロジェクト・デザイン・マトリックス (PDM)
4. 作物学部関連資料
  - (1) 学科と教官構成
  - (2) 研究課題と参画者
  - (3) 各研究室別設置要望機材
5. 土地／水資源管理学部関連資料
  - (1) 教官構成
  - (2) カリキュラム
  - (3) ハノイ農業大学環境分析センター実験室
6. 経済／農村開発学部関連資料
  - (1) 教官構成
  - (2) 講義科目と担当
  - (3) 研究課題
  - (4) 調査経費見積書



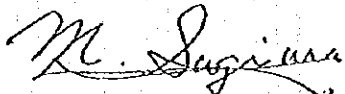
MINUTES OF UNDERSTANDING  
ON THE JAPANESE TECHNICAL COOPERATION  
FOR THE EDUCATION AND RESEARCH  
CAPABILITY BUILDING PROJECT  
OF HANOI AGRICULTURAL UNIVERSITY  
IN VIETNAM

The Long Term Study Team (hereinafter referred to as "the Team"), headed by Dr. Miyoji SUGIURA, has been dispatched by the Japan International Cooperation Agency (hereinafter referred to as "JICA") in order to study and discuss about the proposed technical cooperation for the Education and Research Capability Building Project of Hanoi Agricultural University (hereinafter referred to as "the Project") in Vietnam.

During its stay in Vietnam from 8th, April to the 1st of May 1997, the Team had a series of discussions with the Vietnamese authorities concerned on the matters related to the Project and conducted site visits.

As a result of the discussions and the site visits, both sides have agreed to recommend to their respective Government to take further steps towards the implementation of the technical cooperation for the Project, based on the findings and results of the study described in the attachment.

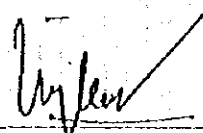
Hanoi, April 29th, 1997



Prof. Dr. Miyoji Sugiura  
Team Leader,  
The Long Term Study Team,  
Japan International Cooperation Agency,  
Japan



Prof. Dr. Tran Van Nhung  
Director,  
International Relations Department,  
Ministry of Education and Training,  
Vietnam



Prof. Dr. Nguyen Viet Tung  
Rector, Hanoi Agricultural University,  
Vietnam

M.S.



## ATTACHMENT

### REPORT OF LONG TERM STUDY TEAM ON THE JAPANESE TECHNICAL COOPERATION FOR THE EDUCATION AND RESEARCH CAPABILITY BUILDING PROJECT OF HANOI AGRICULTURAL UNIVERSITY IN VIETNAM

#### 1. The Long Term Study Team

##### 1.1. Objectives of the Team

The Team was dispatched by JICA for the purposes of studying and discussing on the details of the proposed technical cooperation for the Education and Research Capability Building Project of Hanoi Agricultural University and of formulating the tentative framework of the Project, based on the results of the Preliminary Study Team dispatched from 10th to 19th of September 1996.

##### 1.2. Schedule of the Team; ( see ANNEX 1.)

##### 1.3. Members of the Team; ( see ANNEX 2.)

#### 2. Framework of the Project

##### 2.1. Background

Human resource development in agricultural field is strongly demanded in Vietnam, because agriculture is one of the main industry in the country and it still has a high potential for further development. And high quality manpower for modernization and industrialization of agricultural sector is required. As a leading agricultural university in Vietnam, HAU has great responsibility for that. However, the education and research capability of HAU does not adapt itself to the needs. To resolve the problem, the Government of Vietnam and HAU requested to the Government of Japan for the technical cooperation for the Education and Research Capability Building Project of Hanoi Agricultural University.

As a result of this Long Term Study, the Team summarized the following framework of the Project, which should be confirmed or, if necessary, amended by the further study and discussions.

For the appropriate formulation of the framework, the Team also utilized Project Cycle Management (PCM) method, the process and result of which are

M.S

Nguyen

shown in ANNEX 3. And the framework was rearranged from the PCM result to adjust to the Project Type Technical Cooperation Scheme of JICA.

2.2. Title of the Project

The Education and Research Capability Building Project of Hanoi Agricultural University

2.3. Super Goal

High quality manpower for modernization and industrialization of agriculture is provided.

2.4. Overall Goal

Quality of training and researching of HAU is improved.

2.5. Project Purpose

Quality of training and researching of three faculties ("Agronomy", "Land and Water Resources Management" and "Economics and Rural Development") of HAU is improved.

2.6. Output of the Project

- 1) The quality of teachers and researchers is improved.
- 2) Conditions for training and researching is enhanced.
- 3) Research papers are increased and exchanged.

2.7. Activities of the Project

In the three fields covered by the faculty of "Agronomy", "Land and Water Resources Management" and "Economics and Rural Development", the following activities will be implemented, utilizing the Central Laboratory of HAU, which is now under construction and should be completed before the start of the Project.

- 1) For the quality improvement of teachers and researchers;
  - (1) Training of teachers and researchers on education knowledge and research methods
  - (2) Joint research with universities in Japan
  - (3) Workshops with academic institutions in Vietnam
  - (4) Development of appropriate teaching curriculum
- 2) For the enhancement of training and researching conditions;
  - (1) Planning on the improvement of conditions for training and researching, including on the enhancement of equipment for the Central Laboratory,

M.S.

Nguyen

- classrooms and a computer room
- (2) Training on the maintenance of equipments
- (3) Establishment of a management and maintenance system for equipments

- 3) For the increase and exchange of research papers;
  - (1) Improvement of preparation skill of scientific papers
  - (2) Attendance to academic meetings
  - (3) Contribution of research papers to international academic societies
  - (4) Issue of periodicals and research results in English

### 3. Measures to be taken by the Japanese side

The Japanese side should take the following measures for the successful implementation of the Project.

#### 1) Dispatch of experts

- (1) Long-term experts; Team leader, Coordinator and others related to the above activities such as "Agronomy", "Land and Water Resources Management" and "Economics and Rural Development"
- (2) Short-term experts; Experts in the field related to the above activities

#### 2) Training of Vietnamese personnel in Japan

Each year, some personnel related to the above activities and university management will be trained in Japan

#### 3) Provision of equipment and machinery

- (1) Equipment and machinery related to the activities of the Project, including some equipments to be installed in the Central Laboratory, training instruments ( audio-visual, etc.) and personal computers
- (2) Others necessary for the smooth implementation of the Project such as vehicles

### 4. Measures to be taken by the Vietnamese side

The Vietnamese side should take the following measures for the successful implementation of the Project.

#### 1) Allocation of counterpart personnel and staffs

- (1) An adequate number of qualified counterpart personnel to the long-term and short-term experts dispatched from Japan
- (2) Other staffs necessary for the smooth implementation of the Project, including administration, accounting and equipment maintenance staffs

M.S

Nguyen

2) Provision of building and facilities

- (1) Office rooms for Japanese experts
- (2) Other facilities necessary for the smooth implementation of the Project, including Central Laboratory, class rooms and a computer room

3) Budget allocation

- (1) Expenses necessary for transportation of equipments provided by JICA from the port of disembarkation to the Project site within Vietnam
- (2) Operation and maintenance expenses necessary for the equipment and facilities
- (3) Other running expenses necessary for the smooth implementation of the the Project, including expenses for stationery and reagents
- (4) Transportation and travel allowances for the Japanese experts for their official travel within Vietnam.

4) Necessary administrative arrangements

- (1) Exemption of customs duties, internal taxes and any other duties imposed in Vietnam on the equipment provided by JICA.
- (2) Provision of privileges, exemption and benefits for the Japanese experts and their families assigned under the Project according to the current laws and regulations of Vietnamese.

5. Term of Cooperation

The term of Japanese cooperation for the Project will be five (5) years from the initial dispatch of experts.

6. Joint Coordination Committee

A Joint Coordination Committee with the following functions and composition is expected to be established at the initiation of the Project, and be held at least once a year during the cooperation period.

1) Functions

- (1) To review and authorize the annual plan of the Project activities within the framework of the Project.
- (2) To monitor the progress of the Project
- (3) To evaluate the activities of the Project
- (4) To discuss other matters relevant to the Project

*M. S.*

*T. Ujita*

## 2) Composition of the Committee

### (1) Chairperson:

Vice Minister of Ministry of Education and Training

### (2) Members:

<Vietnamese side>

Rector of Hanoi Agricultural University

Representative(s) from Ministry of Education and Training

Representative(s) from Ministry of Planning and Investment

Representative(s) from Ministry of Agriculture and Rural Development

<Japanese side>

Representative(s) from Embassy of Japan

Representative(s) from JICA Vietnam Office

Japanese Team Leader and Coordinator

M.S.

Wjku



ANNEX 1.

Schedule of the Team

- Apr. 8 Arrive in Hanoi
- Apr. 9 JICA Vietnam office, Embassy of Japan,  
Ministry of Planning and Investment (MPI),  
Hanoi Agricultural University (HAU)
- Apr. 10 Ministry of Education and Training (MOET),  
Meeting at HAU
- Apr. 11 National Institute for Agricultural Planning and Projection  
(NIAPP),  
Meeting at HAU
- Apr. 12 Meeting at HAU
- Apr. 13 Team Meeting
- Apr. 14 Meeting at HAU
- Apr. 15 ~ PCM Workshop at HAU
- Apr. 19 Ministry of Agriculture and Rural Development
- ~ Apr. 22 PCM Workshop at HAU
- Apr. 23 Minutes Preparation
- Apr. 24 Meeting at HAU
- Apr. 25 Minutes Confirmation at HAU, Field Study
- Apr. 26 Meeting at MOET
- Apr. 27 Team Meeting
- Apr. 28 Report Preparation
- Apr. 29 Minutes Signing
- Apr. 30 Report to JICA Vietnam office,  
Report to Embassy of Japan

M.S.

78

*[Handwritten signature]*

ANNEX 2.

Members of the Team

Prof. Dr. Miyoji Sugiura	Team Leader / Crop Science ( Kyushu University )
Prof. Dr. Kazuhiko Egashira	Soil Science ( Kyushu University )
Prof. Dr. Kohei Kobayashi	Agricultural Economy ( Kyushu University )
Mr. Yoshitaka Sumi	Technical Cooperation ( Japan International Cooperation Agency )
Ms. Erika Fukushi	PCM Method ( Global Link Management Inc.)
Ms. Yoshie Nasu	Interpreter ( Japan International Cooperation Center )

*M.S.*

*Uyaka*

## ANNEX 3

### PCM Participatory Workshop on The Education and Research Capability Building Project of Hanoi Agricultural University

#### 1. Objectives

Project Cycle Management (PCM) is a procedure to manage planning, implementation and evaluation of a development project more efficiently and more effectively. During the stay of the Long Term Study Team in Vietnam, the Team and the personnel from the concerned authorities of the Government of Vietnam conducted PCM Workshop for the purpose of formulating the framework of the Project.

#### 2. Participants

A total of 22 project personnel participated in the workshop.

##### 1) Participants

Prof. Dr. Nguyen Viet Tung	Rector, Hanoi Agricultural University (HAU)
Prof. Dr. Vu Duy Giang	Vice Rector, HAU
Assoc Prof. Dr. Nguyen Quang Thach	Vice Rector, HAU
Prof. Dr. Nguyen Huu Te	Dean, Faculty of Agronomy, HAU
PhD. Phan Huu Ton	Deputy Head, Faculty of Agronomy, HAU
PhD. Vu Dinh Hoa	Deputy Head, International Relations Office, HAU
Prof. Dr. To Dung Tien	Dean, Faculty of Economics and Rural Development, HAU
MSc. Tran Huu Cuong	Faculty of Economics and Rural Development, HAU
Assoc. Prof. Dr. Pham Ngoc Thuy	Dean, Faculty of Land and Water resources Management, HAU
MSc. Do Nguyen Hai	Faculty of Land and Water resources Management, HAU
Assoc. Prof. Dr. Do Duc Viet	Dean, Education Office, HAU
Assoc. Prof. Dr. Ha Quang Hung	Head, International Relations Office, HAU
Dr. Cao Anh Long	Head, Scientific Research Office, HAU
Prof. Dr. Hoang Minh Tan	Dean, Faculty of Postgraduate, HAU

M.S.

Truyen

- |                              |   |
|------------------------------|---|
| Ms. Nguyen Thanh Huyen       | Ministry of Agriculture and Rural Development               |
| Dr. Nguyen Viet Hai          | Ministry of Agriculture and rural Development               |
| Prof. Dr. Bach Vong Ha       | Ministry of Education and Training                          |
| Ms. Dai Thi Ngoc Xuan        | Ministry of Education and Training                          |
| Prof. Dr. Miyoji Sugiura     | Member of JICA long-term study team (Crop Science)          |
| Prof. Dr. Kazuhiko Egaishira | Member of JICA long-term study team (Soil Science)          |
| Prof. Dr. Kohei Kobayashi    | Member of JICA long-term study team (Agricultural Economy)  |
| Mr. Yoshitaka Sumi           | Member of JICA long-term study team (Technical Cooperation) |
- 2) Moderator
- |                   |  |
|-------------------|--|
| Ms. Erika Fukushi | Member of JICA long-term study team (PCM method) |
|-------------------|--|
- 3) Interpreter (Vietnamese-Japanese)
- |                 |                                     |
|-----------------|-------------------------------------|
| Ms. Yoshie Nasu | Member of JICA long-term study team |
|-----------------|-------------------------------------|
- 4) Assistant
- |                    |                                |
|--------------------|--------------------------------|
| Ms. Nguyen My Hang | Secretary, JICA Vietnam Office |
|--------------------|--------------------------------|

### 3. Schedule

The PCM workshop was held at meeting room, Hanoi Agricultural University from April 16-22, with the following schedule.

*M.S.*

*Tyfer*

### Workshop Schedule

	A.M.(8:30-11:30)	P.M.(2:00-4:00)
April 16, 1997		Plenary Session -Introduction of participants -Introduction to PCM Workshop (Objectives, Rules, Method)
April 17, 1997	Plenary Session -Introduction to PCM Workshop (continue lecture)	Participation Analysis (lecture and group work)
April 18, 1997	Problem Analysis (lecture and group work)	Problem Analysis (continue group work)
April 19, 1997	Objectives Analysis (lecture and group work)	Objectives Analysis (continue group work)
April 21, 1997	Alternatives Analysis (lecture and group work)	Project Design Matrix (PDM) (lecture and group work)
April 22, 1997	Project Design Matrix (PDM) (continue group work)	Project Design Matrix (PDM) (finalize PDM) Review of PCM Workshop

#### 4. Result of the PCM workshop

##### 4-1 Participation Analysis

In this analysis, the workshop participants are requested to indicate all the players which may be affected by/involved in the project. Then, the players were categorized into several groups such as beneficiaries, potential opponents, implementing agencies, decision makers, funding agencies and supporting groups. The workshop participants chose Hanoi Agricultural University (hereinafter referred to as HAU) from beneficiaries as the target group of this project.

The workshop participants identified three faculties of HAU as a target group of this project, understanding the result of the preliminary study implemented last September.

Engaging in the detailed participation analysis, it was revealed that "the three faculties of HAU" mean "the teachers, their working conditions and students."

*M.S.*

*[Signature]*

#### 4-2 Problem Analysis

In this workshop, the problems of the three faculties, selected above as a target group, were mainly analyzed. Then, a core problem which means "a center" or "a starting point" of this problem analysis was discussed. Among several potential core problem cards, "Quality of training and researching of the three faculties is low" was finally chosen by the participants.

#### 4-3 Objectives Analysis

This analysis is to seek "means" for solving the problems by converting the problems into objectives, and the cause-effect relationship is changed to "means-ends" relations. For example, the core problem; "Quality of training and researching of the three faculties is low" was changed to the objective; "Quality of training and researching of the three faculties is improved". During the process, some problems which were difficult to convert were discarded and some necessary "means" were added.

#### 4-4 Alternatives Analysis

In this analysis, the participants are requested to identify the area of responsibility of the project according to examination criteria such as priority, input, technical aspects, social factors, financial/economic aspects, achievement and sustainability.

At the end of the Alternative analysis the participants selected the following three approaches to be included in the project.

- 1) Quality of teachers/ researchers improvement approach
- 2) Equipment enhancement approach
- 3) Exchange of research result increasing approach

Management capacity improvement was recognized as an important component for the project success, however, it was set apart from the project component because, from Japanese side, it can not be considered as an objective of cooperation itself, but a condition to make the cooperation be more successful.

M.S.

W. J. Taylor

#### 4-5 Project Design Matrix (PDM)

The Project Design Matrix is a summary table of a project design in which project elements--objectives, activities, indicators, inputs and assumption-- are described in a common format. In this workshop, the participants selected "Quality of training and researching of the three faculties is improved" as a Project Purpose, and then formulated those elements of PDM according to the results of workshop above. The result is shown below.

M.S

2/2/20

Project Design Matrix (PDM) : The Education and Research Capability Building Project of Hanoi Agricultural University

NARRATIVE SUMMARY	OBJECTIVELY VERIFIABLE INDICATORS	MEANS OF VERIFICATION	IMPORTANT ASSUMPTIONS
<p><b>SUPER GOAL</b></p> <p>High quality manpower for modernization and industrialization of agriculture is provided</p>			
<p><b>OVERALL GOAL</b></p> <p>Quality of training and researching of HAU is improved</p>	<p>No. of excellent student increased in HAU</p>	<p>Academic office (HAU)</p>	<p>1. Support by Vietnamese Government (MOET, MARD &amp; MPD) is continued</p>
<p><b>PROJECT PURPOSE</b></p> <p>Quality of training and researching of the three faculties of HAU is improved</p>	<p>No. of excellent student increased in three faculties of HAU</p>	<p>Academic office (HAU)</p>	<p>1. The result of the project is extended to other two faculties under cooperative use of central laboratory</p> <p>2. Support by Vietnamese Government (MOET, MARD &amp; MPD) is continued</p>
<p><b>OUTPUTS</b></p> <p>1. Quality of teachers and researchers is improved</p> <p>2. Equipment for training and researching is enhanced</p> <p>3. Research papers are increased and exchanged</p>	<p>1-1 No. of master and PhD degree obtained</p> <p>1-2 No. of research reports/articles published (internally/internationally)</p> <p>1-3 No. of reporting at internal/international congresses</p> <p>1-4 No. of workshops and seminars held</p> <p>2-1 No. of useful equipments introduced in project period</p> <p>2-2 No. of computers and other useful equipments per staff</p> <p>2-3 No. of maintenance staff trained</p> <p>2-4 Types/No. of machines repaired</p> <p>3-1 No. of periodicals issued in HAU</p> <p>3-2 No. of published research papers</p> <p>3-3 No. of published research papers per staff</p>	<p>1-1 Education office (HAU)</p> <p>1-2 Scientific research department (HAU)</p> <p>1-3 International cooperation office (HAU)</p> <p>1-4 Record of HAU-JICA Project Team</p> <p>2-1 &amp; 2-4 Record of HAU-JICA Project Team</p> <p>2-2 &amp; 2-4 Equipment management office (HAU)</p> <p>2-3 Record of three faculties</p> <p>3-1, 3-2 &amp; 3-3 Scientific research department</p> <p>3-2 Record of HAU-JICA Project Team</p>	<p>1. Library service is improved</p> <p>2. Support by Vietnamese Government (MOET, MARD &amp; MPD) is continued</p>

67

M.5



NARRATIVE SUMMARY	OBJECTIVELY VERIFIABLE INDICATORS	MEANS OF VERIFICATION	IMPORTANT ASSUMPTIONS
<p><b>ACTIVITIES</b></p> <p>1-1-1 Dispatch Japanese experts to HAU            1-1-2 Train teachers and staff of HAU in Japan            1-1-3 HAU establish joint research projects with Kyushu University and other Japanese universities            1-1-4 Hold workshops between HAU and other organizations in Vietnam            1-2-1 Equip personal computers            1-2-2 Establish two class rooms with modern teaching equipment (video, OHP, etc.)            1-2-3 increase new books            1-2-4 Establish appropriate teaching curriculum            1-3-1 Contribute research papers to international academic societies            1-3-2 Attend academic meetings more often            2-1 Arrange modern equipment for a central laboratory            2-2 Arrange computer and other facilities in a computer room            2-3 Establish maintenance and management system of equipment            2-4 Hold training courses on maintenance of equipment/machines            2-5 Carry out regular examination of equipment condition            3-1 Issue periodicals and research results of HAU in English            3-2 Write and publish research papers with cooperation of Japanese experts</p>	<p><b>VIETNAMESE SIDE</b></p> <p>1. Experts (C/P)            2. Facilities and rooms            3. Utilities            4. Management/operation cost</p>	<p><b>JAPANESE SIDE</b></p> <p>1. Dispatch of Experts            2. Acceptance of Vietnamese Counterpart training in Japan            3. Provision of Equipments            4. Supplementary Cost for Project activities</p>	<p>1. HAU teachers/researchers improve English language skill            2. Support by Vietnamese Government (MOET, MARD &amp; MPI) is continued</p> <p><b>PRE-CONDITIONS</b></p> <p>1. Central laboratory is constructed            2. A computer room for Economic Faculty is reserved and reformed            3. A stock room for equipment is reserved            4. Electricity and water are supplied stably</p>

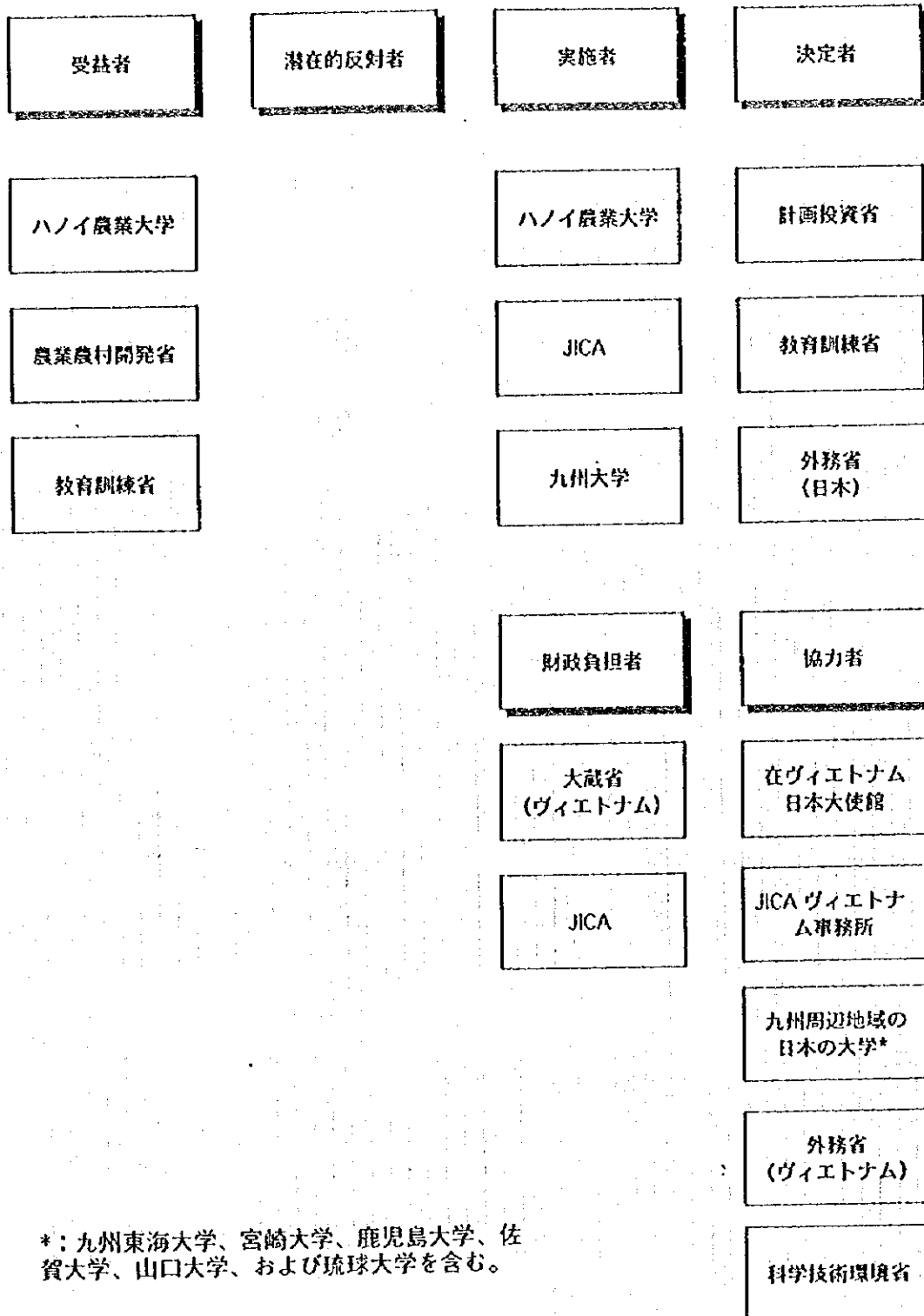
169

S. W. P.



付属資料2. PCMワークショップ資料

(1) 参加者分析



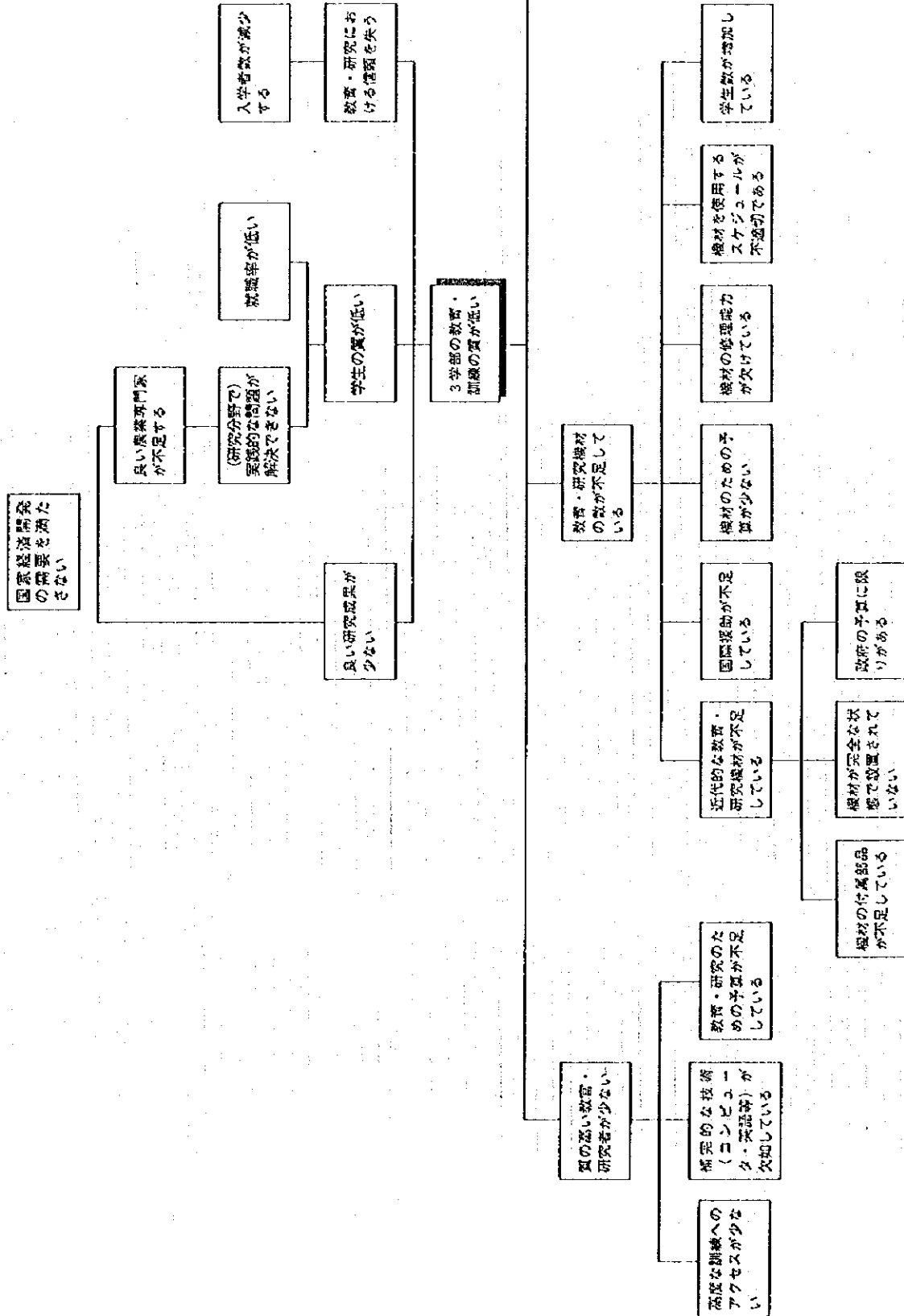
\*: 九州東海大学、宮崎大学、鹿児島大学、佐賀大学、山口大学、および琉球大学を含む。

(2) 詳細な参加者分析

ハノイ農業大学  
(対象3学部)

特徴	ニーズ	プロジェクトとの 関連	
(教官)			
教官の質が低い	近代科学的な情報 を得る	教官の訓練	図書館の整備
向上心が高い	教育・研究手法を 学ぶ	共同研究プロジェ クト	
(劣働・研究環境)			
新しい科学研究分 野が増えている	適切な教育カリ キュラムを開発す る	教官の訓練	
教育・研究施設が 未整備である	教育・研究施設を 整備する	教育施設の設置	研究施設の設置
予算が不足してい る	国際援助を受ける		
(学生)			
アカデミックな水 準が低い	教育の質が向上す る		

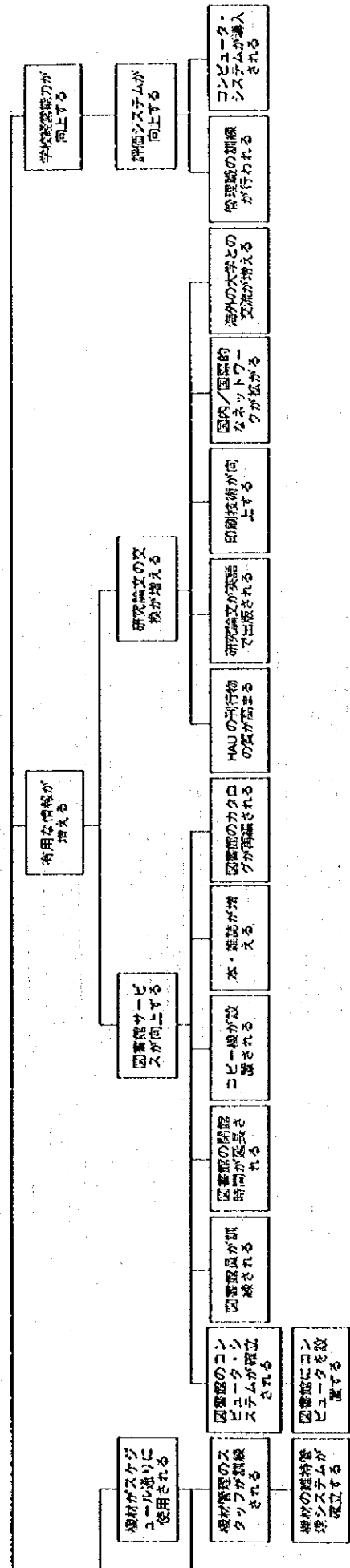
(3) 問題分析 1/2







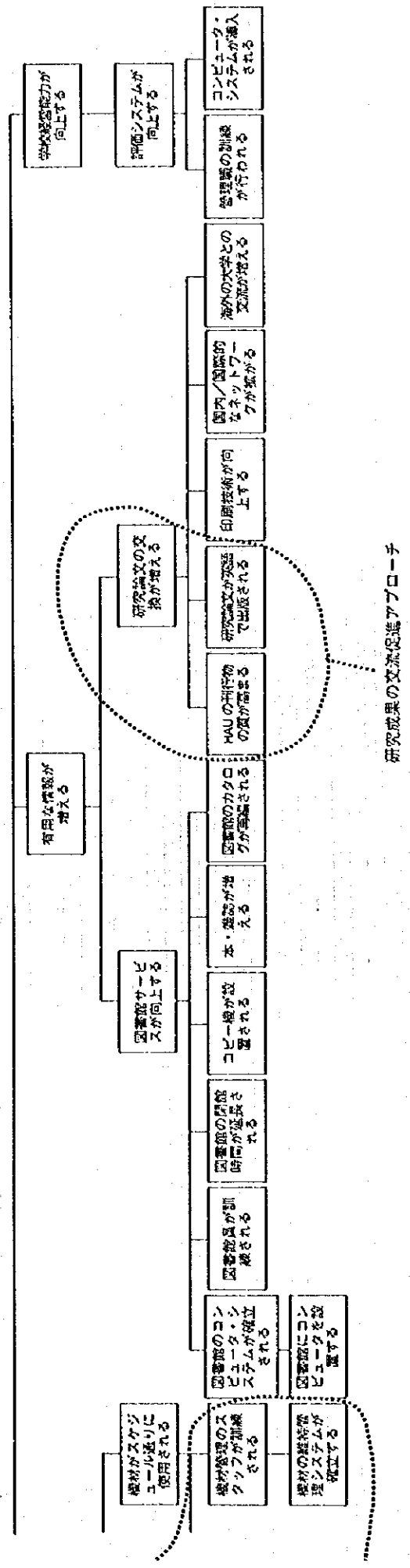
(4) 目的分析 2/2







(5) プロジェクトの選択 2/2



(6) 福士専門家の派遣日程

月日	活動内容
4/15 (火)	移動 (東京-香港-ハノイ)
4/16 (水)	JICAヴィエトナム国事務所 ハノイ農業大学 (HAU) にてPCMワークショップ開催
4/17 (木)	PCMワークショップ開催 (HAU)
4/18 (金)	PCMワークショップ開催 (HAU)
4/19 (土)	PCMワークショップ開催 (HAU)
4/20 (日)	ワークショップの結果の入力作業
4/21 (月)	PCMワークショップ開催 (HAU)
4/22 (火)	PCMワークショップ開催 (HAU)
4/23 (水)	細部の確認、報告書作成
4/24 (木)	移動 (ハノイ-香港-東京)



付属資料3. プロジェクト・デザイン・マトリックス (PDM)

プロジェクトの要約	指標	指標データ入手手段	外部条件
<p>スーパースター 農業の近代化/産業化に貢献する質の高い人材を養成する</p>			
<p>上位目標 ハノイ農業大学全学部の教育・研究の質が向上する</p>	<p>ハノイ農業大学全学部で増加した優秀な学生の人数</p>	<p>教育課 (H A U)</p>	<p>1. ヴイエトナム国政府 (教育訓練省・農業農村開発省・計画投資省) の支援が継続される</p>
<p>プロジェクト目標 ハノイ農業大学3学部*の教育・研究の質が向上する</p>	<p>ハノイ農業大学3学部で増加した優秀な学生の人数</p>	<p>教育課 (H A U)</p>	<p>1. プロジェクトの成果が中央実験棟の利用を通じ、他の2学部へ普及される 2. ヴイエトナム国政府 (教育訓練省・農業農村開発省・計画投資省) の支援が継続される</p>
<p>成果 1. 教官/研究者の質が向上する 2. 教育/研究のための教材が整備/拡充される 3. 研究論文数が増え、かつその交換が国際的に行われる</p>	<p>1-1 取得された修士・博士号の数 1-2 国内/海外で出版された研究論文の数 1-3 国内/海外の会議での研究報告数 1-4 開催されたワークショップ/セミナーの数 2-1 設置された有用な教材の数 2-2 職員1人当たりのコンピュータ、その他の有用な教材の数 2-3 教材管理の訓練を受けた職員数 2-4 修理された教材の種類と数 3-1 H A Uで編集/出版された定期刊行物の数 3-2 研究論文出版数 3-3 職員1人当たりの研究論文出版数</p>	<p>1-1 教育課 (H A U) 1-2 科学研究課 (H A U) 1-3 国際関係課 (H A U) 1-4 プロジェクトチームの記録 2-1 &amp; 2-4 プロジェクトチームの記録 2-2 &amp; 2-4 教材管理課 (H A U) 2-3 3学部の記録 3-1.3-2 &amp; 3-3 科学研究課 3-2 プロジェクトチームの記録</p>	<p>1. 図書館のサービスが向上する 2. ヴイエトナム国政府 (教育訓練省・農業農村開発省・計画投資省) の支援が継続される</p>

(注) \*3学部とは、作物学部、土地/水資源管理学部、経営/農村開発学部を指す。

プロジェクトの要約	指 標	指標データ入手手段	外部条件
<p>活動</p> <p>1-1-1 HAUに日本の農業専門家を派遣する</p> <p>1-1-2 HAUの教官/職員を日本で訓練する</p> <p>1-1-3 HAUが九州大学、その他の日本の大学と共同研究プロジェクトを行う</p> <p>1-1-4 HAUとヴィエトナム国の他の研究機関がワークショップを開催する</p> <p>1-2-1 パーソナル・コンピュータを設置する</p> <p>1-2-2 教室に近代的な教育機材（ビデオ・OHP等）を整備する</p> <p>1-2-3 新しい本を補給する</p> <p>1-2-4 適切な教育カリキュラムを確立する</p> <p>1-3-1 国際的な学会に研究論文を提出する</p> <p>1-3-2 学究的な会議に頻繁に出席する</p> <p>2-1 中央実験棟に近代的な機材を設置する</p> <p>2-2 コンピュータールームにコンピュータ、その他の機材を設置する</p> <p>2-3 機材の維持管理システムを確立する</p> <p>2-4 機材の維持管理に関する訓練コースを開発する</p> <p>2-5 機材の定期点検を実行する</p> <p>3-1 HAUの定期刊行物、及び研究成果を英語で出版する</p> <p>3-2 日本の専門家の協力の下、研究論文を執筆・出版する</p>	<p>投入</p> <p>日本側</p> <p>1. 専門家の派遣</p> <p>2. ヴィエトナム国の研修生の受入</p> <p>3. 機材の供与</p> <p>4. ローカルコスト負担</p> <p>ヴィエトナム国側</p> <p>1. 専門家 (C/P)</p> <p>2. 研究施設・部屋</p> <p>3. 水道光熱関連整備</p> <p>4. 管理・運営費</p>	<p>1. HAUの教官/研究者が英語の能力を高める</p> <p>2. ヴィエトナム国政府（教育訓練省・農業農村開発省・計画投資省）の支援が継続される</p> <p>前提条件</p> <p>1. 中央実験棟が建設される</p> <p>2. 農業経済学部のためのコンピュータールームが用意・改築される</p> <p>3. 機材の保管倉庫が用意される</p> <p>4. 電気・水が安定して供給される</p>	

#### 付属資料4. 作物学部関連資料

##### (1) 学科と教官構成

◇Dean	Prof. Dr. Nguyen Huu Te
◇Deputy of Dean	Prof. Dr. Vu Trieu Man
	Dr. Phan Huu Ton

##### 1) Department of Food Crops

Head of Dept.	1 Prof. Dr. Nguyen Huu Te
	2 Asso. Prof. Dr. Dinh The Loc
	3 Sen. Lec. Ha Cong Vuong
	4 Sen. Lec. Ms. Bui The Hung
Vice Head of Dept.	5 Sen. Lec. Dr. Nguyen The Hung
	6 Lec. Ms. Nguyen Thien Huyen
	7 Lec. B.S. Vu Thi Tam
	8 Assis. Lec. Pham Van Cuong

##### Proposal Research Theme

- 1 : Intensive farming technologies for photosensitive varieties in late Autumn rice season (by 1)
- 2 : Transfer of economic and technological models for increase of plant production and improvement of the quality of living standard for ethnic minority groups in Hunghoa district, Quangtri province (by 1)

##### 2) Department of Industrial trees and dry/cash crops

Head of Dept.	9 Asso. Prof. Dr. Doan Thi Thanh Nhan
Vice Head of Dept.	10 Sen. Lec. Dr. Nguyen The Con
	11 Sen. Lec. Dr. Nguyen Van Binh
	12 Sen. Lec. Ms. Bui Thi Tinh
	13 Sen. Lec. Dr. Vu Dinh Chinh
	14 Lec. B.Sc. Bui Xuan Suu
	15 Lec. Ms. Nguyen Dinh Vinh

##### Proposal Research Theme

- 1 : Legume breeding and intensive farming technologies (by 9)

### 3) Department of Fruit Trees and Vegetables

Head of Dept.	16	Asso. Prof. Dr. Pham Van Con
Vice Head of Dept.	17	Sen. Lec. Dr. Doan The Lu
	18	Sen. Lec. Dr. Hoang Ngoc Thuan
Head Science office	19	Sen. Lec. Dr. Cao Anh Long
	20	Sen. Lec. B.Sc. Nghiem Bich Ha
	21	Sen. Lec. Dr. Ho Huu An
	22	Lec. Ms. Pham Thi Huong
	23	Assis.Lec. B.Sc. Tran Minh Hang

#### Proposal Research Theme

- 1 : Study on technological methods in multiplication by grafting for several fruit trees (Longan, Litchi and Persimmon) (by 16)
- 2 : Designing of farming models based on advanced agricultural technologies at Hanoi Agriculture University (by 19)

### 4) Department of Genetics and Plant Breeding

Head of Dept.	24	Asso. Prof. Dr. Nguyen Van Hien
Vice Head of Dept.	25	Sen. Lec. Dr. Nguyen Van Hoan
	26	Asso. Prof. Luyen Huu Chi
	27	Asso. Prof. Dr. Nguyen Thi Tram
	28	Sen. Lec. Dr. Nguyen Thi Van
	29	Sen. Lec. Ph.D. Vu Dinh Hoa
	30	Sen. Lec. Dr. Nguyen Hong Minh
Deputy Dean of Fac.	31	Sen. Lec. Ph.D. Phan Huu Ton
	32	Asso. Prof. Dr. Phan Quynh Son
	33	Sen. Lec. B.Sc. Kieu Thi Thu

#### Proposal Research Theme

- 1 : Improvement of dry matter and eating quality of sweet potatoes (by 29)
- 2 : Rice breeding for disease resistance, grain quality and high yield potential (by 31)

### 5) Department of Storage and Processing of Agroproducts and Biochemistry

Head of Dept.	34	Asso. Prof. Dr. Vu Thi Thu
Vice Head of Dept.	35	Sen. Lec. Ms. Pham Thi Van



- 36 Sen. Lec. Ms. Vu Kim Bang
- 37 Sen. Lec. Dr. Ngo Xuan Manh
- 38 Sen. Lec. Ms. Nguyen Manh Khai
- 39 Sen. Lec. B.Sc. Tran Van Pham
- 40 Lec. Ms. Hoang Dinh Tung
- 41 Lec. Ms. Tran Lan Huong
- 42 Lec. Ms. Nguyen Thi Bich Thuy
- 43 Lec. B.Sc. Nguyen Thi Hoang Lan
- 44 Assis. Lec. B.Sc. Nguyen Thi Thanh Thuy
- 45 Assis. Lec. B.Sc. Nguyen Xuan Bang
- 46 Assis. Lec. B.Sc. Le Minh Nguyet

**Proposal Research Theme**

1 : Study and development of processing technologies for several agro-products in farmer household in GiaLam-Hanoi (by 34)

2 : Study on rice storage and vegetable processing (by 35)

**6) Department of Agro-Ecology and Forecasting**

- Head of Dept. 47 Sen. Lec. Ms. Tran Duc Vien
- Vice Head of Dept. 48 Sen. Lec. Dr. Nguyen Thi Lan
- 49 Asso. Prof. Dr. Pham Chi Thanh
- 50 Asso. Prof. Dr. Van Tat Tuyen
- 51 Sen. Lec. Dr. Pham Tien Dung
- 52 Sen. Lec. Dr. Doan Van Diem
- 53 Sen. Lec. Dr. Pham Van Phe
- 54 Sen. Lec. Ms. Tran Danh Thin
- 55 Assis. Lec. Ms. Nguyen Thanh Lam

**Proposal Research Theme**

1 : Effect of cultivation technologies on environment and agro-product quality (by 48)

**7) Department of Plant Physiology**

- Head of Dept. 56 Prof. Dr. Hoang Minh Tan
- Dean of postgraduate Faculty

Vice Rector	57	Prof.	Dr. Nguyen Quang Thach
Vice Head of Dept.	58	Sen. Lec.	Dr. Vu Quang Sang
	59	Sen. Lec. B.Sc.	Mai Thi Tan
	60	Sen. Lec.	Ms. Nguyen Thi Nhan
	61	Sen. Lec.	Dr. Nguyen Ly Anh
	62	Lec.	Ms. Nguyen Thi Kim Thanh

#### Proposal Research Theme

1 : Improvement and application of biological technologies in agricultural production and biological studies (by 57)

#### 8) Department of General Biology

Head of Dept.	63	Sen. Lec.	Dr. Nguyen Thi Viet Nga
Vice Head of Dept.	64	Sen. Lec. B.Sc.	Doan Van Minh
	65	Lec.	B.Sc. Nguyen Thi Nhu Nghia
	66	Lec.	B.Sc. Nguyen Thi Hanh Hoa

#### 9) Department of Entomology

Rector	67	Prof.	Dr. Nguyen Viet Tung
Head of Dept.	68	Prof.	Dr. Ha Quang Hung
Head of International Cooperation Office			
Vice Head of Dept.	69	Sen. Lec.	Ms. Tran Dinh Chien
	70	Asso. Prof.	Dr. Nguyen Duc Khiem
	71	Sen. Lec.	Dr. Nguyen Van Dinh
	72	Sen. Lec.	Ms. Dang Thi Dung
	73	Lec.	B.Sc. Le Xuan Thien
	74	Sen. Lec.	Dr. Nguyen Thi Kim Oanh
	75	Lec.	Ms. Ho Thi Thu Giang

#### 10) Department of Plant Pathology

Head of Dept.	76	Asso. Prof.	Dr. Nguyen Kim Van
Vice Head of Dept.	77	Sen. Lec.	Ms. Nguyen Van Vien
	78	Prof.	Dr. Vu Trieu Man

- 79 Lec. Ms. Do Tan Dung
- 80 Sen. Lec. Ms. Ngo Hai Xuyen
- 81 Sen. Lec. Ms. Ngo Bich Hao
- 82 Lec. Ms. Bui Trong Thuy
- 83 Assis. Lec. B.Sc. Ha Viet Cuong

**Proposal Research Theme**

- 1 : Application and testing some bio-products in rapid and accurate prognoses to control several serious plant diseases (by 78)

**11) Department of Sericulture**

- Head of Dept. 84 Asso. Prof. Dr. Do Thi Cham
- Vice Head of Dept. 85 Asso. Prof. Dr. Nguyen Van Long
- 86 Sen. Lec. Ms. Nguyen Huy Tri
- 87 Sen. Lec. Ms. Tran Thi Ngoc
- 88 Sen. Lec. Ms. Bui Thi Diem

**Proposal Research Theme**

- 1 : Study on technological methods for high leaf yield and disease management of mulberry (by 84)



- 12 Prof. Dr. Nguyen Viet Tung (Rector of HAU)
- 13 Ms. Tran Dinh Chien (Vice head of Entomology)
- 14 Dr. Nguyen Thi Kim Oanh (Dept. of Entomology)

**Theme 4 Use of In vitro culture technologies in breeding and multiplication for several crops (potato, annanas, Bananas and orchid).**

Project Leader;

- 15 Prof. Dr. Neuten Quang Thach (Vice Rector, Dept. of Plant Physiology)

Participants;

- 16 Prof. Dr. Hoang Minh Tan (Dept. of Plant Physiology)

Dr. Nguyen Thi Ly Anh (Dept. of Plant Physiology)

- 17 Ms. Nguyen Thi Nhan (Dept. of Plant Physiology)

- 18 Ms. Mai Thi Tan (Dept. of Plant Physiology)

**Theme 5 Application of advanced technologies in rapid diagnosis of diseases for Tropical fruit and vegetable crops in Vietnam.**

Project Leader;

- 19 Prof. Dr. Vu Trieu Man (Deputy Dean, Faculty of Agronomy, Dept. of Plant Pathology)

Participants;

- 20 Dr. Nguyen Kim Van (Head, Dept. of Plant Pathology)

- 21 Ms. Bui Trong Thuy (Dept. of Plant Pathology)

- 22 B.Sc. Ha Viet Cuong (Dept. of Plant Pathology)

- 23 Ms. Nguyen Van Vien (Vice Head, Dept. of Plant Pathology)

**Theme 6 Application of advanced methodologies including biological tests for analysis of agricultural residues, food additives, and toxin in agro-food products.**

Project Leader;

- 6 Prof. Dr. Nguyen Huu Te (Dean, Faculty of Agronomy)

Participants;

- 24 Ms. Pham Thi Van (Vice Head, Dept. of Storage and processing of agro-products and Biochemistry)

- 25 Dr. Vu Quang Sang (Vice Head, Dept. of Plant Physiology)

26 Ms. Nguyen Van Vien (Vice Head, Dept. of Plant Pathology)

27 Dr. Ngo Xuan Manh (Dept. of storage and processing agro-products and  
Biochemistry)

**Theme 7 Improvement of dry matter, eating quality and disease resistance of sweet potato (and  
other root/tuber crops)**

**Project Leader;**

28 Dr. Vu Dinh Hoa (Dept. of Genetics and Plant Breeding)

**Participants;**

29 Dr. Nguyen The Hung (Vice head, Dept. of Food Crops)

30 Dr. Nguyen Khiem (Dept. of Entomology)

31 B.Sc. Tran Minh Hang (Dept. of Fruit Trees and Vegetables)

32 B.Sc. Nguyen Bich Thuy (Dept. of Storage and Processing of Agro-products)

### (3) 各研究室別設置要望機材

#### a : Gene Engineering

1. Cool chamber
2. Deep freezer (-20°C, -86°C)
3. Refrigerated centrifuge
4. Shaker
5. Speed vacuum centrifuge
6. Microcentrifuge
7. DNA Synthesizer
8. DNA Fluorometer
9. Vacuum drying oven
10. Vacuum pump
11. DNA Thermocycler
12. Densitometer
13. Thermostate incubator
14. Hybridization oven
15. Gel dryer
16. DNA Sequencer manual
17. Homogenizer/Disintegrator
18. PH meter
19. Sub-marine electrophoresis system
20. Electronic analytical balance
21. Bidistillator
22. Autoclave 100L
23. Washing machine for nitrocellulose membrane
24. Hot plate
25. Vortex mixer
26. Automatic DNA sequencer
27. Ultra centrifuge
28. Laminair flow cabinet + table
29. Shaking incubator

30. Thermostate incubator
31. CO<sub>2</sub> incubator
32. Centrifuge
33. Ice maker
34. Water bath
35. Microcentrifuge
36. Vortex mixer
37. Hot plate
38. Gene pulser apparatus
39. Read biotic
40. Microscope with attachment camera
41. Microscope with micromanipulator
42. Microscope phase contract
43. Gene shot gun

**b : Microbiological Thechnology Lab.**

44. Laminar air flow cabinet
45. PH meter
46. Colony counter
47. Read biotic
48. Autoclave 50L
49. Thermostate incubator
50. CO<sub>2</sub> incubator
51. Microscope optical
52. Microscope with attachment camera
53. Analytical balance
54. Refrigerator
55. Autoclave 150L
56. Washing machine
57. Infrared moisture meter
58. Platform with clamp for shake
59. Air compressor and air system sterilizer



60. Fermenter 2L
61. Fermenter 20L
62. Lab. time
63. Abbe refractometer
64. Laboratorial drying cupboard
65. Spray dryer
66. Automatic enzyme activity analyzer
67. Continuous centrifuge
68. Vortex mixer
69. O<sub>2</sub> analyzer
70. Packaging apparatus 5gr~200gr.
71. Thermometer digital
72. CO<sub>2</sub> analyzer
73. Tablet packaging apparatus

c : Plant Cell Engineering Lab.

74. Autoclave
75. Hole Plate
76. Medium distributor
77. Magnetic hot stirrer
78. Refrigerator
79. Electronic analytical balance
80. Technical balance
81. pH meter
82. Drying oven
83. Water distillator
84. Microscope with attachment camera
85. Microscope phase contrast
86. Binocular loop
87. Laminar air flow cabinet (simple) 5
88. Air conditioner
89. Cell fusion system

90. Air compressor and millipore for sterilisation
91. Laminar air flow cabinet
92. Shaker
93. Tissue culture chamber
94. Centrifuge table

d : Animal Cell Technology Lab.

95. Ultra centrifuge 120,000rpm
96. Medical refrigerator 511L
97. Deep freezer chamber (3×3×2.5m, -86°C)
98. Lyophilisator 7L/ca
99. Deep freezer (-20°C)
100. Microscope with attachment camera Canon
101. System for electrophoresis on nitrocellulose membrane
102. Microplate reader, Microplate washer (for ELISA)
103. Laminair
104. Laminair flow cabinet MCV 13BSF, Sanyo
105. Shaker
106. Electric balance
107. Thermostate
108. Centrifuge table
109. Room-incubator (37°C)
110. Cell culture rotating apparatus "cell rotator" with cassette base 4-20 v/ph
111. Refrigerator
112. pH meter
113. Autoclave 100L
114. Drying oven
115. Autoclave 75L
116. Water still 8 L/hour

e : Nutrition and Food Science Lab.

117. Automatic Titrator
118. Full automatic crude fat extractor
119. Analytical electronic balance
120. Technical electronic balance
121. System for NH<sub>3</sub> distillation (Gerhardt, Germany)
122. Bomb-calorimeter for energy determination
123. Refrigerator
124. Thin layer chromatography
125. Fluorescence spectrophotometer (Hitach or Shimadzu)
126. Selective electrodes
127. High performance liquid chromatograph (Perkin-Elmer, USA)
130. pH meter
131. ICP-spectrophotometer for multi element analysis
132. Semimicro reaction apparatus
133. Full automatic crude analyzer

f : Chemistry and Biochemistry Lab.

134. Fast protein liquid chromatograph (FPLC)
135. UV-VIS spectrophotometer (U 3000, Hitach, Japan)
136. Biochemical analyzer for diagnosis
137. pH meter WTW 537 (Germany)
138. Homogenisator
139. Deep freezer (-20°C, Sanyo, Japan)
140. Cool cabinet for sample (0- -4°C, Sanyo, Japan)
141. Sample Mill-Tecator, Sweden
142. Lab. Lyophilisator 5-3L
143. Dryer (France)
144. Thermostat
145. System for NH<sub>3</sub> distillation : System for sample mineralization, automatic titration
146. Automatic extractor for lipid determination

147. Automatic amino acids analyzer (Hitach, Japan)
148. Electrophoresis on acrylamide and agarose gels
149. Cool room for enzymes (0~4°C)
150. Deep freezer (-20°C)
151. Centrifuge table
152. Shaker universal with clamps and rack

g : Agrochemistry and Environment Lab.

153. Analytical electronic balance
154. Gas chromatograph (Hitach, Japan)
155. Atomic absorption spectrometer AAS-3110 (Perkin-Elmer, USA)
156. Flame photometer 410 (Corning-England)
157. Automatic Leaf area meter (Hitach, Japan)
158. Freezer
159. Dryer
160. Polarograph VA693 processor (Metrohm, Swetzeland)
161. VIS-spectrometer (Pharmacia-Sweedon)
162. pH meter WTW 537 (Germany)
163. Kit for water, water waste evaluation
164. Selective electrodes
165. System for sample mineralization
166. Apparatus for extraction at low temperature

付属資料 5. 土地/水資源管理学部関連資料

(1) 教育構成

No	Name	Academic Title	Position	Teaching subject
<u>Department of Agrochemistry and Soil Science</u>				
1	Nguyen Dinh Manh	Assoc.Prof.,Dr.	Vice-dean of Faculty Head of Dept.	Agrochemistry
2	Vu Huu Yem	Assoc.Prof.,Dr.	Ex-head of Dept.	Agrochemistry
3	Ha Huy Khue	Senior Lecturer		Agrochemistry
4	Nguyen Nhu Ha	Senior Lecturer		Agrochemistry
5	Le Thi Bich Dao	MSc.		Agrochemistry
6	Nguyen Muoi	Assoc.Prof.		Soil Science
7	Tran Van Chinh	Dr.	Vice-head of Dept.	Soil Science
8	Pham Thanh Nga	Senior Lecturer		Soil Science
9	Nguyen Huu Thanh	Dr.		Soil Science
10	Hoang Van Mua	MSc.		Soil Science
11	Do Nguyen Hai	MSc.		Soil Science
12	Dao Chau Thu	Assoc.Prof.,Dr.		Soil Science
13	Nguyen Xuan Thanh	Dr.		Microbiology
14	Le Thi Hong Xuan			Microbiology
15	Pham Thi Nham			
<u>Department of Land Planning</u>				
16	Nguyen Thi Vong	Dr.	Vice-dean of Faculty Head of Dept.	Land Planning
17	Nguyen Nhat Tan	Assoc.Prof.		Land Planning
18	Doan Cong Quy	Senior Lecturer	Vice-head of Dept.	Land Planning
19	Vu Thi Binh	Dr.		Land Planning
20	Nguyen Quang Hoc	MSc.		Land Planning
<u>Department of Land Management</u>				
21	Hoang Anh Duc	MSc.		Land Law
22	Nguyen Duy Huc	Senior Lecturer		Land Law

23	Nguyen Van Than	Senior Lecturer		Land Evaluation
24	Nguyen Thanh Tra	Dr.	Head of Dept.	Cadastral Map
25	Ho Thi Lam Tra	MSc.		Mapping Technic
26	Dam Xuan Hoan	Dr.		Geodesy
27	Nguyen Khac Thoi	Senior Lecturer		Geodesy
28	Nguyen Van Tuyen	Senior Lecturer		Geodesy

Department of Water Resource Management and Agrotechnics

29	Ha Hoc Ngo	Professor, Dr.		Head of Dept.
30	Pham Ngoc Dung	Assoc.Prof.,Dr.		Water Resource Man agement
31	Nguyen Duc Quy	Assoc.Prof.,Dr.		Irrigation Technic
32	Nguyen Van Dung	MSc.		Irrigation Technic
33	Tran Thi Hien			Irrigation Technic
34	Ha Thi Thanh Binh	Dr.	Vice-head of Dept.	Agrotechnic
35	Phung Dang Chinh	MSc.		Agrotechnic
36	Nguyen Tat Canh	MSc.		Agrotechnic
37	Nguyen Ich Tan	MSc.		Agrotechnic
38	Pham Ngoc Lam			Irrigation System

Department of Land Information System

39	Tran Thi Bang Tam	MSc.	Head of Dept.	Land Information System (LIS)
40	Nguyen Trong Binh	MSc.	Vice-head of Dept.	LIS
41	Pham Thi Huong Lan	MSc.		LIS
42	Tran Quoc Vinh			LIS

Department of Chemistry

43	Phan Xuan Van	Assoc.Prof.,Dr.		General Chemistry I
44	Nguyen Van Tau	Assoc.Prof.,Dr.	Head of Dept.	General Chemistry I
45	Vu Van Soan	Senior Lecturer		General Chemistry I
46	Hoang Thi Huong	MSc.		General Chemistry I
47	Nguyen Ba Binh	MSc.		General Chemistry I

48	Hoang Ha	Dr.	General Chemistry I
49	Nguyen Tien Quy	Senior Lecturer	General Chemistry I
50	Truong Thi My	MSc.	General Chemistry I
51	Tran Huu Hue	Dr.	General Chemistry I
52	Duong Van Dam	Senior Lecturer	General Chemistry I
53	Pham Ngoc Thuy	Assoc.Prof.,Dr. Dean of Faculty	General Chemistry II Instrumental Analytical Chemistry Water Analysis
54	Pham Hong Anh	Dr.	General Chemistry II
55	Vo Van Cau	MSc.	General Chemistry II
56	Do Thi Hoa	MSc.	General Chemistry II
57	Do Thu Cuc	MSc.	General Chemistry II
58	Dang Van Hong	Senior Lecturer	General Chemistry II
59	Nguyen The Hong Linh	Dr.	General Chemistry II
60	Bui The Vinh	Dr.	General Chemistry II
61	Tran Van Chien	Senior Lecturer	General Chemistry II
62	Dinh Van Hung	Assoc.Prof.,Dr.	General Chemistry II
63	Nguyen Thi Chac	MSc.	General Chemistry II
64	Le Thi Hop	MSc.	General Chemistry II
65	Nguyen Truong Son	Assoc.Prof.,Dr. Vice-Rector	General Chemistry II

## (2) カリキュラム

学部

[Agrochemistry and Soil Science]

Agrochemistryコース

No	Subject	Credit
<i>First Stage</i>		
I	Social Sciences and Humanities	20
1	Philosophy	5
2	Political Economy	5
3	General Law	3
4	General Sociology	2
5	Vietnamese	3
6	Population and Development	2
II	Foreign Languages	20
III	Mathematics and Natural Sciences	40
1	Mathematics I	3
2	Mathematics II	3
3	Probability and Statistics	4
4	General Physics I	3
5	General Physics II	3
6	General Physical Practice	1
7	General Chemistry I	2
8	General Chemistry II	3
9	Analytical Chemistry	3
10	Organic Chemistry	2
11	General Biology I	4
12	General Biology II	4
13	General Biological Practice	2
14	Informatic	3
IV	Physical Fitness	3
V	Military Education	4
<i>Second Stage</i>		
I	Politics	7



1	History of Vietnam Communist Party	4
2	Scientific Socialism	3
II -- Foreign Language		4
III -- Score Course		30
1	Plant Physiology	4
2	General Microbiology	4
3	Agroecology	4
4	Agrometeorology	3
5	Botany Chemistry	4
6	Environmental Chemistry	3
7	Instrumental Analysis	3
8	Informatic for Agrochemistry	5
IV -- Major Course		51
1	General Pedology	4
2	Soil Chemistry	3
3	Soil Physics	3
4	Soil Fertility and Fertility Management	2
5	Irrigation and Drainage	2
6	Fertilizer and Fertilizing	5
7	Cropping Principles	3
8	Chemicals in Agriculture and their Pollution	3
9	Farm Management	3
10	Field Fertilizer Experiments	4
11	General Pathology	4
12	General Entomology	4
13	Chemicals for Plant Protection	3
14	Weed Management	3
15	Integrated Pest Methodology	3
16	Rural Development Extension	2
V -- Selective Course		
1	Soil, Plant and Fertilizer Analysis	5
2	Water Analysis	2
3	Industrial Crops and Fertilizing	2

4	Food Crops and Fertilizing	2
5	Fruit Crops and Fertilizing	2
6	Quantitative Chemical Analysis	2
7	Chemical Toxicology	2
8	Plant Protection	3
9	Marketing Principles	3
10	General Law	3

VI--Seminar

- 1 Soil Pollutions and Soil Conservation

Soil Scienceコース

No	Subject	Credit
----	---------	--------

First Stage

Agrochemistryコースと同じ

Second Stage

I --Politics	7
1 History of Vietnam Communist Party	4
2 Scientific Socialism	3
II --Foreign Language	4
III --Score Course	28
1 Biochemistry of Plant	4
2 Physiology of Plant	4
3 Geology	3
4 Pedology Geography	2
5 Agrometeorology	3
6 Ecology and Environment	3
7 Colloidal Chemistry	3
8 General Crop Science	3
9 Geodesy	3
IV --Major Course	65
1 General Forestry	3
2 General Microbiology	3
3 General Pedology	4

4	Soil Chemistry	3
5	Soil Physics	3
6	Soil Biology	3
7	Instrumental Analysis	3
8	Soil, Plant and Fertilizer Analysis	3
9	Vietnamese Soil	3
10	Soil Improvement	3
11	Fertilizer and Fertilizing	5
12	Irrigation and Drainage	3
13	Soil Mapping	3
14	Soil Pollution and Treatment	3
15	Land Evaluation	3
16	Land Use Planning	4
17	Informatic for Soil Science I	3
18	GIS	4
19	Land Law and Environmental Law	3
20	Field Experiment	3
<b>V – Selective Course</b>		
1	Water Analysis	2
2	Food Crops and Rice Soil	2
3	Industrial Crops and Industrial Crop Soil	2
4	Fruits and Fruit Soil	2
5	Land Valuation	3
6	Informatic for Soil Science II	3
<b>VI – Seminar</b>		
1	Forage Crop Soil	
2	Rural Development Project Planning	
3	Land Toxicology	
4	Heavy Metals in Soil	

[Land Administration Management]

No	Subject	Credit
----	---------	--------

First Stage

I -- Social Sciences and Humanities	42
1 Philosophy	5
2 Political Economy	5
3 General Economic Law	4
4 Vietnam Economic Geography	4
5 General Psychology	3
6 History of Economic Theories	4
7 Advanced Vietnamese	4
8 Macro Economic Theory	4
9 Micro Economic Theory	4
10 General Sociology	3
11 Population and Development	2
II -- Foreign Languages	20
III -- Mathematics	21
1 Mathematics I	4
2 Mathematics II	4
3 Probability and Statistics	4
4 Informatics	6
5 Environment and Man	3
IV -- Physical Fitness	3
V -- Military Education	4
<u>Second Stage</u>	
I -- Politics	7
1 History of Vietnam Communist Party	4
2 Scientific Socialism	3
II -- Foreign Language	4
III -- Science Course	30
1 Soil Science	5
2 Land Evaluation	4
3 Advances Informatics	4
4 Tropical Farming System	3
5 Geodesy I	4
6 Geodesy II	4

7	Mapping Engineering	3
8	General Law	3
IV--Major Course		62
1	Data Management System	4
2	Applied Informatics for Mapping Design	4
3	GIS and LIS	4
4	Land Information System Management	3
5	Rural Development Planning	4
6	Land Use Distribution Planning	6
7	Cadastral Mapping	3
8	Land Law	5
9	Land Valuation	3
10	Remote Sensing	3
11	Zoning Planning	4
12	Land Administration Policy	4
13	Thesis	15
IV--Elective Course (Not less than 15 credits)		
1	Computer Programming Language	3
2	Land Economy	3
3	Information System Analysis	3
4	Rural Land Valuation Practice	3
5	Urban Land Valuation Practice	3
6	Management and Analysis of Estate Marketing	3
7	Development Project Planning	3
8	Advanced Course for Computer Technology Application in Land Management	3

大学院・修士課程

[Soil Science]

No	Subject	Credit
I --General Course		31
1	Philosophy	6
2	Foreign Languages	16

3	Methodology of Researching	2
4	Principle and Methodology of High Education Teaching	3
5	Basic Computer	4
II -- Basic Interbranch Course		22
1	Chemistry	4
2	Agroecology and Environment Protection	3
3	Soil Chemistry	4
4	Soil Physics	3
5	Soil Biology	4
6	Agricultural System	4
III -- Specialized Course		33
1	Soil Analysis	4
2	Soil Conservation	4
3	Applying Computer in Biological Statistics	4
4	Fertilizer and Soil Property	4
5	Soil Surveying Methodology	3
6	On-Farm Irrigation Engineering	4
7	Remote Sensing	3
8	Land Evaluation	4
9	Applying Computer in Land Management	3
IV -- Field Work and Thesis		8

[Agricultural Chemistry]

No.	Subject	Credit
I -- General Course		31

[Soil Science] 土壌学

II -- Basic and Interbranch Course		25
1	Physical Chemistry	4
2	Agroecology and Environment Protection	3
3	Chemical Analysis	4
4	Organic Chemistry	4
5	Environmental Chemistry	2

6	Biochemistry	4
7	Soil Chemistry	4
III--Specialized Course		25
1	Chemical Toxicology	2
2	Fertilizer and Crop	4
3	Fertilizer and Soil Property	4
4	Specialized Analytical Technique	5
5	Chemistry for Plant Protection	2
6	Chemistry for Food Conservation and Processing	2
7	Microbiology	2
8	Applying Computer in Biological Statistics	4
IV--Field Work and Thesis		8

[Irrigation Engineering and Soil Reclamation]

No	Subject	Credit
I --General Course		31
「Soil Science」に同じ		
II --Basic and Interbranch Course		23
1	Agroecology and Environment Protection	3
2	Soil Physics	4
3	Agricultural System	4
4	On-farm Experimentation Method and Biological Statistics	4
5	Fertilizer and Crop	4
6	Hydraulics and Pump	4
III--Specialized Course		34
1	Geological Hydrography and Ground Water	3
2	On-farm Drainage Engineering	3
3	On-farm Irrigation Engineering	6
4	Irrigation and Drainage System	3
5	Soil and Water Conservation Engineering	4
6	Land and Water Management Modeling	4
7	Water Analysis	3

8	Water Resource Planning	4
9	Computer Programming	4
IV--Field Work and Thesis		8

大学院・博士課程

[Soil Science]

No	Subject	Credit
I—General Course		31
1	Philosophy	6
2	Foreign Language	16
3	Methodology of Researching	2
4	Principle and Methodology of High Education Teaching	3
5	Basic Computer	4
II—Basic and Interbranch Course		15
1	Soil Chemistry	4
2	Agroecology and Environment Protection	3
3	Soil Physics	4
4	Soil Biology	4
III—Specialized Course		16
1	Soil Analysis	4
2	Soil Conservation	4
3	Land Evaluation	4
4	Applying Computer in Land Management	4
5	Fertilizer and Soil Property	4

[Agricultural Chemistry]

No	Subject	Credit
I—General Course		31
[Soil Science] に同じ		
II—Basic and Interbranch Course		16
1	Agroecology and Environment Protection	4
2	Soil Chemistry	4



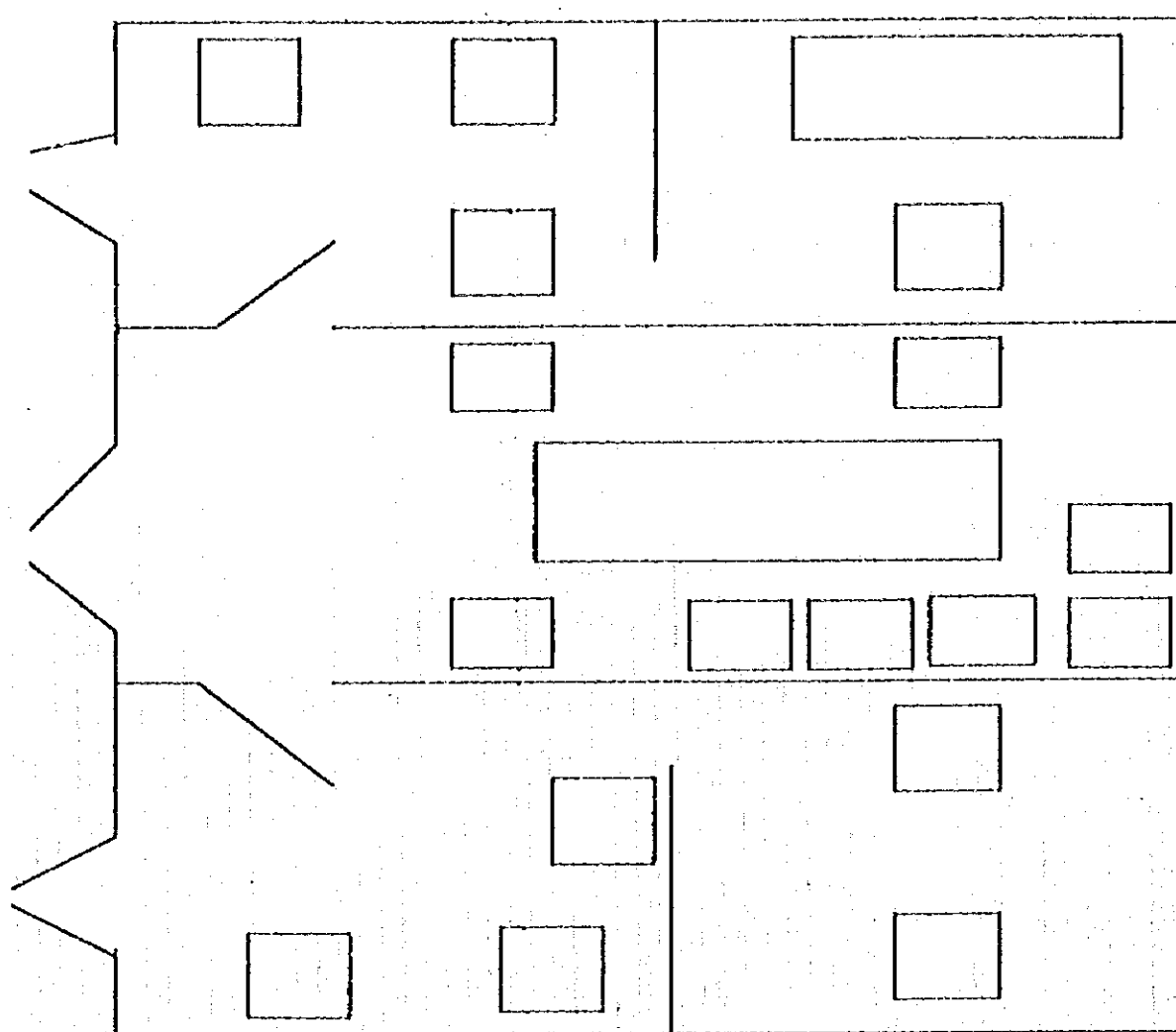
3	Environmental Chemistry	4
4	Biochemistry	4
III -- Specialized Course		16
1	Biochemistry and Fertilizer for Plant	4
2	Soil and Water Analytic Engineering	4
3	Fertilizer and Soil Property	4
4	Applying Computer in Biological Statistics	4

[Irrigation Engineering and Soil Reclamation]

No	Subject	Credit
I -- General Course		31
[Soil Science] に同じ		
II -- Basic and Interbranch Course		15
1	Agroecology and Environment Protection	3
2	Water Analysis	4
3	Soil Physics	4
4	On-farm Irrigation and Drainage	4
III -- Specialized Course		16
1	On-farm Irrigation Engineering	4
2	On-farm Drainage Engineering	4
3	Soil and Water Conservation Engineering	4
4	Land and Water Management Modeling	4

(3) ハノイ農業大学環境分析センター実験室

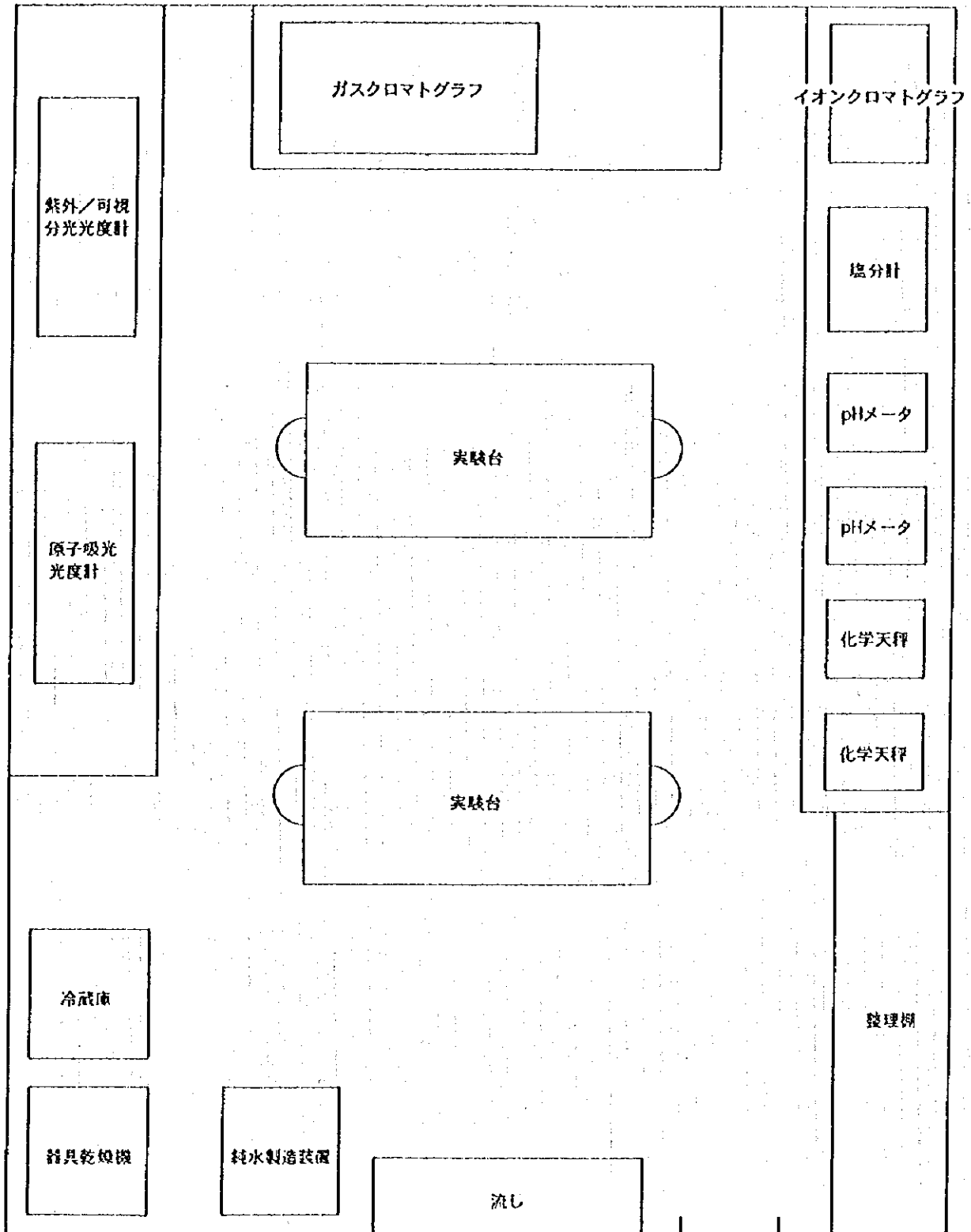
**AGROCHEMISTRY AND ENVIRONMENT LAB.**



1. Analytical Electronic balance \*
  2. Gas chromatograph (Hitachi - Japan) \*
  3. Atomic absorption spectrometer AAS-3110 (Perkin-Elmer - USA) \*
  4. Flame photometer-410 (Corning - England) \*
  5. Automatic Leaf Area meter (Hitachi-Japan)
  6. Freezer
  7. Dryer
  8. Polarograph - VA693 Processor (Metrohm-Switzerland) \*
  9. VIS-spectrometer (Pharmacia-Sweden) \*
  10. pH-meter WTW 537 (Germany) \*
  11. Kit for water, water waste evaluation \*
  12. Selective electrodes \*
  13. System for sample mineralization
  14. Apparatus for extraction at low temperature
  15. Soil sample Mill
  16. Water still \*
- \* already-existing equipment

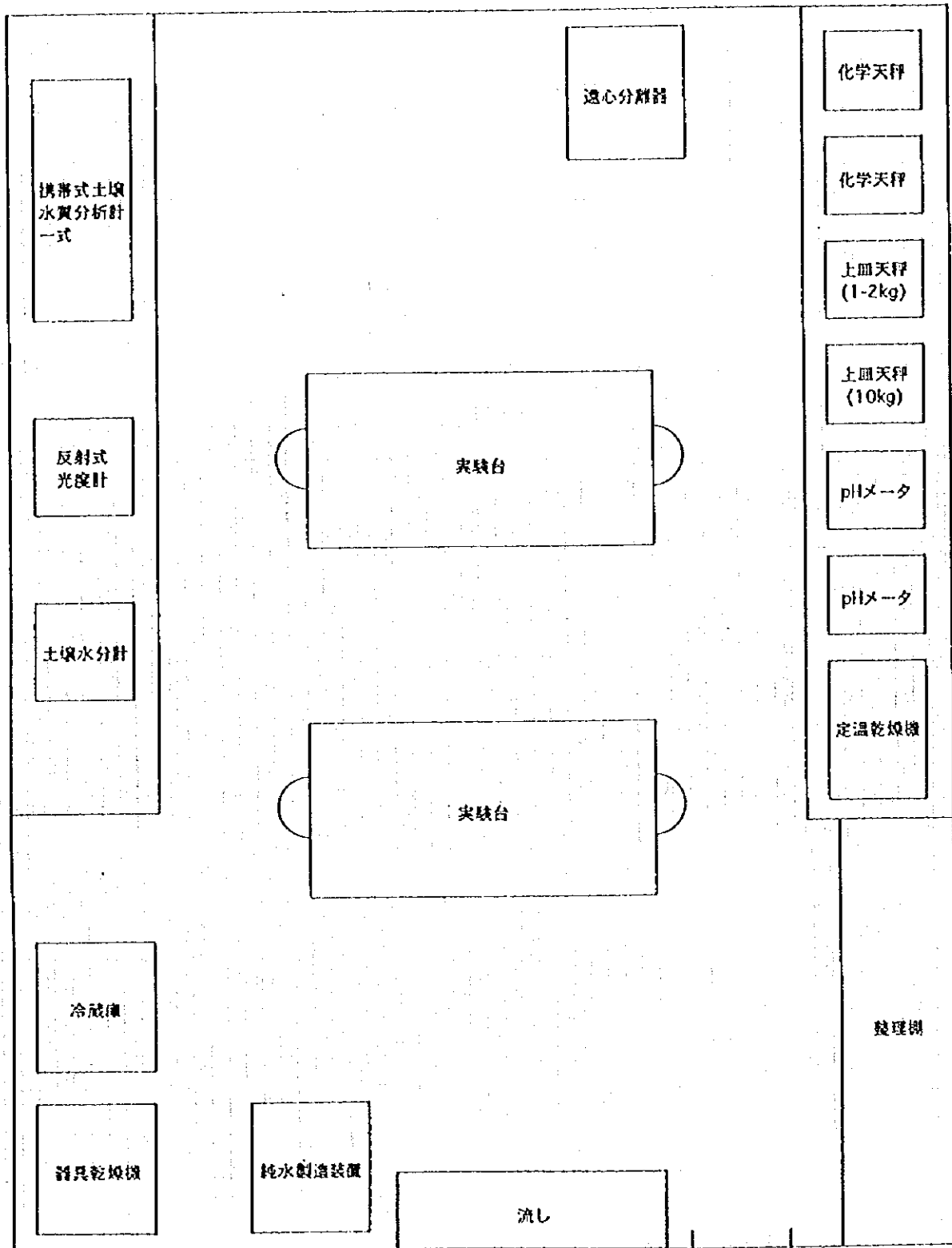
机 (2~3ヶ)

ハノイ農業大学環境分析センター実験室  
環境分析 (水質)

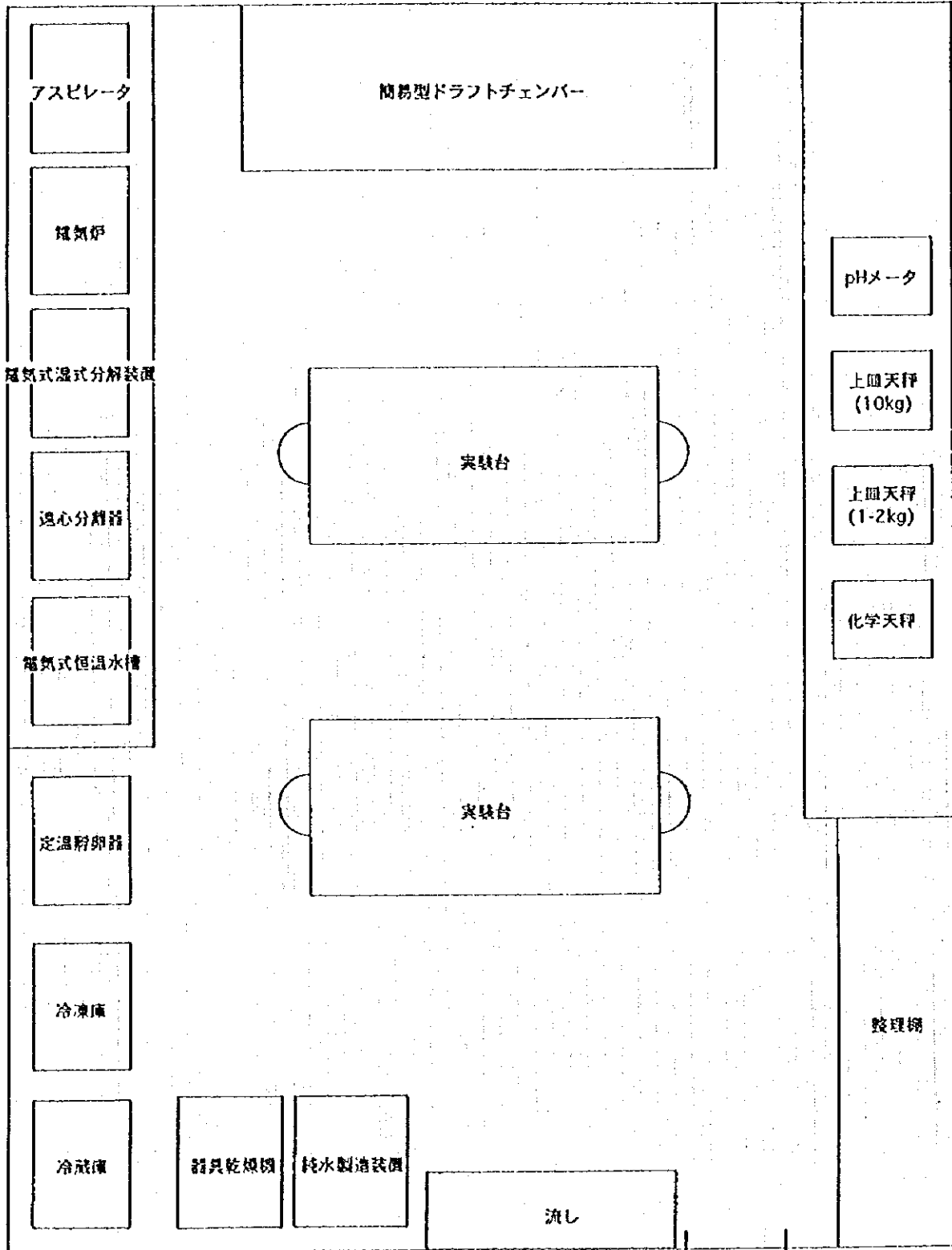


入口

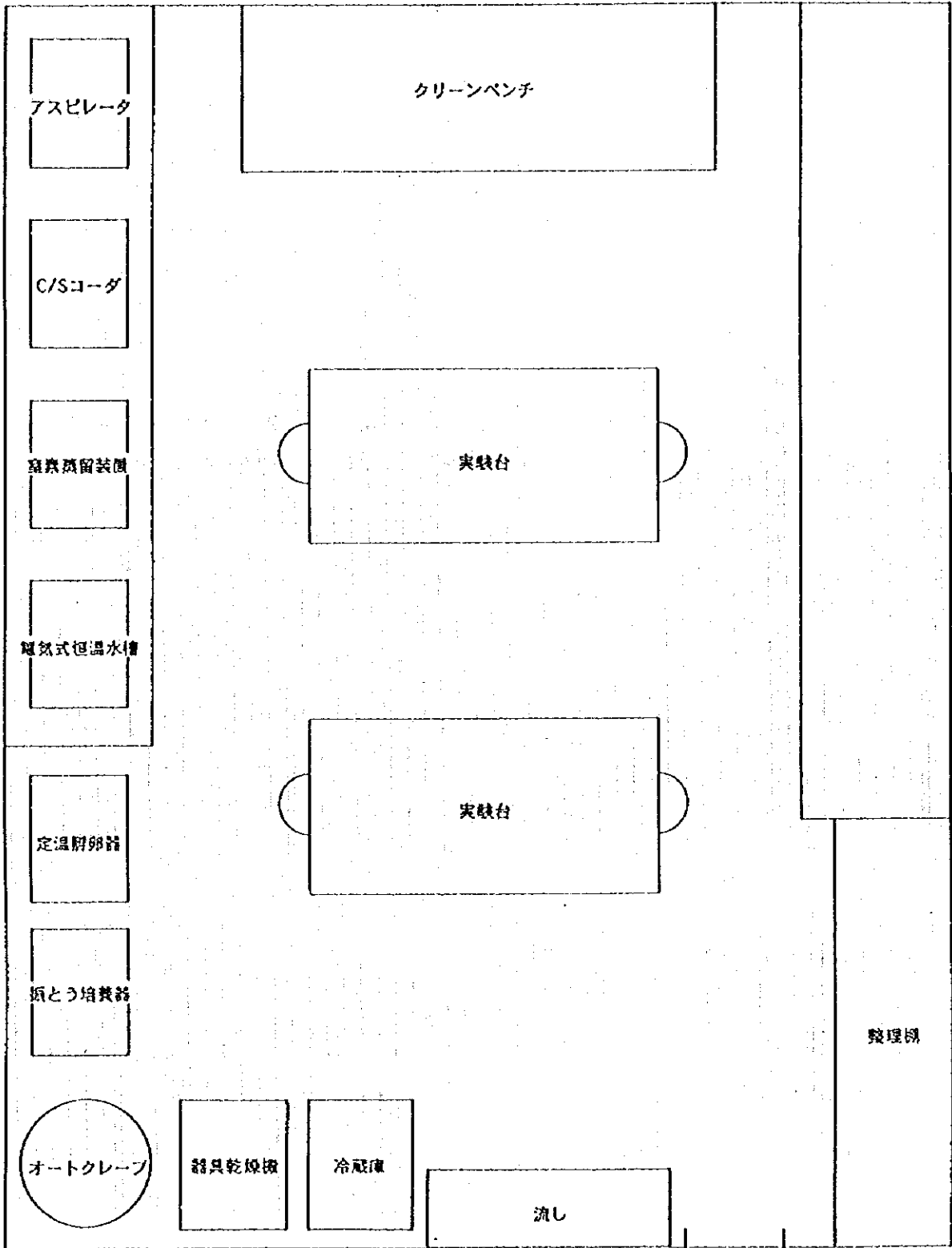
ハノイ農業大学環境分析センター実験室  
環境分析 (土壌)



ハノイ農業大学環境分析センター実験室  
環境分析 (植物)



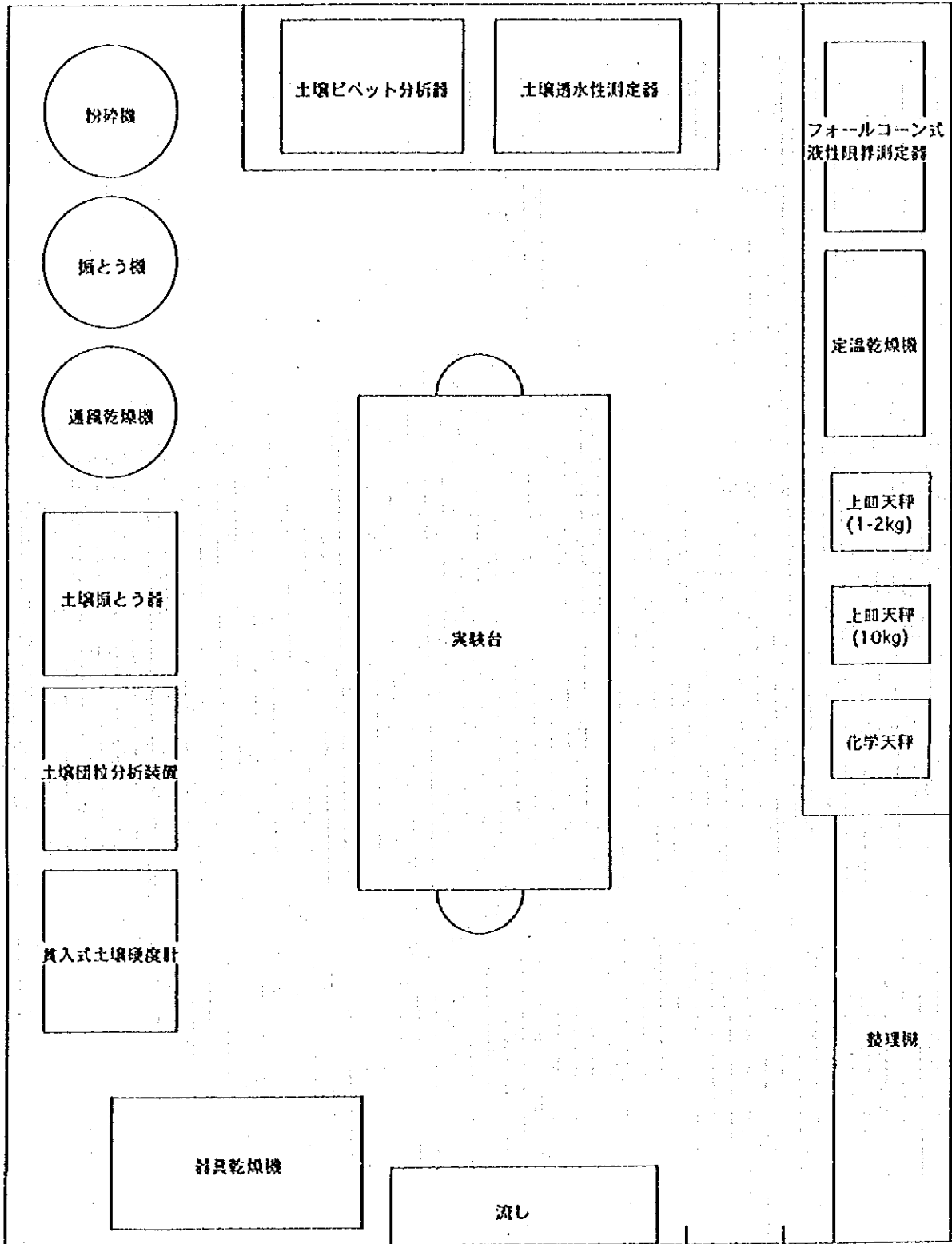
ハノイ農業大学環境分析センター実験室  
土壌微生物



入口

机 (2~3ヶ)

ハノイ農業大学環境分析センター実験室  
土壌物理分析/試料調製



入口





付屬資料 6. 經濟/農村開發学部関連資料

(1) 教育構成

Nº	氏 名	出生年	学 位	職 名
会 計 学 科				
1	Kim Thị Dung	1958		Head of Dep. Asso. Prof.
2	Phạm Thị Mỹ Dung	1948	Dr.	
3	Bùi Bằng Đoàn	1951	Dr.	Deputy of Dep.
4	Nguyễn Quốc Oánh	1968		
5	Bùi Thị Phúc	1962	MS.	
6	Nguyễn Thị Tâm	1952	Dr.	
7	Nguyễn Quang Thoại	1936	Dr.	
8	Lê Hữu Anh	1951	Dr.	
9	Nguyễn Đăng Hợp		MS.	
10	Nguyễn Xuân Tiến		MS.	
11	Lê Thị Minh Châu	1974		
12	Đỗ Quang Giám	1972		
農 業 經 濟 学 科				
1	Lương Xuân Chính	1953		Deputy of Dep.
2	Lê Bá Chức	1952	MS.	Head of Dep.
3	Nguyễn Mậu Dũng	1973		
4	Trần Văn Đức	1953	Dr.	
5	Thái Anh Hùng	1961		
6	Nguyễn Tiến Thêu	1939		
7	Nguyễn Phúc Thọ	1952		
8	Vũ Thị Phương Thủy	1957		
9	Nguyễn Thị Vàng	1954	MS.	
10	Vì Văn Năng			
11	Nguyễn Thị Ngân	1974		
12	Vũ Văn Tuấn	1972		
13	Đỗ Thị Năng	1974		
計 量 經 濟 学 科				
1	Vũ Văn Cảnh	1957		Deputy of Dep.
2	Nguyễn Mộng Kiều	1944	MS.	Dean of Faculty Prof. Deputy of Fac.
3	Nguyễn Thị Nhuận	1960		
4	Trần Đình Thao	1958	MS.	
5	Tô Dũng Tiến	1941	Dr.	
6	Ngô Thị Thuận	1955	Dr.	
7	Đặng Xuân Lợi	1951		
8	Nguyễn Hữu Ngoan		Dr.	
9	Lê Khắc Bộ	1974		

農村開発学科				
1	Đỗ Kim Chung	1956	Dr.	Head of Dep.
2	Mai Thanh Cúc	1958	MS.	
3	Dinh Văn Dân	1952		
4	Nguyễn Trọng Dắc	1954	MS.	Deputy of Dep.
5	Phạm Văn Đình	1946	Dr.	Deputy of Fac. Acco. Prof.
6	Dinh Văn Hiến	1942		
7	Dương Văn Hiếu	1951	MS.	
8	Nguyễn T. Tuyết Lan	1960	MS.	
9	Nguyễn Phương Lê	1973		
10	Nguyễn Văn Mác	1957	MS.	
11	Nguyễn Xuân Tín	1948	MS.	
12	Quyển Đình Hà	1953	Dr.	
アグリビジネス経営学科				
1	Hoàng Ngọc Bích	1949		
2	Hồ Ngọc Châu	1941		
3	Nguyễn Quốc Chính	1964		
4	Nguyễn Nguyên Cự	1942	Dr.	
5	Trần Hữu Cường	1962	MS.	Interna. Assis.
6	Nguyễn Huy Cường	1955	MS.	Deputy of Dep.
7	Bùi Thị Gia	1951	MS.	
8	Chu Thị Kim Loan	1968		
9	Phạm T Minh Nguyệt	1955		
10	Nguyễn Văn Quý	1945		
11	Đỗ Thành Xương	1951		
12	Đặng Văn Tiến	1952	MS.	
13	Đỗ Văn Viện	1953	Dr.	Head of Dep.

【注】

1. MS : Master of Science
2. 学位欄で記入のない教員はBS (Bachelor of Science) のみ所有
3. 職名欄で記入のない教員はLecturer (講師) である

(2) 講義科目と担当

経済学科

1. ミクロ経済学
2. マクロ経済学
3. 経済法
4. ベトナム経済地理
5. 国際経済学
6. 農業経済学原論

Department of Economics

- Microeconomics
- Macroeconomics
- Economic Law
- Economic Geography of Vietnam
- International Economics
- Principle of Agr. Economics

計量経済学科

7. 統計学
8. 農業統計学
9. 計量経済学
10. 経済数学
11. 応用コンピュータ・プログラム
12. 農業経済学研究方法論
13. 経済統計学
14. 企業統計学

Department of Econometrics

- Theory of Statistics
- Agr. Statistics
- Econometrics
- Economic Mathematics
- Computer Program Application
- Methodology of Study in Agr. Economics
- Economic Statistics
- Business Statistics

会計学科

15. 会計学理論
16. 企業会計学
17. 農業租税管理学
18. 企業租税管理学
19. 農業経済分析
20. 農業経営分析
21. 国際会計学
22. 公益会計学
23. 会計法
24. 貨幣理論
25. 会計管理学
26. 会計監査

Department of Accounting

- Theory of Accounting
- Business Accounting
- Financial Management in Agriculture
- Financial Management in Business
- Economic Analysis in Agriculture
- Business Analysis in Agriculture
- International Accounting
- Public Accounting
- Accounting Law
- Theory of monetary Finance
- Accounting Management
- Audit

アグリビジネス経営学科	Department of Business Management
27. 企業経営学 (1)	Business Management (sec. 1)
28. 企業経営学 (2)	Business Management (sec. 2)
29. 企業プロジェクト分析	Preparing and Analyzing Business Project
30. 農産物流通論	Agr. Marketing
41. 農業関連産業経営学 (他学部学生)	Agr. Business Management (for other faculties students)

農村開発学科	Department of Rural Development
31. 農業経済学	Agr. Economics
32. 農業政策学	Agr. Policy
33. 農村開発経済学	Economics for Rural Development
34. 土地利用経済学	Economics on Land Use
35. 農村開発プロジェクト分析	Preparing and Analyzing Rural Development Project
36. 農村地域協同組合論	Cooperative Economics in Rural Areas
37. 家庭経済学	Farmhousehold Economy
38. 農産物市場価格論	Market and Price of Agricultural Products
39. 開発経済学	Development Economics
40. 資源・環境経済学	Resources and Environment Economics

### 教員の講義担当科目

会計学科	
1. Kim Thị Dung	企業財政管理学, 会計法
2. Phạm Thị Mỹ Dung	農業経済分析, 農業経営分析
3. Bùi Bằng Đoàn	農業経済分析, 農業経営分析
4. Nguyễn Quốc Oánh	企業財政管理学, 企業財政管理学, 会計法
5. Bùi Thị Phúc	会計学理論, 企業会計学, 国際会計学
6. Nguyễn Thị Tâm	会計学理論, 企業会計学, 国際会計学
7. Nguyễn Quang Thoại	担当なし
8. Lê Hữu Ảnh	企業財政管理学, 会計法
9. Nguyễn Đăng Hợp	企業財政管理学, 会計法

- |                      |              |
|----------------------|--------------|
| 10. Nguyễn Xuân Tiến | 企業会計学, 国際会計学 |
| 11. Lê Thị Minh Châu | 担当なし         |
| 12. Đỗ Quang Giám    | 担当なし         |

#### 農業経済学科

- |                       |                        |
|-----------------------|------------------------|
| 1. Lương Xuân Chính   | ミクロ経済学, 国際経済学, 農業経済学原論 |
| 2. Lê Bá Chúc         | マクロ経済学, ベトナム経済地理       |
| 3. Nguyễn Mậu Dũng    | ミクロ経済学, 農業経済学原論        |
| 4. Trần Văn Đức       | ミクロ経済学, マクロ経済学         |
| 5. Thái Anh Hùng      | 経済法                    |
| 6. Nguyễn Tiến Thêu   | ミクロ経済学, 国際経済学          |
| 7. Nguyễn Phúc Thọ    | マクロ経済学, 農業経済学原論        |
| 8. Vũ Thị Phương Thuy | ミクロ経済学, 農業経済学原論        |
| 9. Nguyễn Thị Vàng    | マクロ経済学, ベトナム経済地理       |
| 10. Vĩ Văn Năng       | ベトナム経済地理, 国際経済学        |
| 11. Nguyễn Thị Ngân   | 担当なし                   |
| 12. Vũ Văn Tuấn       | 担当なし                   |
| 13. Đỗ Thị Năng       | 担当なし                   |

#### 計量経済学

- |                     |                                  |
|---------------------|----------------------------------|
| 1. Vũ Văn Cảnh      | 経済数学                             |
| 2. Nguyễn Mộng Kiều | 統計学, 農業統計学, 経済統計学                |
| 3. Nguyễn Thị Nhuận | 応用コンピュータプログラム                    |
| 4. Trần Đình Thao   | 計量経済学, 応用コンピュータプログラム             |
| 5. Tô Dũng Tiến     | 計量経済学                            |
| 6. Ngô Thị Thuận    | 統計学, 農業統計学, 応用コンピュータプログラム, 企業統計学 |
| 7. Đặng Xuân Lợi    | 統計学, 農業統計学, 経済統計学, 企業統計学         |
| 8. Nguyễn Hữu Ngoan | 統計学, 農業統計学, 経済統計学, 企業統計学         |
| 9. Lê Khắc Bộ       | 担当なし                             |

#### 農村開発学科

- |                     |                       |
|---------------------|-----------------------|
| 1. Đỗ Kim Chung     | 農業政策学                 |
| 2. Mai Thanh Cúc    | 農村開発経済学, 農村開発プロジェクト分析 |
| 3. Đinh Văn Dẫn     | 農業経済学, 家庭経済学          |
| 4. Nguyễn Trọng Đắc | 土地利用経済学, 農産物市場価格論     |
| 5. Phạm Văn Đình    | 農業政策学, 農業経済学          |
| 6. Đinh Văn Hiến    | 農村地域協同組合論, 家庭経済学      |

- |                        |                  |
|------------------------|------------------|
| 7. Dương Văn Hiếu      | 農村地域協同組合論 農産物対価論 |
| 8. Nguyễn T. Tuyết Lan | 土地利用経済学          |
| 9. Nguyễn Phương Lê    | 土地利用経済学          |
| 10. Nguyễn Văn Mác     | 農業政策学, 農業経済学     |
| 11. Nguyễn Xuân Tín    | 農村開発経済学, 家庭経済学   |
| 12. Quynh Đình Hà      | 農村開発経済学, 土地利用経済学 |

アグリビジネス経営学科

- |                       |                                |
|-----------------------|--------------------------------|
| 1. Hoàng Ngọc Bích    | 企業経営学(2), 農産物専業経営学             |
| 2. Hồ Ngọc Châu       | 企業経営学(1), 企業プロジェクト分析, 農産物流通論   |
| 3. Nguyễn Quốc Chính  | 企業経営学(2), 農産物専業経営学 (他学科学生)     |
| 4. Nguyễn Nguyên Cự   | 企業プロジェクト分析, 農産物専業経営学 (他学科学生)   |
| 5. Trần Hữu Cường     | 企業経営学(1), 企業経営学(2), 企業プロジェクト分析 |
| 6. Nguyễn Huy Cường   | 企業経営学(2), 農産物流通論               |
| 7. Bùi Thị Gia        | 企業経営学(2)                       |
| 8. Chu Thị Kim Loan   | 農産物専業経営学 (他学科学生)               |
| 9. Phạm T Minh Nguyệt | 企業経営学(2), 農産物専業経営学 (他学科学生)     |
| 10. Nguyễn Văn Quý    | 企業経営学(1), 農産物流通論               |
| 11. Đỗ Thành Xương    | 企業経営学(2), 農産物専業経営学 (他学科学生)     |
| 12. Đặng Văn Tiến     | 農産物専業経営学 (他学科学生)               |
| 13. Đỗ Văn Viện       | 企業経営学(1), 農産物流通論               |

### (3) 研究課題

a : 会計学科 Department of Accounting

No 1 ホアビン県山岳地域の農業経済構造を改変する農業地域計画

"Planning of Agricultural Regions to serve Changing of Agricultural Economic Structure of Mountain Hoabinh Province"

背景：調査対象の Hoabinh 県は北ヴェトナム国山岳地域に位置している。そのため、従来は農産物を生産することは困難な社会経済の条件下にあった。県当局はこういう社会経済条件を変革し、林業生産・永年作物・畜産等の導入により農業生産を可能とさせるマスター・プランを2010年を目標に作成する計画であり、本課題はその計画に沿った研究である。

Direct of subject : Assoc. Prof. Dr. Pham Thi My Dung

Coordinate offices : Hoabinh Agricultural and Rural Service

Hoabinh Planning and Investment Service

Hoabinh Science and Technology Service

No 2 ハノイ市場向け果実出荷システムの開発

"Developing Marketing System of Fruit for Hanoi Market"

背景：ヴェトナム国における果実生産は、潜在的には大きいにもかかわらず、今迄のところ南ヴェトナム国に限定されており、1人当たり消費量も著しく低い。中央政府の農業開発計画では果実生産の振興は重要な柱であり、急速な生産の拡大が計られている。果実生産は、まず国内消費に目を向け、次に輸出である。北ヴェトナム国最大の消費市場は首都ハノイであり、ハノイを中心に出荷輸送チャンネルが自然発生的に形成されているので、このチャンネルを合理化、かつ、効率的に構築するモデルとして、出荷輸送ルート、集出荷所の建設等インフラストラクチャーの整備確立を計画する。

Direct of Subject : Accounting Department

Assoc. Prof. Dr. Pham Thi My Dung

Cooperative office : Vietnam General Corporation of Fruit and Vegetable

b : 農業経済学科 Department of Agricultural Economics

No 3 紅河デルタ地域における米市場と価格に関する研究

"Rice Market and Price Research in the Red River Delta"

背景：米はヴェトナム国最大の農産物である。市場経済政策の導入によって、

米の価格は市場の需給関係で決まることになり、価格は大幅に変動して予測することは難しい。紅河デルタ地域を対象に、米の生産・市場・価格形成の現状を調査し、市場と価格に影響する要因を分析し予測を可能とさせる計量経済学的方法を開発する。

Head of Department : Dr. Tran Van Duc

Ms. Nguyen Mau Dung

BSc. Vu Thi Phuong Thuy

Ms. Luong Xuan Chinh

c : 計量経済学科 Department of Econometrics

No 4. ヴィエトナム国における牛肉と豚肉の流通システム

“Beef and Pork Marketing system in Vietnam”

背景：ヴィエトナム国の人口は、現在約7,500万人で、経済成長率が高い。世帯当たり所得の増加につれて牛肉や豚肉など肉類に対する需要も伸びると見込まれる。ところが、1995年フエ市で開催された畜産学会では、飼養家畜数の統計やその生産物の流通に関する情報に関しては、全国的に希薄であることが指摘された。特に生産者・仲買人・消費者を結ぶ流通過程の情報についてはほとんど何もないことが強調された。そこで、本研究では肉牛・豚について、その流通の現状を調査し、そのうえで、農民の生産・出荷を刺激し、効率的に市場へ出荷する要因を明らかにする。

Ms. Tran Dinh Thao

Dr. Ngo Thi Thuan

Dr. Nguyen Huu Ngoan

No 5. ヴィエトナム国の米と野菜栽培における農薬使用の生産性と健康に与える影響

“Impact of Agrochemicals on Productivity and Health in Rice and Vegetable Production in Vietnam”

背景：農業用薬剤の利用は、生産物買収を低費用で増加させ、投下労働と資本に対する高い経済的報酬をもたらすから、農民にとって最も魅力的である。農業の施用は、発展途上国で近年増加しているけれども、まだその限界には至らず、今後も増加し続けるであろう。他方、農薬の不敵切な使用は、農業環境破壊の原因となり、鳥・馬・有益昆虫類などを死滅させ、公害を発生させ、人間の健康をむしばむ原因となる。本研究では、農薬の適切な



使用を判断するための、諸指標を作成することである。

Dr. Ngo Thi Thuan

Mr. Trinh Dinh Thau

No 6 ヴィエトナム国のメコン河デルタ地域における熱帯果物生産に関する研究

“A Tropical Fruit Production Study in Mekong River delta, Vietnam”

背景：メコン河デルタ流域は熱帯果実生産の潜在力が巨大であり、加工製品として輸出する可能性も大きい。事実、この地域で生産される果実はヴィエトナム国全土へ出荷されるだけでなく、隣国のカンボディアや中国へも輸出されている。カントウ大学の調査によれば、この地域における果実生産の可能性は米生産量の2～10倍もあると報告している。しかし、現状では、期待されるほど伸びていない。それはなぜか、また何が生産の制限の要因であるか。本研究ではこれらの諸点を明らかにする。

Vu Van Canh

No 7 ハノイ市サクソン地域における農業生産開発計画

“Planning on an Agricultural Production Development in Socson District, Hanoi, Vietnam”

背景：ヴィエトナム国では人口の80%が農村地域に居住しており、農業生産はヴィエトナム国経済の重要な役割を果たしている。調査対象地域では首都ハノイ北35kmに位置しているけれども、1990年以前は開発が遅れ、住民の生活水準は低かった。1990年以降は、政府がここに国際空港を建設し、2020年の開設を目指して道路を建設し、電気を導入するなど大規模な公共投資を行った。それに関連して、農産物加工工場ゾーン、ツーリズム・ゾーン等の土地利用計画が企画され、それを契機に地域の社会経済構造が一変しつつある。こういう状況の中で、農地が転用され、農業生産は縮小しつつある。新しい社会・経済環境の中で、収益性の高い農業生産と農業経営のあり方を探究する。

Prof. Dr. To Dung Tien

Ms. Nguyen Mau Dung

Dr. Ngo Thi Thuan

d : 農村開発学科 Department of Rural Development

No 8 ハノイ市ジアラム地域における持続的農業開発モデルの確立に関する研究

“Research and Establishment of Sustainable Agricultural Development Model in Gialam District-Hanoi City”

背景：調査対象地域はハノイ市郊外にあり、近年多数の工場が建設され、都市化が進行している地域である。このことは、反面、農業セクターには新たな困難が問題を惹起している。耕地が分断され、土壌や水質が公害で汚染され、収穫量が不安定になるなど。それで、食物の生態系を中心とした農業経営形態を考え、良好な環境を維持しながら、かつ、農業経営としても高い収益が得られる持続的農業経営のモデルを作製する。

Dean of the Project : Major Lecturer Dinh Van Dan

Prof. Dr. Pham Van Dinh

BSc. Nguyen Phuong Le

No 9 農村地域非農業活動の振興により農村経済を多様化させる研究

“Diversification of Rural Economy Through Promotion of Rural Non-Farming Activities”

背景：ヴェトナム国は人口の80%が農村地域に居住しており、そこで農業や関連産業に雇用されて生活の糧を得ている。この10年間、農業部門は年率4.2%の経済成長を記録し、食糧自給を達成し、大量の米を世界市場へ輸出するまでになった。他方、そのために農村地域における貧富の差が拡大した。この差を縮小するためには、農村地域における非農業分野の産業を育成し、農村で発生している過剰労働力を吸収し、また都市部の諸産業が農村の労働力を吸収し得なければならない。本研究は、農村地域産業を育成し、農業セクターから非農業セクターへ労働力を移行させ、西部門の経済を均衡発達させるための情報・戦略・非農業産業の形態・持続的農業の形態等について究明する。

Head of Department : Do Kim Chung

No10 “VAC” 総合農業モデル振興による持続的農業発展

“Sustaining Agriculture Development Through Promotion of ‘VAC’ Integrated Farming Models”

背景：ヴェトナム国の農業経営形態は、伝統的には作物・畜産及び水産業を統

合した複合的形態である。いわゆるVAC (Vuon-Ao-Chuong、樹園地・池・豚) システムで、全国に共同した農業形態である。このシステムの特徴は、食糧の自給・産業の創造・農業の持続的発展という思想から、国内農業を自力で発展させ得る複合的農業経営形態である。ところが、残念なことにこの農業経営形態に最近あまり関心が示されていない。เวียดนาม国農業に関する大方の研究は米の生産に関するものである。農業セクターが持続的であるためには、すべての農業活動、農業企業が相互に統合され、一部の生産物や残滓物が他部門の投入要素となり、その結果、化学薬品などの購入が節約され、土地生産性が上昇し、資源の効率的利用が達成される。本研究は、VAC経営方式で自給生産の枠を越え、企業的経営への展開を可能とさせる方策を確立する。

Head of Department : Do Kim Chung

#### No11 紅河デルタの一地域における総合農村開発計画

“Integrated Rural Development Planning for a District in the Red River Delta”

背景：農村統合開発計画法 (Integrated Rural Development Planning) は、その概念、構造及び方法論が明確で、国際的に認められた規範的分析方法である。この方法は、地域レベルの二つの計画関数、つまり垂直的計画関数と水平的計画関数を統合することである。垂直的関数は国家レベル、またはマクロレベルの経済を地域レベル、またはミクロレベルの計画に分割することを表し、水平的関数はそれぞれ異なる特定地域の経済活動を全地域をカバーする経済活動に一本化することである。垂直的関数と水平的関数を統合して、เวียดนาม国における新しいかつ有効な農村統合開発計画法を策定する。

Dr. Quyen Dinh Ha and a group of teaching and research staffs of Department Development.

#### No12 ライチの商品開発マーケティングに関する研究

“Research on Litchi Commodity Chain Marketing”

背景：レイシ (Litchi) は豊富な栄養を含有する貴重な果実である。それはเวียดนาม国における特産物と考えられている。また、国内消費向けにも輸出向けにも幅広く用いられている。国内におけるレイシの主産地はThanhha District (Haiduong Province) とLuengan District (Bacgiang Province) であ

るが、ここから全国に出荷され、輸出されている。本研究はレイシの流通過程を調査し、生産と消費を一層拡大する方法を明らかにすることである。

Prof. Dr. Pham Van Dinh

Dr. Tran Van Duc

Ms. Nguyen Xuan Tin

Ms. Nguyen Mau Dung

アグリビジネス経営学科 Department of Business Management

No13 ヴィエトナム国農村で農地改革施行に伴って発生した社会経済諸問題の解明

“The Solution for Socio-Economic Problems Arisen after the Implementation of the Land Reform in Rural Areas, Vietnam”

背景：ヴィエトナム国は今、中央計画経済から市場経済への移行過程にある。1986年ドイモイ政策の導入により、高率のインフレ現象が終局し、農業生産が増加し、1人当たりGDPが伸びた。1993年には新しい土地法が制定され、土地所有に関する制約が解除され、農民は土地使用に関して幅広い権限が与えられた。しかし、新しい法律の施行に伴って、新たな社会・経済的諸問題が発生した。たとえば、土地使用権を分配した時に、その分配方法は公正であったろうか。こういう農民の不満に対して、多くの地域の地方政府は、近い将来、農用地の再分配を行うことを約束している。本研究は、農地改革後に発生した社会経済問題に焦点を絞り、農業生産性の向上という視点から土地使用権の再分配を検討し、その方法を公式化することである。

Mr. Tran Huu Cuong

No14 ヴィエトナム国・ハノイにおける主要農産物の市場と価格情報

“Information of Market and Price on Some Agricultural Commodities in Hanoi, Vietnam”

背景：中央計画経済体制下では政府が価格を決めていたから、市場や価格に関する情報は一般国民にとってそれほど必要でなかった。1989年に国家経済が市場経済へ移行してから農産物の市場と価格に関する情報は、農民を含め、市民一般に重要となった。特に、ヴィエトナム国経済が国際経済に関わるようになって、市場情報の重要性は一層増加した。効率的な市場システムの

構築は農業生産者と消費者の所得向上と、直接結びつく重要な課題である。

Research Leader : Ms. Bui Thi Gia

Cooperating Scientists : Ms. Tran Huu Cuong

Nguyen Huu Chinh

(4) 調査経費見積書

貨幣単位：USドル

課題番号	1	2	3	4	5	6	7	8	9	10	11	12	13	14
参加学科と教員数	会計学科 4名	会計学科 3名	会計学科 3名	計量学科 2名	計量学科 4名	計量学科 3名	農経学科 3名	農経学科 3名	農経学科 北ベトナム	農経学科 紅河流域	農経学科 紅河流域	農経学科 北ベトナム	農経学科 紅河流域	農経学科 北ベトナム
調査対象地域	ベトナム	タイ/ラオス	紅河流域	北ベトナム	水田地帯	カマボク	タイ近郊	タイ近郊	北ベトナム	紅河流域	紅河流域	北ベトナム	紅河流域	タイ近郊
調査経費	10,000	12,000	5,000	10,000	2,200 ② 4,050 ③ 1,300	1,000 2,250 1,500 400 5,450	24,000	24,000	24,000	24,000	15,000	1,000 2,500	1,000	
調査経費小計	10,000	12,000	16,000	10,000	8,250									
調査経費	12,000	9,000	5,000		300	1,000	19,000	14,000	5,000	200				
調査経費	5,000	7,000	4,000		300	500	25,000	42,000	11,000	6,800				
調査経費	3,000	2,000	5,000		600	800	11,000	11,000	22,000	1,000				
調査経費	20,000	18,000	14,000		600	2,300	8,000	68,000	40,000	3,200				
調査経費小計	30,000	30,000	30,000	10,000	8,850	7,750	95,000	91,000	58,000	15,200				60,000

【注】空白の欄は原文に記入のないもの

①はセミナー開催費

②と③の積算は次のとおりである

② ((4人\*30日) + 15日) \* 30 USドル

③ (農家500 \* 2 USドル) + 調査員30名 \* 10 USドル

#### 【注：調査経費の積算方法】

(4) は、経済・農村開発学部の教員が企画した研究課題14件の調査経費見積書を一覧表にまとめたものである。経費はいかなる根拠に基づいて積算されているか、その特徴をまとめると以下のとおりである。(ただし、課題番号No5とNo13は原簿に見積額の記入がなく、またNo4とNo14は合計金額のみ記入されていて費目別の明細は記入されていなかった。)

- ① 調査経費は調査費と教員作業費に分かれている。調査費は調査実施の際に要する費用で、旅行運賃・宿泊費・調査実施のために雇った人夫賃、情報提供者に対する謝金、資料の収集や複写に要する費用と謝金等からなっている。
- ② 課題番号No6は、教員が自ら調査に参加する場合の調査人夫賃として1人1日30USドルを計上している(注：②)。だが、大学院生または教員以外の人を調査員として雇う場合の人夫賃は、1人1日10USドルである(注：③)。
- ③ 調査対象農家に対する謝金は1戸平均2USドルである。農民1人1日当たり日雇賃金よりやや高い。
- ④ 教員作業費として、研究企画準備費、資料整理・分析(コンピューターによる作業も含む)、結論、考察や展望の取りまとめ、執筆作業等に分けて経費を積算している。また、結論や考察・展望が出た段階でセミナーを開催し、関係者の意見を聴取しているが、それに要する金額も相当な額である。  
教員作業費の内容は、要するに教員の知的労働に対する報酬である。HAU教員は、大学から貰う給与は生活費の約3分の1で、このほかにアルバイトに従事して3分の2を得ていると、ある教官から聞いたが、教員作業費用として計上した費目はアルバイト収入に相当するものである。
- ⑤ 教員作業費として計上した金額の方が調査費よりも多い課題番号は、No1, 2, 9, 10, 11, 12の6件であり、逆の場合の課題番号はNo3, 6, 7, 12の4件である。研究課題のどのような内容のものが、調査費と教員作業者の比率を決めることになるかは、明らかでない。

JICA