

付 属 資 料

1. 調査日程
2. 主要面談者
3. ミニッツ
4. 評価グリッド
5. PDM プロジェクト要約比較表
6. 収集文献・資料一覧
 - 6-1 Self Evaluation on HAU-JICA ERCB Project
 - 6-2 List of Scientific Papers and others in HAU-JICA ERCB Project Activities

1. 調査日程

	月日	曜日	日 程	関係者
1	3月3日	月	移動（成田→ハノイ）	
2	3月4日	火	JICA ベトナム事務所打合せ	調査団、専門家
			プロジェクト専門家との打合せ	調査団、専門家
			在ベトナム日本国大使館表敬	調査団、専門家、 事務所員
3	3月5日	水	第1回合同評価委員会	調査団、合同評価委員
			インタビュー調査 （ハノイ農業大学当局）	調査団、合同評価委員、 ハノイ農業大学関係者
			施設調査（図書館、実験室）	調査団、合同評価委員、 専門家
4	3月6日	木	第2回合同評価委員会 施設調査（実験圃場、網室）	調査団、合同評価委員、 専門家
			インタビュー調査（農学部）	調査団、合同評価委員、 ハノイ農業大学関係者
			インタビュー調査（土地・水資源 管理学部）	調査団、合同評価委員、 ハノイ農業大学関係者
			インタビュー調査（経済・農村開 発学部）	調査団、合同評価委員、 ハノイ農業大学関係者
5	3月7日	金	インタビュー調査（専門家） 第3回合同評価委員会	調査団、合同評価委員、 専門家
6	3月8日	土	合同評価報告書ドラフト作成	調査団
7	3月9日	日	団内打合せ・合同評価報告書ドラ フト作成	調査団
8	3月10日	月	第4回合同評価委員会 *合同評価報告書ドラフト協議	調査団、合同評価委員
9	3月11日	火	第5回合同評価委員会 *合同評価報告書協議 *合同評価報告書署名	調査団、合同評価委員

10	3月12日	水	合同調整委員会準備 事務所打合せ	調査団、事務所員
			植村団員／移動（ハノイ→香港→ 成田）	
11	3月13日	木	合同調整委員会 *プロジェクト活動報告 *合同評価結果報告 *協議議事録署名式	教育訓練省、計画投資 省、ハノイ農業大学、 在ベトナム日本国大使 館、JICA ベトナム事務 所、プロジェクト専門 家、合同評価委員、調 査団
12	3月14日	金	JICA ベトナム事務所報告	
			在ベトナム日本国大使館報告	
			移動（ハノイ→成田/機内泊）	
13	3月15日	土	成田着	

2. 主要面談者

<ベトナム側関係者>

- (1) 教育訓練省
Prof. Dr. Tran Van Nhung Vice Minister (副大臣)
Dr. Bui Cong Tho International Relations Department
- (2) 計画投資省
Dr. Phan Thanh Tam Department of Science, Education and Environment
- (3) ハノイ農業大学当局
Prof. Dr. Dang Vu Binh Rector (学長)
Assoc. Prof. PhD. Tran Duc Vien Vice Rector (副学長)
Dr. Le Van Lanh Deputy Director, Office of Research Management and Information Relations (研究運営情報関係局 副局長)
Dr. Nguyen Viet Tung Former rector (前学長)
Dr. Hung (前国際関係局長)
- (4) ハノイ農業大学農学部
Assoc. Prof. PhD. Nguyen Van Dinh Dean (学部長)
Dr. Nguyen The Hung Vice dean (副学部長)
Dr. Phan Huu Ton Entomology
Dr. Nguyen Van Hoan Entomology
Dr. Tran Dinh Chien Entomology
Dr. Ha Quang Hung Entomology
- (5) ハノイ農業大学土地・水資源管理学部
Dr. Nguyen Thi Vong Dean (学部長)
Dr. Nguyen Tat Canh Vice dean (副学長)
Dr. Do Nguyen Hai
- (6) ハノイ農業大学経済農村開発学部
Prof. Dr. Pham Van Dinh Dean (学部長)
Dr. Ngo Thi Thuan Vice dean (副学部長)
Dr. Nguyen Mau Dung Lecturer
Dr. Tran Huu Cuong Lecturer

<日本側関係者>

- (1) 在ベトナム日本国大使館
菊森 佳幹 二等書記官
- (2) JICA ベトナム事務所
金丸 守正 所長
仲宗根 邦宏 所員
- (3) ハノイ農業大学強化計画派遣専門家
杉浦 巳代治 リーダー
高橋 和久 業務調整
瀬古 秀文 農学

**THE MINUTES OF MEETING
BETWEEN THE JAPANESE EVALUATION TEAM
AND
THE AUTHORITIES CONCERNED OF
THE GOVERNMENT OF THE SOCIALIST REPUBLIC OF VIETNAM
ON THE JAPANESE TECHNICAL COOPERATION FOR
THE EDUCATION AND RESEARCH CAPABILITY BUILDING PROJECT
OF HANOI AGRICULTURAL UNIVERSITY**

The Japanese Evaluation Team (hereinafter referred to as "the Japanese Team") organized by the Japan International Cooperation Agency (hereinafter referred to as "JICA") and headed by Ms. Harumi KITABAYASHI, visited the Socialist Republic of Vietnam (hereinafter referred to as "Vietnam") from March 3 to March 14, 2003 for the purpose of final evaluation of the Project Type Technical Cooperation for the Education and Research Capability Building Project (hereinafter referred to as "the Project") as well as discussing the major issues related to the implementation of the Project.

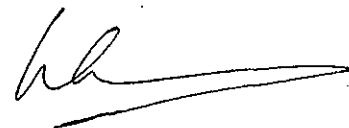
During its stay in Vietnam, the Japanese Team and the Vietnamese Team as the Joint Evaluation Team (hereinafter referred to as "the Team") conducted interviews with the persons concerned including the members of Hanoi Agricultural University and the Japanese experts, had a series of discussions with the authorities concerned of the Government of the Socialist Republic of Vietnam, made the project site surveys and exchanged views among themselves.

As a result of the discussions, the Japanese Team and the Vietnamese authorities concerned agreed to recommend to their respective Governments the matters referred to in the Joint Evaluation Report attached hereto.

Hanoi, March 13, 2003

北林春美

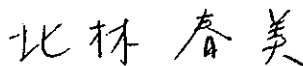
Ms. Harumi KITABAYASHI
Mission Leader,
Japanese Evaluation Team,
Japan International Cooperation Agency



Prof. Dr. Tran Van Nhung
Vice Minister,
Ministry of Education and Training,
The Socialist Republic of Viet Nam

**THE JOINT EVALUATION REPORT
ON THE JAPANESE TECHNICAL COOPERATION
FOR
THE EDUCATION AND RESEARCH CAPABILITY BUILDING PROJECT
OF
HANOI AGRICULTURAL UNIVERSITY**

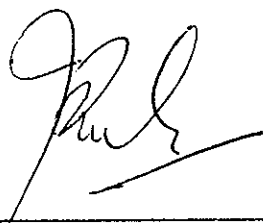
Hanoi, March 11, 2003



Ms. Harumi KITABAYASHI
Mission Leader,
Japanese Evaluation Team,
Japan International Cooperation Agency



Mr. Nguyen Van Phu
Vietnamese Evaluation Team,
Department of Higher Education,
Ministry of Education and Training



Dr. Ngo Xuan Binh
Vietnamese Evaluation Team,
Department of Bio Technology, Faculty of Agronomy,
Thai Nguyen Agriculture & Forestry University



Dr. Dang Kim Son
Vietnamese Evaluation Team,
Information Centre for Agriculture and
Rural Development,
Ministry of Agriculture and Rural Development

Table of Contents

1. INTRODUCTION	3
1-1. Outline of the project	
2. EVALUATION METHODS OF THE PROJECT	4
2-1. Purpose of the evaluation	
2-2. Members of the joint evaluation team	
2-3. Evaluation methods of the Project	
2-4. Five Evaluation Criteria	
3. RESULTS OF THE EVALUATION	5
3-1. Efficiency	
3-1-1. Inputs (Quantity, Quality and Timing)	
3-1-2. Linkages between Inputs and Outputs	
3-2. Effectiveness	
3-2-1. Project Purpose Level	
3-2-2. Output Level	
3.3. Impact	
3-4. Relevance	
3-5. Sustainability	
3-5-1. Institutional Aspect	
3-5-2. Financial Aspect	
3-5-3. Technical Aspect	
4. CONCLUSIONS	10
5. RECOMMENDATIONS	11
6. LESSONS LEARNED FROM THE PROJECT	
7. OTHERS	
ANNEXES	
1. PDMe	13
2. The list of experts	15
3. The list of counterparts trained in Japan	18
4. The amount of the inputs for the Project	19
5. The list of counterparts assigned	20
6. The list of facilities and equipment provided by Hanoi Agricultural University	22
7. Plan of Operation	23
8. The list of counterparts under long-term training for degrees	28
9. The output indicators of the Project	29

1. INTRODUCTION

The Government of Vietnam made a formal request to the Japanese government for the Education and Research Capability Building Project of Hanoi Agricultural University (hereinafter referred to as "HAU") in 1995.

In response to the request, Japanese Government dispatched a Preliminary Study Team in September 1996 in order to clarify the objectives, contents, and priorities. A Long-Term Study Team was dispatched in order to formulate the framework of the Project in April 1997. Based on the preliminary study and the long-term study, the Japanese government recognized the followings; 1) Needs of human resources development to pursue agricultural development under market economy in Vietnam; 2) Hanoi Agricultural University as the leading institution of educating agriculturalists and supplying human resources in agricultural development of the nation. The Japanese Implementation Study Team was dispatched in order to discuss the Master Plan and the Tentative Schedule of Implementation (hereinafter referred to as "TSI"), and signed the Record of Discussions (hereinafter referred to as "R/D") on June 24th, 1998 consisting of the Master Plan and the TSI to start the project from September 1st, 1998.

The Advisory Team was dispatched in August 1999 to formulate the Project Design Matrix (hereinafter referred to as "PDM") and the detailed Tentative Schedule of Implementation (hereinafter referred to as "dTSI") based on the Mater Plan and TSI agreed in the R/D.

In June 2001, the Joint Evaluation Team consisting of the Japanese Mid-term Evaluation Team and the Vietnamese Team conducted an interim evaluation on achievement of the Project by carrying out a field visit, exchanging views and holding a series of discussions in order to recommend desirable measures to be taken by both Governments for the successful implementation of the Project.

1-1. Outline of the project

In accordance with PDM for evaluation (hereinafter referred to as "PDMe" shown in Annex 1) that was arranged for the purpose of evaluation based upon the R/D, the dTSI and the PDM, the outline of the Project is as follows:

(1) Project Purpose

Quality of research and education is improved at three faculties (Faculty of Agronomy, Faculty of Land and Water Resources Management, Faculty of Economics and Rural Development) of HAU.

(2) Outputs

- a. Quality of research is improved.
- b. Quality of education is improved.
- c. Facilities and equipment are properly set up, operated, and maintained to improve quality of research and education.

2. EVALUATION METHODS OF THE PROJECT

2-1. Purpose of the evaluation

(1) To evaluate the achievement of the Project in accordance with PDMe (Annex I) and Plan of Operation (PO) attached in Annex 7.

(2) To make recommendations and suggestions to the authorities of the two Governments concerning the measures to be taken after the termination of the cooperation period.

(3) To obtain the lessons learned from the evaluation of the Project for future cooperation.

2-2. Members of the joint evaluation team

(1) Japanese side

	Name	Title/Field	Present Job
1	Ms. Harumi KITABAYASHI	Mission leader	Director, Agriculture Technical Cooperation Division, JICA
2	Dr. Tetsuo MATSUMOTO	Research and education	Professor, International Cooperation Center for Agricultural Education, Nagoya University
3	Mr. Masaki UEMURA	Educational administration	Official, International Affairs Division, Ministry of Education, Culture, Sports, Science and Technology
4	Mr. Hiroyuki TAKADA	Planning evaluation	Staff, Agriculture Technical Cooperation Division, JICA
5	Mr. Jun TOTSUKAWA	Evaluation analysis	Consultant, IMG. Inc.

(2) Vietnamese side

	Name	Title/Field	Present Job
1	Mr. Nguyen Van Phu	Educational administration	Senior expert, Department of Higher Education, Ministry of Education and Training
2	Dr. Ngo Xuan Binh	Agricultural education	Senior lecturer, Thai Nguyen Agriculture & Forestry University
3	Dr. Dang Kim Son	Agricultural research	Director, Information Centre for Agriculture and Rural Development, Ministry of Agriculture and Rural Development
4	Mr. Tran Cong Thang	Agricultural research	Researcher, Information Centre for Agriculture and Rural Development, Ministry of Agriculture and Rural Development
5	Dr. Phan Thanh Tam	Planning & Management	Consultant group member, Senior expert, Ministry of Planning and Investment

2-3. Evaluation Methods of the Project

This evaluation was conducted by the Team following the PDMe and the PO. The project information for evaluation was obtained from the documents prepared by members of

the Project, site visit, interviews and discussions with the personnel involved in the Project.

2-4. Five Evaluation Criteria

The evaluation was conducted based upon the following five criteria;

(1) Efficiency

Efficiency of the Project implementation is analyzed focusing on the relationship between inputs and outputs in terms of timing, quantity, and quality, and on the linkage with other cooperation schemes of JICA and other organizations.

(2) Effectiveness

Effectiveness is assessed by evaluating the extent to which the Project has achieved Outputs and the Project Purpose.

(3) Impact

Impact of the Project activities is identified as positive and negative changes produced by the Project directly and indirectly.

(4) Relevance

Relevance of the Project is assessed on the validity of the Project Purpose and Overall Goal in connection with the superordinate policies and plans (e.g. development policy of the Government of Vietnam), and needs of the beneficiaries.

(5) Sustainability

Sustainability of the Project is forecasted based on the organizational, financial and technical aspects by examining the extent to which the achievement of the Project is sustained or expanded after the assistance is completed.

3. RESULTS OF THE EVALUATION

3-1. Efficiency

3-1-1. Inputs (Quantity, Quality and Timing)

(1) Dispatch of Japanese Experts

Nine (9) long-term experts and thirty (30) short-term experts have been dispatched. Six (6) more short-term experts will be dispatched by the end of the project. The list of experts is attached as Annex 2.

Most of all experts were dispatched on schedule except a long-term expert to the Faculty of Agronomy at the beginning due to difficulty in recruitment. Negative influences by the delay have been nearly overcome by earnest efforts of long-term experts and counterparts.

Besides the delay, a long-term expert to the Faculty of Land and Water Resource Management was not dispatched from the fourth year as planned. Instead of a long-term expert, several short-term experts were assigned. The originally planned activities were caught up.

(2) Counterpart Training in Japan

Twenty-three (23) counterparts have been trained in Japan as scheduled. Three (3) more counterparts will be trained in Japan by the end of the project. The list of counterparts trained in Japan is as Annex 3. There are three (3) counterparts who are studying for their

degrees (PhD, MSc) in Japan at present shown in Annex 8.

(3) Equipment provided by Japanese side

Quantity and quality of equipment were judged appropriate by the records showing frequency of use. The team only concerned that the weather station will be ending the life in the near future.

Most items of equipment were set up on schedule. The delay in provision of some items did not give any significant negative influences. The amount of provided equipment is presented in Annex 4.

(4) Local cost borne by Japanese side

The Japanese side provided local cost for 1) project activities such as holding workshops and seminars, printing proceedings and reports, and 2) construction of experimental field. The amount of the funds provided by the Japanese side is shown in Annex 4.

(5) Assignment of Counterpart staff

Due to lack of mutual communication on the definition of the counterpart personnel, HAU assigned as counterparts as many as two hundred and twenty one (221) teaching staff in the three faculties. After the discussions with the Mid-term evaluation team dispatched in 2001, the number of the counterparts was reduced to sixty seven (67) shown in Annex 5, limiting the assignment to those who conducted project activities with the Japanese experts. As those counterparts had multiple responsibilities in and out of HAU, they were unable to spend sufficient time to work with the experts during their stay at HAU. In stead, different counterpart staff took turns in activities such as technology transfer and research.

(6) Local cost borne by HAU

HAU has allocated a total cost of five hundred sixteen thousand (516,000) US dollars to construct a new building of the Faculty of Agronomy, and others. The list of facilities and equipment is shown in Annex 6

3-1-2. Linkage between Inputs and Outputs

(1) Japanese side

a. Dispatch of experts

Expected outputs have been achieved in spite of the delay and cancellation in dispatch of long-term expert to the Faculty of Agronomy and the Land and Water Resource Management. Repeated dispatches of the same short-term experts also strengthened relationship with their counterparts and improved research and education quality.

b. Equipment

Quality and quantity of equipment produced expected Outputs.

c. Counterpart training

Counterpart training in Japan contributed to Outputs significantly. All the counterparts trained in Japan have continued research and education in HAU applying knowledge and skills gained in Japan.

(2) Vietnamese side

a. Assignment of counterpart personnel

It was observed that the counterpart members were too busy in jobs inside and outside of HAU. Although different persons took turns to work with the Japanese experts during their stay at HAU, experts often found it difficult to transfer new technologies to many persons due to insufficient time spent by one person and frequent interruption.

b. Equipment

Most items of equipment/facilities have been maintained well so far. It is highly evaluated in terms of efficiency that specialists were assigned to manage the laboratories and net houses. Only inappropriate location of Gas-Chromatograph system was observed.

c. Provision of local cost borne by Vietnamese side

The local cost was provided by HAU as schedule.

3-2 Effectiveness

3-2-1. Project Purpose Level

Project Purpose: Quality of research and education is improved at three faculties (Agronomy, Land and Water Resources Management, Economics and Rural Development) of HAU.

Through the research activities, a number of research results have been contributed to the production of teaching materials, experimental manuals and syllabi improvement.

A number of books and literatures provided have been accessed by both teaching staff and students in the Faculty of Economics and Rural Development.

It has been confirmed by interview and site observation that access to the central laboratories and other research facilities such as experiment field has been increased both by teaching staff and students in the Faculties of Agronomy, and Land and Water Resources Management.

3-2-2. Output Level

Output 1: Quality of Research is improved.

Research quality has been improved, compared with before the project started. The following indicators/events endorse the evaluation (Figures are total number of the results obtained from 1998 to March, 2003):

- The number of workshops/seminars held.

Agronomy: 10; Land and Water Resource Management: 6; Economics and Rural Development: 8

- The number of research papers published.

Agronomy: 41; Land and Water Resource Management: 21; Economics and Rural Development: 39 (see Annex 9)

- Hanoi Agricultural University Journal (HAU Journal) was newly developed.

There had no Journals published in HAU before the Project. The HAU Journal,

currently in the process of publishing 4th edition, is going to be recognized as state level by the government.

- The opportunities to conduct research in close cooperation with MARD and other organizations including contract research are on the increase.
- New technologies for research (genetics, biotechnology, DNA analysis, tissue culture, water analysis and identification of some toxic substances, questionnaire survey design and analysis) were introduced.
- Academic titles (Ph.D, MSc) were obtained by the teaching staff and students.

Agronomy: (PhD; 30, MSc; 112)

Land and Water Resources Management: (PhD; 37, MSc; 121) (See Annex 9)

Economics and Rural Development: (PhD; 54, MSc; 100) (See Annex 9)

*Number of the Faculty of Economics and Rural Development is only for teaching staff.

Output 2: Quality of Education is improved.

Education quality has been improved, compared with before the project started. The following indicators/events endorse the evaluation (Figures are the results obtained from 1998 to March, 2003):

- The number of teaching materials improved.
Agronomy: 1; Land and Water Resource Management: 1; Economics and Rural Development: 2
- The number of experimental manuals newly developed.
Land and Water Resources Management: 5
- The number of syllabi reviewed to meet the request by MOET
Agronomy: 5; Land and Water Resources Management: 5; Economics and Rural Development: 7
- Two students got the second highest award (Youth Creativity Award) by MOSTE in 2002.
- Students have more opportunities to conduct experiments in the laboratories and the experiment field.

Output 3: Facilities and equipment are properly set up, operated, and maintained to improve quality of research and education

Most facilities and equipment are properly set up, operated, and maintained. The following indicators/events endorse the evaluation;

- Specialists were assigned to manage the laboratories and net houses.
- A librarian was assigned to the Economics and Rural Development Faculty Library whose collection now amounts to 40,000 books.
- The record of equipment/facilities use shows that most of them are frequently used.
At present, only four percent of equipment supplied to the Faculty of Agronomy and

three percent to the Faculty of Economics and Rural Development have been rarely used.

3-3. Impact

The following impacts were observed;

	Positive	Negative
Technical Impact	<ul style="list-style-type: none"> • New two lines of rice are going to be registered as new varieties. 	-
Institutional Impact	<ul style="list-style-type: none"> • HAU is playing the important role of model/demonstration for other institutions that need to improve education and research quality. • As the result of prestige and reputation grew, HAU became more attractive to students. • More contracts of research from government authorities (including three national level contracts won by competition), local governments and other organizations including Japanese universities. • Other organizations including ones from overseas conduct research with HAU by use of equipment/facilities in laboratories. • Young staff and students are more interested in research. 	<ul style="list-style-type: none"> • More facilities and equipment in one way resulted in requiring more cost for maintenance.
Socio-cultural/Environmental Impact	<ul style="list-style-type: none"> • Working style including attitude toward research of HAU staffs is improved. 	<ul style="list-style-type: none"> • Experiments in laboratories produced more waste, which currently sewage down. The current condition could be worsened in the near future.

3-4. Relevance

The overall goal and project purpose are still in consistent with the national policy of Education and Training Development Strategies (2001-2020) of MOET, which emphasizes improvement of education and research quality. The project also accords with the current MOET reform policy that promotes experiments and practices besides lectures and reading textbooks. Relevance of the project can also be observed from the fact that two faculties were recently designated as target institutions to develop teaching materials and methodology, potentially to be extended to other related universities.

The project's overall goal and purpose are also relevant to the national agricultural policy such as Five-Year Plan for Agriculture and Rural Development (2001-2005) of MARD, which emphasizes increase in agricultural produce. The research activities are, therefore, highly expected to contribute to the increase in agricultural productivity including new varieties of rice, which are exactly in line with the current activities in the project.

3-5. Sustainability

3-5-1 Institutional Aspect

Concerns about sustainability from institutional aspect exist in severe working environment of teaching staff. If the current condition continues, they cannot fully contribute to improvement of research and education.

3-5-2 Financial Aspect

Although insufficient budget for research and education in HAU is a big concern for the sustainability of the Project, the positive events were observed in the current budget of HAU as follows; 1) There are more joint researches with governmental research institutes, local governments and companies; 2) Collecting operation fee of equipment/facilities in the laboratories can be expected from outsiders of HAU; 3) The research budget from MOSTE has been increased since 1998 partly owing to more winning of research proposal competition; 4) The budget of HAU has been on the increase. HAU affirmed that it would make efforts in financial aspect as much as possible including for maintenance cost of the equipment supplied by the project.

3-5-3. Technical Aspect

Technologies transferred by the project has high sustainability because most transferred ones are basic technologies, which counterpart personnel have already absorbed at sufficient level, and also nearly all of them still remain at HAU and continue research and education.

4. CONCLUSIONS

In the past four and half years most of the planned activities were conducted, such as technology transfer and scientific research on specific issues, academic seminars and workshops, development of educational materials, review of the syllabi, and upgrading of experimental and educational equipment and facilities.

The faculty members of HAU utilized the new technologies introduced by the Project. Those activities lead to the improvement of the quality of research. Joint research with other organizations has been promoted, and the research contracts with the Ministry of Science and Technology increased through enhanced capacity and prestige of HAU as academic institution.

Although it is difficult to quantitatively measure the improvement in quality of education, it was confirmed that students have more opportunities to study in the library, experimental laboratories and field. Those educational improvements are expected to contribute to the educational reform by the Ministry of Education and Training that designated the HAU as model for development of new teaching materials and methodologies.

Regarding the maintenance and management of equipment and facilities, HAU assigned fulltime staff to manage the laboratory, library and experimental field, which ensured the efficient utilization and proper maintenance of the equipment and reference books.

In conclusion, the Project will achieve its purpose by the end of its term, as the targeted three faculties of HAU have built capacity of education and research.

5. RECOMMENDATIONS

Despite the delay in assignment of the long-term expert to the Faculty of Agronomy, research activities were conducted with successful achievements. High yield and bacterial leaf blight disease (BLB) resistant lines of rice were identified through technical cooperation activities and they are at the stage of broad scale evaluation for registration of the new varieties. It is expected that the research will be continued and lead to the registration of the new varieties, thus eventually transferred to the farmers by relevant authorities in charge of extension. The team encouraged to accomplish the research to obtain the registration of the new varieties. Technical assistance of JICA by means of expert assignment to accomplish this specific objective is recommended.

Waste management in the laboratories is not appropriate and there is concern over environmental pollution due to discharge of untreated waste. It is strongly recommended that HAU take measures for preventing negative impact on the environment in terms of treatment facilities and procedures. Being a leading institution of agricultural education and research, HAU is expected to play a model role in environmental protection in advanced scientific activities.

The weather station is producing valuable data for research in various fields, but the life of the equipment will end in a few years. The Team urged HAU to continue meteorological data collection with alternative tools.

Although HAU has decided to allocate its budget for maintenance of the laboratories, concern over maintenance of imported laboratory equipment was expressed by the Rector and members of HAU. It is desirable that JICA provide spare parts within the allocated budget before the Project terminates in August. Continuing and increased support from the Ministry of Education and Training is requested in order that HAU will sustain and further develop the research and educational capacity.

6. LESSONS LEARNED FROM THE PROJECT

It seems that lack of mutual communication and understanding between the HAU members and the Japanese experts hampered efficient implementation of the activities at the beginning stage of the Project. Careful explanation and discussions with respect to the principles and procedures of technical cooperation program of JICA at the early stage of the project would be essential for smooth operation and avoidance of delays in inputs.

Vietnamese side recognized that maintenance and operation cost of the equipment provided by JICA was not so small just after they were introduced to HAU. Mutual consultation regarding future burden of newly procured equipment must be done before it is introduced.

7. OTHERS

The special characteristic of the project is that there are several kinds of supports out of the project inputs that enhanced the project activities. One of them is the supporting consortium of the project consisting of six Japanese universities such as Kyushu University, Yamaguchi University, Saga University, Miyazaki University, Kagoshima University and University of the Ryukyus. Eight counterparts have been given long-term study opportunities in those universities. The list of those counterparts is attached in Annex 8.

PROJECT DESIGN MATRIX for Evaluation

Annex 1

Title of the Project : The Education and Research Capability Building Project of Hanoi Agricultural University
 Period : September 1, 1998~ August 31, 2003

	Narrative Summary	Veri f i able indicators	Means of verification	Important assumption	Note
SUPER GOAL	High quality manpower of modernization and industrialization of agriculture is trained			1 Agricultural policies will not be drastically changed. 2 Research results will be actually utilized for promotion and development of agriculture.	
OVERALL GOAL	Quality of research and education of entire HAU is improved	<ul style="list-style-type: none"> · No. of experimental practices and field works introduced to education process at the entire HAU · Access to the Central Laboratories, the computer-room and other facilities for researchers in other faculties 	<ul style="list-style-type: none"> · Training Office (HAU) · Scientific Research Department(HAU) 	Graduates from HAU obtain proper positions in concerned institutions	
PROJECT PURPOSE	Quality of research and education is improved at three faculties (Faculty of Agronomy, Faculty of Land and Water Resources Management, Faculty of Economics and Rural Development) of HAU	<ul style="list-style-type: none"> · No. and cases of actual introduction of research results to teaching materials and syllabi · Access to references (book or literatures) and computers for Faculty of Economics and rural Development · Access to the Central Laboratories or other research facilities provided with Agronomy and Faculty of Land and Water Resources Management 	<ul style="list-style-type: none"> · Training Office (HAU) · Scientific Research Department(HAU) 	The result of the project is extended to other faculties of HAU	
OUTPUTS	(1) Quality of research is improved	1-1 No. of workshops/seminars/ training-seminars held and the proceedings issued 1-2 No. of persons attended workshops/ seminars/training-seminars held 1-3 No. of Master and Ph.D degrees obtained 1-4 No. of journals edited and issued 1-5 No. of research presentation held in and out of Vietnam 1-6 No. of research papers/reports published in and out of Vietnam 1-7 No. of researches utilizing experimental field for Fac. Of Agronomy and Fac. Of LWRM 1-8 No. of researches with data and information obtained from fieldworks for Fac. Of ERD	<ul style="list-style-type: none"> · 1-1~3 : Record of the project team · 1-4,1-7~8 : Record of the target faculties and the project team · 1-5~6 : Scientific Research Department (HAU) and International Relations Office(HAU) 		

PROJECT DESIGN MATRIX for Evaluation

Annex 1

	Narrative Summary	Verifiable indicators	Means of verification	Important assumption	Note
	(2) Quality of education is improved	2-1 No. of teaching materials improved 2-2 No. of experimental manuals developed 2-3 No. of syllabi improved	2-1~3 : Training Office (HAU), Record of the target faculties and the project team		
	(3) Facilities and equipment are properly set up, operated, and maintained to improve quality of research and education.	3-1 Increase of time per teacher to use equipment 3-2 Increase of utilization of installed equipment 3-3 Results of activities of working group on 3-4 No. of staff trained on equipments utilization and maintenance	3-1~4 : Equipment Management Office (HAU), Record of the target faculties and the project team		
ACTIVITES	(1-1) Promote the following fields of researches conducted by Fac. Of Agronomy (1-1-1) Plant Breeding (1-1-2) Plant Protection (1-1-3) Biotechnology (1-1-4) Meteorology (1-2) Promote the following fields of researches conducted by Fac. LWRM (1-2-1) Soil and Environmental Conservation (1-2-2) Plant Nutrition (1-2-3) Water Management (1-3) Promote the following fields of researches conducted by Fac. of ERD (1-3-1) Agricultural Marketing (1-3-2) Rural Development (1-3-3) Farm Management				
	(2-1) Improve teaching materials and syllabi of Fac. Of Agronomy in the fields related to the research topics set in Plan of Operation (PO) (2-2) Improve teaching materials and syllabi of Fac. Of LWRM in the fields related to the research topics set in PO (2-3) Improve teaching materials and make a model of syllabus of Fac. of ERD (3-1) Establish operational/management system of equipment/computers (3-2) Establish maintenance system				

HAU-JICA ERCB PROJECT

Project year		Project Year 1								Project Year 2								Project Year 3								Project Year 4								Project Year 5																									
		1998								1999								2000								2001								2002								2003																	
Title : Name	Year	Month																																																									
		9	10	11	12	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4	5	6
Team leader	Original plan	←-----→																																																									
	Kenji CHO	←-----→ (1998.11.10-2001.3.9)																																																									
	Miyoji SUGIURA	←-----→ (2001.2.20-2003.8.31)																																																									
Project coordinator	Original plan	←-----→																																																									
	Mikiko FUJIWARA	←-----→ (1998.9.22-2000.9.21)																																																									
	Kazuhisa TAKAHASHI	←-----→ (2000.9.7-2003.8.31)																																																									
Agronomy field	Original plan	←-----→																																																									
	Masatoshi ONIKI	←-----→ (2000.1.11-2001.5.10)																																																									
	Hidefumi SEKO	←-----→ (2001.4.25-2003.8.31)																																																									
	on-planning	*Recruit was unsuccessful. Short-term experts will attend to all the required work. (2002.1.15-2003.8.31 tentative)																																																									
Land & water resources management field	Original plan	←-----→																																																									
	Kiyoshi Kurosawa	←-----→ (1999.3.2-2001.3.1)																																																									
	Yuichi SAEKI	←-----→ (2001.2.20-2002.2.19)																																																									
on-recruiting	*Recruit was unsuccessful. Short-term experts will attend to all the required work. (2002.2.1-2003.8.31 tentative)																																																										
Economics & rural development field	Original plan	←-----→																																																									
	Kazunari TSUJI	←-----→ (1999.1.9-2002.1.7)																																																									

REMARKS: ←-----→ : Actual, ←-----→ : Plan

HAU-JICA ERCB PROJECT

Project year Year		Project Year 1				Project Year 2				Project Year 3				Project Year 4				Project Year 5																													
		1998				1999				2000				2001				2002				2003																									
		9	10	11	12	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4	5	6
S I O R T T E R M E X P E R T S	1	Plant physiology																																													
	2	Tropical plant protection																																													
	3	Agriculture meteorology																																													
	4	Agriculture marketing (Marketing system)																																													
	5	Installation of weather station																																													
	6	Installation of weather station																																													
	7	Biological control																																													
	8	Agricultural policy (Agricultural cooperatives)																																													
	9	Environmental science																																													
	10	Farm management (Land-use planning)																																													
	11	Soil physics																																													
	12	Agricultural Marketing (Agricultural Products processing)																																													
	13	Farm management (Farm house hold economy and joint family)																																													
	14	Soil chemistry																																													
	15	Crop production																																													
	16	Horticulture																																													
	17	Agricultural economics & policies (Agriculture environmental policy)																																													
	18	Agricultural structure/ rural development																																													
	19	Plant nutrition (Soil nutrition)																																													
	20	Plant nutrition (Chemical fertiliser)																																													
	21	Plant pathology																																													
	22	Crop science & Plant breeding																																													
	23	Horticulture & Biotechnology																																													

HAU-JICA ERCB PROJECT

Project year		Project Year 1												Project Year 2												Project Year 3												Project Year 4												Project Year 5																																															
		1998												1999												2000												2001												2002												2003																																			
		9	10	11	12	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4	5	6	7	8																																				
Title / Name	Year	Month																																																																																															
S H O R T T E R M E R I T S	24	Plant breeding (resistant rice to bacterial leaf blight disease)																																																Dr. Taura, Kagoshima Univ. (2002.9.16-2002.10.18) ◆																																															
	25	Plant breeding (high yielding potential rice)																																																Dr. Yoshimura, Kyushu Univ. (2002.7.30-2002.8.23) ◆																																															
	26	Plant pathology (racial ecology of bacterial leaf blight disease)																																																Dr. Furuya, Kyushu Univ. (2002.8.15-2002.9.25) ◆																																															
	27	Soil physical and chemical property																																																Dr. Egashira, Kyushu Univ. (2002.9.29-2002.10.26) ◆																																															
	28	Analysis of organic compounds in plant and soil																																																Dr. Yamakawa, Kyushu Univ. (2002.11.8-2002.12.24) ◆																																															
	29	Rural finance and investment planning																																																Dr. Usami, Yamaguchi Univ. (2002.10.17-2002.11.14) ◆																																															
	30	Improvement of syllabi and support for making technical report																																																Dr. Kazunari Tsuji, Kyushu Univ. (2002.12.7-2002.12.29) ◆																																															
	31	Plant breeding (breeding for Brown plant-hopper resistance rice)																																																Dr. Yasui, Kyushu Univ. (2003.4.5-2003.5.3: tentative) ◆																																															
	32	Synthetic guide and follow-up of the agricultural economics study																																																Dr. Masao Tshuji, Kyushu Univ. (1 month from May 2003: tentative) ◆																																															
	33	Synthetic guide and follow-up of the soil study																																																Dr. Egashira, Kyushu Univ. (1 month from May 2003: tentative) ◆																																															
34	Breeding of bacterial leaf blight disease resistant rice																																																Dr. Taura, Kagoshima Univ. (1 month from May 2003: tentative) ◆																																																
35	Collection and preparation guidance of the pest specimen																																																Dr. Ogata, Kyushu Univ. (2 months from May 2003: tentative) ◆																																																
36	Improvement of the high yielding potential of Hybrid rice																																																Dr. Yoshimura, Kyushu Univ. (1 month from May 2003: tentative) ◆																																																

*ABBREVIATION: AGR: Faculty of Agronomy, LWRM: Faculty of Land & Water Resources Management, ERD: Faculty of Economics & Rural Development
 JFY: Japanese Fiscal Year (April - March)

Project year Year		Project Year 1				Project Year 2				Project Year 3				Project Year 4				Project Year 5				Total													
		1998				1999				2000				2001				2002					2003												
		9	10	11	12	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4		5	6	7	8	9	10	11	12	1	2	3	4	5
Title / Name		Month																																	
J A P A I N E S E	Japanese fiscal year (JFY)	JFY 1998				JFY 1999				JFY 2000				JFY 2001				JFY 2002				JFY 2003				Subtotal									
	Budget for project activity	\$30,142				\$81,577				\$88,683				\$82,308				\$73,245				\$50,000				\$405,955									
	Construction of experiment garden	\$0				\$0				\$231,380				\$0				\$11,811				\$0				\$243,191									
	Provision of equipment	\$473,858				\$734,037				\$236,888				\$220,000				\$104,061				\$25,000				\$1,793,844									
	Total	\$504,000				\$815,614				\$556,951				\$302,308				\$189,117				\$75,000				\$2,442,990									
O P E R A T I O N C O S T V I E T N A M E S E S I D E	Vietnamese fiscal year (VFY)	VFY 1998				VFY 1999				VFY 2000				VFY 2001				VFY 2002				VFY 2003													
	Actual & estimated expenditure for the Project																																		
	University administration section																																		
	source: MOET	\$357				\$11,548				\$4,789				\$4,946				\$2,500				\$1,800				Expenditure results for the Project Wages/salary of university teachers is not included.									
	source: Univ. budget (school fee)	\$664				\$25,175				\$3,975				\$2,061				\$1,000				\$1,250													
	source: Budget from other sources	nil				nil				nil				nil				nil				nil													
	Subtotal	\$1,021				\$36,723				\$8,764				\$7,007				\$3,500				\$3,050				\$60,065									
	Faculty of Agronomy																																		
	source: MOET	-				\$1,401				\$301,047				\$13,169				\$7,020				\$23,200				VFY 2000 expenditure from MOET covers construction of new building (4,300,000,000 VND)									
	source: Univ. budget (school fee)	-				\$3,294				\$11,270				\$1,740				\$10,900				\$12,142													
	source: Budget from other sources	-				no information				no information				no information				-				-													
	Subtotal	-				\$4,695				\$312,317				\$14,909				\$17,920				\$35,342				\$385,183									
	Faculty of Land & Water Management																																		
	source: MOET	-				\$2,098				\$618				\$4,176				\$6,633				\$12,736													
	source: Univ. budget (school fee)	-				\$2,088				\$5,536				\$2,011				\$7,520				\$7,711													
	source: Budget from other sources	-				no information				no information				no information				-				-													
	Subtotal	-				\$4,186				\$6,154				\$6,187				\$14,153				\$20,447				\$51,127									
Faculty of Economics & Rural Dev.																																			
source: MOET	-				\$33				-				\$2,402				\$6,163				\$5,848														
source: Univ. budget (school fee)	-				\$961				\$112				\$1,388				\$2,100				\$1,230														
source: Budget from other sources	-				no information				no information				no information				-				-														
Subtotal	-				\$994				\$112				\$3,790				\$8,263				\$7,078				\$20,237										
Total	\$1,021				\$46,598				\$327,347				\$31,893				\$43,836				\$65,917				\$516,613										
Exchange rate US\$=	14,000				VND 14,300				VND 14,400				VND 14,600				VND 15,200				VND 15,320														

No	POST	NAME	TITLE	DEGREE	SEX	C/P training	Training source	C/P CATEGORY
1	ADMI	Dang Vu Binh	Rector	Dr.	M	settled	JICA	Project manager
2	ADMI	Tran Duc Vien	Vice rector	Dr.	M			Senior C/P
3	ADMI	Nguyen Huu Ngoan	Vice rector	Dr.	M			Senior C/P
4	ADMI	Nguyen Van Muon	Vice rector	Dr.	M			Senior C/P
5	ADMI	Le Van Lanh	Head, IRL	Dr.	M			Senior C/P
6	ADMI	Quyen Dinh Ha	Head, FIN	Dr.	M			Senior C/P
7	ADMI	Tran Van Hung	Head, ADM	Dr.	M			Senior C/P
8	ADMI	Nguyen Quang Thach	Former vice rector	Dr.	M	settled	JICA	Senior C/P
9	ADMI	Nguyen Viet Tung	Former rector	Dr.	M			Senior C/P
10	ADMI	Nguyen Truong Son	Former vice rector	Dr.	M	settled	JICA	Senior C/P
11	ADMI	Bu Duy Son	Head, CON	-	M			Senior C/P
12	ADMI	Duong Manh Duc	Deputy head, ADM	-	M			Senior C/P
13	AGR	Nguyen Van Dinh	Dean	Dr.	M			Senior C/P
14	AGR	Nguyen The Hung	Vice dean	Dr.	M	settled	JICA	Technical C/P
15	AGR	Tran Dinh Chien	Vice dean	Dr.	M	settled	JICA	Technical C/P
16	AGR	Phan Huu Ton	Former vice dean	Dr.	M	settled	JICA	Technical C/P
17	AGR	Dang Thi Dung		Dr.	F	settled	JICA	Technical C/P
18	AGR	Nguyen Van Hoan	Deputy department head	Dr.	M	settled	JICA	Technical C/P
19	AGR	Doan van Diem	Deputy department head	Dr.	M			Technical C/P
20	AGR	Ha Quang Hung	Former head, IRL	Dr.	M	settled	JICA	Technical C/P
21	AGR	Nguyen Van Vien		Dr.	M	settled	JICA	Technical C/P
22	AGR	Nguyen Kim Van		Dr.	M			Technical C/P
23	AGR	Tran Danh Thinh		Dr.	M			Technical C/P
24	AGR	Nguyen The Con		Dr.	M			Technical C/P
25	AGR	Nguyen Kim Thanh		Dr.	F			Technical C/P
26	AGR	Ho Huu An		Dr.	M			Technical C/P
27	AGR	Nguyen Thi Phuong Thao		MSc.	F	on-going	JPN Scholarship	Technical C/P
28	AGR	Nguyen Thi Bich Yen		MSc.	F	settled	JICA	Technical C/P
29	AGR	Pham Van Cuong		MSc.	M	on-going	JICA Long-term	Technical C/P
30	AGR	Tran Thi Minh Hang		MSc.	F	on-going	JPN Scholarship (for JICA C/P)	Technical C/P
31	AGR	Ho Thi Thu Giang		MSc.	M	settled	AIEJ Scholarship	Technical C/P
32	AGR	Pham Thi Minh Phuong		-	F	on-going	JPN Scholarship	Technical C/P
33	AGR	Bui Trong Thuy		-	M			Technical C/P
34	AGR	Le Xuan Thien		-	M			Technical C/P

The list of facilities and equipment provided by Hanoi Agricultural University

University HDQ

1. Space and facilities for Expert offices
2. Construction of Generator house
3. Publication expenses of HAU Journals (cost sharing with JICA)
4. Electric and Water fee

Faculty of Agronomy

1. Space and facilities/equipment for Central Laboratory
2. Space and facilities for Weather station
3. Space and facilities/equipment for Insect Specimen Room
4. Space and facilities/equipment for Student Laboratory
5. Furniture / Rockers, Stabilizers, Dehumidifier, Telephone
6. A part of fences for the experimental field
7. Reconstruction work of experimental field (cost sharing with JICA)

Faculty of Land & Water Resources Management

1. Space and facilities/equipment for Central Laboratory
2. Space and facilities/equipment for Student Laboratory

Faculty of Economics & Rural Development

1. Space and facilities for Computer room and Seminar room
2. Space and facilities for Library
3. Space and facilities for Student Computer Room

Plan of Operations for the Education and Research Capability Building Project of Hanoi Agriculture University

Annex 7

Project Purpose: Quality of research and education of the three faculties of Hanoi Agricultural University is improved

Activities	Target/Indicators	Implementation schedule												Responsible Person in the Project	Inputs						
		1998		1999		2000		2001		2002		2003									
		III	IV	I	II	III	IV	I	II	III	IV	I	II								
1-2 Promote the following fields of researches conducted by Faculty of Land and Water Resources Management																					
1-2-1 Soil and Environmental																					
a. Environmental conservation and prevention of pollution of soil and water in the Red River Delta	No. of field survey, No. of reports, No. of transferred techniques																	Nguyen Dinh Minh, Nguyen Huu Thanh, Trinh Quang Huy, Tran Van Chinh, Nguyen Van Tau & Nguyen Quang Hoc	Dr. Ootsubo, Dr. Kurosawa		
-Water pollution at and around Hanoi																					
-Soil contamination in agricultural fields																					
b. Physical, chemical and mineralogical properties of degraded soils and acid sulphate soils	No. of field survey, No. of reports																		Dr. Wada, Dr. Kurosawa		
1-2-2 Plant Nutrition																			Dr. Nagatomo, Dr. Ikeda		
a. Detection and improvement of limiting factors for crop production in problems soils	No. of field survey, No. of reports, No. of transferred techniques																		Le Thi Beeh Dao	Dr. Saeki	hydroponic culture, estimation of element content in plant
b. Rational use of chemical fertilizers aimed at increasing crop productivity and conserving environments	No. of field survey, No. of reports, No. of transferred techniques																		Nguyen Thi Minh		utilization of leguminous plant for decrease of chemical fertilizer

Plan of Operations for the Education and Research Capability Building Project of Hanoi Agriculture University

Annex 7

Project Purpose: Quality of research and education of the three faculties of Hanoi Agricultural University is improved

Activities	Target/Indicators	Implementation schedule							Responsible Person in the Project	Inputs
		1998	1999	2000	2001	2002	2003			
		I II III IV	I II III IV	I II III IV	I II III IV	I II III IV	I II III IV			
2-2 Improve teaching materials and syllabi of Faculty of Land and Water Resources Management in the fields related to the research topics								Dean & related C.P of Faculty of Land and Water Resources Management	Dr. Sacki and long-term exp.	
2-2-1 Monitoring and fact finding survey on teaching materials and curriculum			■	■	■	■				
2-2-2 Improve teaching materials	No. of teaching materials improved				■	■	■			
2-2-3 Develop experimental manuals	No. of experimental manuals developed				■	■	■			
2-2-4 Develop syllabi	No. of syllabi				■	■	■			
2-3 Improve teaching materials and syllabi of Faculty of Economics and Rural Development in the fields related to the research topics								Dean & related C.P of Faculty of Economics and Rural Development		
2-3-1 Monitoring and fact finding survey on teaching materials and curriculum			■	■	■					
2-3-2 Promote to make a model of syllabus for lectures by the teaching staff who have an experience of C.P training in Japan	A model of syllabus developed				■	■	■	Dr. Pham Van Dinh, Dr. Ngo Thi Thuan, Mr. Tran Huu Cuong, Mr. Pham Van Hung & others	Dr. Tsuji, Short-term exp.	
3-1 Establish operational management system of equipment/computers								All C.Ps	All the long-term experts	
3-1-1 Basic survey on the present			■	■	■					
3-1-2 Establishment of the design for equipment installation			■	■	■					
3-1-3 Establishment of management boards on equipment			■	■	■					
3-1-4 Establishment of equipment database system			■	■	■					
3-1-5 Effective utilization of equipment			■	■	■	■	■			
3-2 Establish maintenance system										
3-2-1 Improvement of maintenance			■	■	■	■	■			

No.	Name	Section	Study field	Scholarship source	Study site	Study period
1	Ms. Ho Thi Lam Tra	LWRM	Doctor course: Soil science	JPN Scholarship	Kyushu Univ.	1997.10.3-2000.9.24
2	Mr. Nguyen Mau Dung	ERD	Doctor course: Agricultural economics	JPN Scholarship	Kyushu Univ.	1998.10.10-2001.9.10
3	Ms. Nguyen Thi Phuong Thao	AGR	Doctor course: Horticulture	JPN Scholarship	Kyushu Univ.	1999.10.4-2002.9.30
4	Ms. Pham Thi Minh Phuong	AGR	Master course: Horticulture Doctor course: Horticulture	JPN Scholarship	Saga Univ.	2000.4.1-2002.3.31 2002.4.1-2005.3.31
5	Ms. Nguyen Thi Minh Hien	ERD	Doctor course: Agricultural economics	JPN Scholarship	Kyushu Univ.	2000.10.1-2004.3.31
6	Mr. Pham Van Cuong	AGR	Doctor course: Crop science	JICA Long-term training	Ryukyu Univ.	2000.11.1-2004.3.31
7	Ms. Tran Thi Minh Hang	AGR	Doctor course: Horticulture	JPN Scholarship	Yamaguchi Univ.	2001.4.1-2004.3.31
8	Mr. Nguyen Tat Thang	ERD	Doctor course: Agricultural economics	JICA Long-term training	Kagoshima Univ.	2001.9.18-2005.4.2
9	Ms. Nguyen Thi Minh	LWRM	Master course: Soil science	JICA Long-term training	Yamaguchi Univ.	2001.9.15-2003.10.4
10	Mr. Trinh Quang Huy	LWRM	Doctor course: Soil science	JPN Scholarship	Kyushu Univ.	2001.10.4-2004.9.30
11	Ms. Chu Thi Kim Loan	ERD	Doctor course: Agricultural economics	JPN Scholarship	Kyushu Univ.	2002.10.4-2005.9.30
12	Ms. Nguyen Thi Phuong Mai	AGR	Doctor course: Crop science	JPN Scholarship	Kyushu Univ.	2003.10-2006.9: tentative

REMARKS: JPN Scholarship=Scholarship program of the Government of Japan (MONBUSHO scholarship), AIEJ=Association of International Education of Japan

*ABBREVIATION: AGR: Faculty of Agronomy, LWRM: Faculty of Land & Water Resources Management, ERD: Faculty of Economics & Rural Development

No. of research papers/reports published in and out of Vietnam
as of March 2003

HAU-JICA ERCB Project

Year Faculty	1998	1999	2000	2001	2002	2003	Total
Agronomy	0	10	8	4	8	11	41
Land and Water Resources Management	2	2	5	8	3	1	21
Economics and Rural Development	1	2	4	20	6	6	39
Joint research reports				1		1(on editing)	1 (2)
Total (published)	3	14	17	33	17	18	102

No. of staff and students obtaining Ph.D and Master Degrees

HAU-JICA ERCB Project

Year Faculty		1998	1999	2000	2001	2002	Total
Agronomy	Ph.D	4	5	5	9	7	30
	MSc	18	20	12	22	40	112
Land and Water Resources Management	Ph.D	0	3	8	13	13	37
	MSc	12	14	16	28	51	121
Economics and Rural Development (staff)	Ph.D	7	8	10	13	16	54
	MSc	17	17	20	21	25	100
Economics and Rural Development (student)	Ph.D and MSc	105	119	114	120	-	

評価項目	調査項目			調査方法			
				質問票	インタビュー	視察	
効率性	投入量/内容は成果を達成するために適正であったか	人的	日本人長期専門家	分野/人数/タイミング/期間	○	J, CP, ME, (MR, MP)	-
			日本人短期専門家	分野/人数/タイミング/期間	○	J, CP, ME, (MR, MP)	-
			ベトナムC/P (教官:管理部門クラス、非管理部門クラス)	分野/人数/タイミング/期間	○	J, CP, ME, (MR, MP)	-
			C/P研修	分野/人数/タイミング/期間	○	J, CP, ME, (MR, MP)	-
			供与資機材	分野	○	J, CP, ME	○
		(資機材、建物等施設)	供与量				
		実験圃場	タイミング				
		中央実験室	利用度	利用に当たっての困難性等			
		プロジェクトオフィス	アクセス	利用したい時に利用可能か			
		セミナー室	維持管理体制	管理人の有無、			
		他		維持管理規則等の有無(必要性)			
		運営経費	経費(総額)	○	-	-	
			タイミング	○	J, CP, ME	-	
			予算分配	-	J, CP, ME	-	
				必要分野に対して経費が当てられたか	-	J, CP, ME	-
	プロジェクト参加者の定着度/任用度	○	J, CP	-			
	HAU内からのサポート	○	J, CP	-			
	JCCからのサポート	○	J, CP, ME, MR, MP	-			
	他ドナーとの重複の有無	○	J, CP, ME, MR, MP	-			
有効性(目標達成度)	⇒⇒⇒実績表の確認			○	J, CP	○	
	外部条件内容に変化はあったか	(1.HAUの研究成果が現場に反映される:スーパージョブ)	○	J, CP	-		
	→その変化は目標達成に影響を	(2.育成された人材が必要な地位に配置される:上位目標)	○	J, CP	-		
	どのように与えたか	(3.プロジェクトの結果がHAU他学部に波及する:プロジェクト目標)	○	J, CP	-		
妥当性	上位目標はベトナム側のニーズに(政府・HAU)適合しているか			○	J, CP, ME, MR, MP	-	
	プロジェクト目標はベトナム側のニーズに(政府・HAU)適合しているか			○	J, CP, ME, MR, MP	-	
インパクト	予期しなかったインパクトの有無	政策面		○	J, CP, ME, MR, MP	-	
		技術面					
		環境面					
		社会経済面					
		組織面					
		財政面					
自立発展性	自立発展の見通し	政策面	政府サポートの継続性	○	J, CP, ME, MR, MP	-	
		技術面	研究				
			教育				
		組織面	資機材維持管理				
			職場環境(教官の定着を促進できる処遇)				
		財政面	HAU内外への技術移転実施の体制				
		環境面	安定的な予算の獲得				
		社会経済面					

注: J:日本人専門家; CP:ベトナム側カウンターパート; ME:教育訓練省; MR:農業農村開発省; MP:計画投資省
備考:インタビューの補足対象として卒業生、現役学生への聞き取りを検討

PDMプロジェクト要約比較表

プロジェクト名：ヴェトナム ハノイ農業大学強化計画 (The Education and Research Capability Building Project of Hanoi Agricultural University)
 プロジェクト期間：1998年9月1日～2003年8月31日（5年間）
 ターゲット：ハノイ農業大学3学部（農学部、土地・資源管理学部、経済・農村開発学部）の教官

プロジェクトの要約	実施協議 1998年6月24日	運営指導 1999年8月	中間評価 2001年6月	終了時改訂案 2002年12月	終了時評価用 (PDM) 2003年3月	備考
スーパーゴール		High quality manpower of modernization and industrialization of agriculture is trained	High quality manpower for modernization and industrialization of agriculture is trained		High quality manpower of modernization and industrialization of agriculture is trained	国家開発計画との整合性を高めるために追加されたものと考えられる。特に評価の対象とはならないが、プロジェクトの位置づけを示すために残す。
上位目標	(1) Quality of Hanoi Agricultural University (HAU) graduates is improved (2) Quality of HAU academic staff is improved	Quality of training and researching of entire HAU is improved	(1) Quality of HAU graduates is improved (2) Quality of HAU academic staff is improved	(1) Quality of HAU graduates is improved (2) Quality of HAU academic staff is improved	Quality of research and education of entire HAU is improved	実施協議、中間評価では、卒業生や大学教員といった人材の能力の向上を目的にしているが、運営指導ではハノイ農大全般の教育と研究能力の向上を目的にしている。その理由として、OPである越前教官の個人評価につながると思惑された背景がある。越前の意向を配慮し、運営指導時の上位目標を終了時に用いることとし、その評価指標として、協力対象である3学部以外の大学全体に対するインパクト及び妥当性を評価する。その指標として学生や教員に関するインパクトを検討する。
プロジェクト目標	Quality of research activities, teaching curriculum and materials is improved at three faculties (Faculty of Agronomy, Faculty of Land and Water Resources Management, Faculty of Economics and Rural Development) of HAU in Viet Nam	Quality of training and researching of three faculties of HAU is improved	Quality of research and education is improved at three faculties (Faculty of Agronomy, Faculty of Land and Water Resources Management, Faculty of Economics and Rural Development) of HAU	Quality of research and education is improved at three faculties (Faculty of Agronomy, Faculty of Land and Water Resources Management, Faculty of Economics and Rural Development) of HAU	Quality of research and education is improved at three faculties (Faculty of Agronomy, Faculty of Land and Water Resources Management, Faculty of Economics and Rural Development) of HAU	プロジェクトの協力の範囲をハノイ農大の3学部に限ることは共通している。また質の向上をはかることについても共通している。差異は向上をはかる内容であるが、上位目標と同様に、教育・研究の質の向上を目的とすることが妥当と考える。その評価指標として、有効性の観点から評価グリッドを作成する過程で、関係者のコメントを踏まえながら確定する。
成果	(1) Research capability of academic staff is improved (2) Development capability of academic staff is improved for curriculum and teaching materials (3) Management system of Central Laboratory is established	(1) Quality of research is improved (2) Quality of education is improved (3) Equipment for training and researching is enhanced	(1) Quality of research is improved (1-1) Workshop/seminars/training-seminars mainly for researchers are (1-2) Results of researches are (1-3) Experimental practices and fieldworks are implemented and (2) Quality of education is improved (2-1) Teaching materials are improved and utilized (2-2) Experimental manuals are developed and utilized (2-3) Syllabi are developed and (3) Facilities and equipment for training and research are properly set up, operated, and maintained.	1. Quality of research is improved 2. Quality of education is improved 3. Facilities and equipment for training and research are properly set up, operated, and maintained.	(1) Quality of research is improved (2) Quality of education is improved (3) Facilities and equipment are properly set up, operated, and maintained to improve quality of research and education.	上記と同様に、成果は研究の質の向上とし、その判断材料として具体的な内容を指標にするのが望ましい。 上記と同様に、成果は教育の質の向上とし、その判断材料として具体的な内容を指標にするのが望ましい。 当初は中央実験室に限定した協力を想定していたが、その他関連施設の整備の必要性がプロジェクト開始後に判明した。機材供与は、単なる施設の整備による研究・教育の向上にとどまらず、機材管理能力の向上をも当初から目指しているものであり、これを表す表現になおした。
活動	(1) To give technical advice for survey, planning and implementation of practical research and experimental activities conducted by HAU academic staff	(1-1) Advise for each field of research conducted by Fac. of Agronomy (1-2) Advise for each field of research conducted by Fac. of LWRM	(1-1) Promote the following fields of researches conducted by Fac. Of Agronomy (1-1-1) Plant Breeding (1-1-2) Plant Protection (1-1-3) Biotechnology (1-1-4) Meteorology (1-2) Promote the following fields of researches conducted by Fac. LWRM	(1-1) Promote the following fields of researches conducted by Fac. Of Agronomy (1-1-1) Plant Breeding (1-1-2) Plant Protection (1-1-3) Biotechnology (1-1-4) Meteorology (1-2) Promote the following fields of researches conducted by Fac. LWRM	(1-1) Promote the following fields of researches conducted by Fac. Of Agronomy (1-1-1) Plant Breeding (1-1-2) Plant Protection (1-1-3) Biotechnology (1-1-4) Meteorology (1-2) Promote the following fields of researches conducted by	・ハノイ農業大学はJICAによるプロジェクトの実施方法について十分に理解していなかった。 ・欧米の大学との共同研究と同様に、JICAが実施する事業と理解していた。 ・そのことが活動の内容について、実施協議及び運営指導時に、ヴェトナム側の関与がないような書きぶりとなった。 ・中間評価時に是正をはかり、運営指導時に合意されたPDに則した書きぶりに変更され、その後のプロジェクト活動は、これに従ったものとなった。

POMプロジェクト要約比較表

		(1-2-1) Soil and Environmental Conservation (1-2-2) Plant Nutrition (1-2-3) Water Management	(1-2-1) Soil and Environmental Conservation (1-2-2) Plant Nutrition (1-2-3) Water Management	(1-2-1) Soil and Environmental Conservation (1-2-2) Plant Nutrition (1-2-3) Water Management	・従って終了時評価にあたっては、中間評価時の活動項目を用いて評価を行うのが妥当である。
	(1-3) Advise for each field of research conducted by Fac. of ERD	(1-3) Promote the following fields of researches conducted by Fac. of ERD	(1-3) Promote the following fields of researches conducted by Fac. of ERD	(1-3) Promote the following fields of researches conducted by Fac. of ERD	
		(1-3-1) Agricultural Marketing (1-3-2) Rural Development (1-3-3) Farm Management	(1-3-1) Agricultural Marketing (1-3-2) Rural Development (1-3-3) Farm Management	(1-3-1) Agricultural (1-3-2) Rural Development (1-3-3) Farm Management	
	(1-4) Organize workshops/seminars/training-seminars related to each research with HAU (1-5) Edit and issue the academic activities				
(2-1) To give technical guidance for preparing teaching materials	(2-1) Guide and advise for teaching materials of each faculty	(2-1) Improve teaching materials and syllabi of Fac. Of Agronomy in the fields related to the research topics set in Plan of Operation (PO)	(2-1) Improve teaching materials and syllabi of Fac. Of Agronomy in the fields related to the research topics set in Plan of Operation (PO)	(2-1) Improve teaching materials and syllabi of Fac. Of Agronomy in the fields related to the research topics set in	
(2-2) To give technical guidance and advice for arranging curriculum, especially related to experimental activities	(2-2) Guide technically and advise for curriculum especially related to experimental activities	(2-2) Improve teaching materials and syllabi of Fac. Of LWRM in the fields related to the research topics set in PO (2-3) Improve teaching materials and make a model of syllabus of Fac. of ERD	(2-2) Improve teaching materials and syllabi of Fac. Of LWRM in the fields related to the research topics set in PO (2-3) Improve teaching materials and make a model of syllabus of Fac. of ERD	(2-2) Improve teaching materials and syllabi of Fac. Of LWRM in the fields related to the (2-3) Improve teaching materials and make a model of syllabus of Fac. of ERD	
(3-1) To give technical guidance and advice for operation and managed system of Central Laboratory	(3-1) Guide technically and advise for operation/managed system of equipment/software	(3-1) Establish operational/management system of equipment/computers	(3-1) Establish operational/management system of equipment/computers	(3-1) Establish operational/management system of equipment/computers	
(3-2) To give guidance for maintenance of equipment	(3-2) Guide technically and advise for maintenance system	(3-2) Establish maintenance system	(3-2) Establish maintenance system	(3-2) Establish maintenance system	

Self Evaluation of HAU-JICA ERCB Project

BY HAU JICA ERCB Project

Term of the Project : September 1998 ~ August 2003

HAU-JICA ERCB Project Supported by MOET and JICA

Hanoi Agricultural University

Target Faculties.

Faculty of Agronomy

Faculty of Land and Water Resources Management

Faculty of Economics and Rural Development

JICA-HQ and JICA-Vietnam Office

Supported by

Kyushu University, Saga University,

Kagoshima University, Miyazaki University

Ryukyu University, Yamaguchi University

March 03 ~ March 15, 2003

Data for HAU-JICA ERCB Project Evaluation 1 (Draft)

No. 1

Output Headings of PDM Subitems of PO Verifiable indicator	Name of Experts (time)	Term of Working	Name of C/P	Contents of transferred techniques	Achiev- ement (%)	Grade (Self evaluation)				
						5	4	3	2	1
Activities	Dr. F. Kubota ('99-03-30- '99-04-10)	Plant Physiology Discussion and Planning of Proj- ect activities for 5 years in Agronomy.	Dr. Ha Quang Hung (Head of Intern. Rela. Dept)	1: Interview on training candidates and study abroad candidates in Japan 2: Consult between teachers of Faculty of Agronomy and JICA expert on the project activities mainly in plant breeding and supporting to central Lab. 1: Principal of PGR and its importance.			0			
1-1 Promote the following fields of researches conducted by Faculty of Agronomy	11 days	1999-I 2000-II ~ 2003-II		2: Evaluation of lodging resistance 3: PCR for TGMS gene. 4: Linkage mapping methodo- logy preliminary inocul- tion test of BLB.	75-80		0			
1-1-1. Plant Breeding							0			
1-1-1:a, Rice genetics and breeding for pest resistance and high yield potential	Dr. A. Yoshimura (2002-07-30 ~ 08-23) 25 days (2003-02-15 ~ 02-20) (JICA&P&P)	Plant Breeding (high yield potential rice)	Dr. Nguyen Van Hoan Dr. Phan Huu Ton				0			
1: No. of Cross combinations. (150)	Dr. A. Yoshimura 2003-07-30 ~ 2003-08-23 25 days	Plant Breeding (high yield potential rice) and Internationa- -l Seminar	Dr. Nguyen Van Hoan				0			
2: No. of promising breeding lines (5 lines)	Dr. A. Yoshimura 2003-02-15 ~ 02-19 (Univ. found)			1: Evaluation of resistance to brown planthopper on rice varieties. a: Sucking resistance. b: Ovicidal response.			0			
3: Transfer of modern techniques for selection (5 techniques)	Dr. H. Yasui (2002-04-02 ~ 04-30) 28 days (JICA&P&P)	Plant Breeding (Brown planthopper resistance)	Dr. Nguyen Van Hoan Ms. Vu Thu Hien Ms. Tran thi Lien				0			
	Dr. H. Yasui 2003 Dr. M. Sugiura (Long Term Expert) (2001-02-20 ~ 2003-08-31) 921 days	Feeding on brown planthopper for experimental materials	Ms. Tran thi Lien	1: Feeding and multiplicat- -ion of brown planthopper through the year.			0			

Output Headings of PDM Subitems of PO Verifiable indicator	Name of Experts (time)	Term of Working	Name of C/P	Contents of transferred techniques	Achiev- ement (%)	Grade (Self evaluation)				
						5	4	3	2	1
	Dr. S. Taura (2002-09-16 ~ 10-19) 34 days	Rice breeding of resistant to bacterial leaf blight (BLB) disease	Mr. Bui Trong Thuy Ms. Dao Thi Tham Mr. Nguyen Trong Sam Mr. Tong Van Hai Dr. Nguyen Van Hoan	1: Selection of BLB resis- tant rice varieties by inoculation 1: Leaf cutting inoculation tests of BLB to 10 breed- ing line of homogeneous genes in IR24. 2: Measurement method of leaf spot size. 3. Identification of pathogenicity of BLB by inoculation data. 4. Utility of resistant information from inoculation tests. 5. Distribution of BLB pathogen in North Vietnam.			0			
1-1-1:b, Evaluation and improvement of genetic resources of several crops.	Dr. Hidefumi SEKO (Long Term expert) (2001-04-25 ~ 2003-08-31) 857 days	2000-II 2001-II ~ 2003-II Plant genetic resources & also response to the faculty and experimental fie- lds during his stay.	Dr. Phan Huu Ton Dr. Tran Danh Thin Mr. Trong Van Hai (Ms. Tran thi Lien)	1: Respose to all projet activities for the Faculty of Agronomy during his stay in HAU. 2: Collection techniques for PGR. 3: Conservation techniques for PGR. 4: Evaluation techniques for agronomic characters.	75		0			
4: No. of surveys (5 times) 5: No. of collected materials(150) 6: No. of conserved materials(250) 7: Transfer of techniques for characterization	Dr. Hidefumi SEKO (Short Term) (2000-08-22 ~ 09-09) 19days	Crop production	Dr. Phan Huu Ton	1: Seminar on Plant gene Bank System in Japan. 2: Guide to measuring metho d for lodind resistance in rice plant.			0			

Output Headings of PDM Subitems of PO Verifiable indicator	Name of Experts (time)	Term of Working	Name of C/P	Contents of transferred techniques	Achiev- ement (%)	Grade (Self evaluation)				
						5	4	3	2	1
1-1-2: Plant Protection a : Establishment of reference collection for identifying pest insect and natural enemies	Dr. Msami TAKAGI (1999-07-08 ~ 08-14) 38 days	1999-II 2001-I~ 2003-II Biological control	Dr. Ha Quang Hung Dr. Dang Thi Dung	1:Workshop on establishmen t of IPM system in Vietnam 2:Survey on research activ ities of main Institutes.	80		0			
8: No. of surveys (3 times)	Dr. Kazuo OGATA (P&P 4 times) (Short Term)	Entomology	Dr. Ha Quang Hung	1:Collection of pest inse- cts and natural enemies. 2:Conservation of standard insects specimens.						
9: No. of collected materials (1,500)	Dr. Takashi . MATSUMOTO (Short Term) (99-03-30- 06- 29) 93 days (JICA&JSP)	Plant Protection & Planning and setting up of Central Lab. of Faculty of Agro. 1999-I	Dr. Vu Trieu Man	1:Layout on Central Lab. of Faculty of Agronomy. 2:Survey on plant diseases in Red River Delta. 3:Diagnosis for plant pathogen by molecular biology.						
10: No. of insect specimen (50)	Dr. M. Oniki (Long Term) (2000-01-11 ~ 2001-05-10) 485 days	1999-IV ~ 2003-II Setup of Central Lab. & Experiment -al field planni -ng. Response to Dept. of Plant pathology.	Dr. Nguyen Kim Van Dr. Nguyen Van Vien Mr. Bui Trong Thuy	1:Setting of equipments. 2:Layout of Experimental fields. 3:Isolation of fungal dis- eases pathogen.	80		0	0		
b : Diseases injury surveys and development of the integreated pest management of rice in Red River Delta.	Dr. S. Taura (Short Term) (2001-09-18 ~ 2000-10-16) 28days	Plant pathology (Racial ecology of bacterial leaf blight)	Mr. Bui Trong Thuy	1:Collection of BLB sample			0			
11: No. of surveys	Dr. N. Furuya (Short Term) ('02-08-15~20 02-09-25) 41 d	Plant pathology (Clasification of Bacterial leaf blight=PCR)	Ms. Dao Thi Tham	2:Isolation of BLB agent						
12: No. of collected materials.	Dr. N. Furuya (Short Term) ('02-02-15 ~ 02-20, P&P)		Mr. Nguyen Tong Thuy Dr. Phan Huu Ton	3:PCR for identifying BLB.			0			
13: Transfer of techniques for for genetic analysis of pathogen				4:Gene to gene reaction be tween pest and host inBLB. 5:Seminar on plant bacteri -ology and its genetics.						

Output Headings of PDM Subitems of PO Verifiable indicator	Name of Experts (time)	Term of working	Name of C/P	Contents of transferred techniques	Achiev- ement (%)	Grade (Self evaluation)				
						5	4	3	2	1
b: Physical, Chemical and mineralo- gical properties of degraded soils and acid sulphate soils. 4. No. of field surveys. 5. No. of reports (6. No. of Transferred techniques)	Dr. K. Egashira (Short Term Expert) (2002-09-29 ~ 10-26) 28 days	1999-III~ 1999-IV 2000-III~ 2000-IV	Dr. Do Nguyen Hai Dr. Nguyen Huu Thanh Dr. Cao Viet Ha Dr. Nguyen Tat Canh	1. Soil profile observation technique 2. Use of zeolite as a soil conditioner. 3. Planning of sampling of water from tube-well 4. Evaluation of NO ₃ ⁻ quality of water. 5. Presentation technique of research results. 6. Activities of the project were summarized.	85		0			
		Soil physical & chemical propert ies, Summing up of project activ -ities in FLWRM.								
1-2-2 : Plant Nurition a: Detection and improvement of limiting factors for Crop production in problems soils 7: No. of field surveys. 8: No. of reports. 9: No. of transferred techniques. b: Rational use of chemical fertil -izers aimed at increasing crop productivity and conserving environments. 10: No. of field surveys. 11: No. of reports. 12: No. of transferred techniquaes.	Dr. Toride (Short Term Expert) (1999-11-30 ~ 12-14) 15days	Soil Physics	Dr. Pham Ngoc Thuy Mr. Canh Mr. Dung	1) Guidance of basic research on soil physics, especially, water and saline in soil.	70		0			
		2000-I~ 2001-IV 2002-III								
	Dr. Y. Saeki (Long Term Exoert) (2001-02-20 ~ 02-19) 365 days	Plant Nutrition & Response to the Faculty during his stay.	Dr. Nguyen Do Hai Dr. Nguyen Huu Thanh Mr. Trinh Quang Huy Ms. Nguyen Thi Minh Ms. Le Thi Bich Dao	1: Detection and improve -ment of limiting factors for crop production in problems soils. 2: Rational use of chemical fertilizers aimed at increasing crop producti -vity and conserving environments. 3: Written on Text book of Plant fertilizer & plant nutrition. 4: Guide and advice to provided machines for research. 5: Written on experimental Manual of soil Science.	70		0			

Output Headings of PDM Subitems of PO Verifiable indicator	Name of Experts (time)	Term of working	Name of C/P	Contents of transferred techniques	Achiev- ement (%)	Grade (Self evaluation)				
						5	4	3	2	1
(13: No. of guidance on apparatus. 14: No. of guidance on techniques 15: No. of isolates of <u>Bradyrhizobia</u> 16: No. of isolates from soy bean 17: No. of manuals of experiments)	Dr. Nagatomo (Short Term Expert) (2001-09-11 ~ 10-04) 24days	Plant nutrition (Soil nutrition)	Dr. Do Nguyen Hai Mr. Nguyen Vong	6: Workshop held & edited proceeding. 6: Advice to syllabi. 1) Measurement technique of phosphorus by ascorbate reduction method. 2) Measurement technique of microheavy (Zn, Cu) by atomic absorption method. 3) Measurement technique of total nitrogen in soil.			0			
	Dr. M. Ikeda (Short Term Expert) (2001-11-29 ~ 12-22) 24days	Plant nutrition (chemical fertilizer)	Dr. Nguyen Huu Thanh Dr. Do Nguyen Hai Ms. Le Thi Bich Dao	1) Colorimetric determina- tion of ammonium nitrogen 2) Colorimetric determinat- ion nitrate nitrogen. 3) To inform recent knowled- ges on carbon metabolism linked to nitrogen assimi- lation in higher plants. 4) Advice to improve syllabus in the subjects of plant nutrition and others.			0			
	Dr. Yamakawa (Short Term Expert) (2002-11-08 ~ 12-21) 43 days	Plant nutrition (Analysis of organic compounds in plant and soil)	Ms. Le Thi Bich Dao	1) Set up gas chromato. 2) Optimization of the file and data file. 3) Preparation of the stand- ard soln. 4) Extraction of residual pesticides with "Organic solvents" 5) Extraction of residual pesticides with "Solid phase micro-extraction (SPME) 6) Analysis of the water and plant sample contain- ing the residual pesticide			0			

Output Headings of PDM Subitems of PO Verifiable indicator	Name of Experts (time)	Term of working	Name of C/P	Contents of transferred techniques	Achiev- ement (%)	Grade (Self evaluation)				
						5	4	3	2	1
<p>1-2-3 : Water Management</p> <p>a. Water management for effective crop production in the Red River Delta and prevention of soil erosion in the upstream region of the Red River.</p> <p>18. No. of field Surveys. 19. No. of Reports (2) 20. No. of transferred techniques.</p>	<p>Dr.Y. KUROSAWA (Long Term Expert) 1999-03-02~ 2001-03-01 730 days</p> <p>Dr.K.Egashira 2 C/P training at Kyushu University</p>	<p>Water Manegement (Soil erosion and soil conservation)</p>		<p>-es by GC 7) Qualitative and Quantitative analysis of pesticides included in the water and plant sample 8) Assessment of the results of agricultural chemicals analyzed with GC 9) Preparation of manuals for GC and extraction of pesticides from water and plant materials.</p> <p>1: Workshop held Soil conservation issues in sustainable Agricultur- al development (1999-12) 2) attend to International congress (2000-01, Thailand) (2001-08, Japan) 3) Counter parts training at Japan 4) Published research papers.</p>	75-90	0	0			

Output Headings of PDM Subitems of PO Verifiable indicator	Name of Experts (time)	Term of working	Name of C/P	Contents of transferred techniques	Achievement (%)	Grade (Self evaluation)				
						5	4	3	2	1
1-3. Promote the following fields of researches by Faculty of Economics and Rural Development. 1-3-1 : Agricultural Marketing a. Agricultural products marketing system in the Red River Delta.	Dr. Satoshi KAI (Short Term Expert) (1999-06-17 ~ 07-13) 26 days	Marketing system	Dr. Do Van Vien Dr. Nguyen Nguyen Cu	1: Mutual understanding on circulation of Agricultural products between Vietnam and Japan. 2: Seminar on methodology of circulation of Agricultural products. 3: Advice for curriculum on agricultural economics.	90	0	0			
-Vegetables 1. No. of surveys. 2. No. of reports.	Dr. Yoshiji SHIRATAKE (Short Term Expert) (2000-06-15 ~ 07-07) 23 days		Dr. Pham Van Dinh	1: Observed on the state of vegetables & fruits markets in Hanoi. 2: Observed on Processing on pickles, Tin, bean curd maker, Pho maker & Trad- itional Chinese medicine maker. 3: Seminar on meaning of the food industry		0				
-Pork 1. No. of surveys. 2. No. of reports.	Dr. K. TSuji Long term expert 1999-01-08 ~ 2002-01-07 1,103 days	1999-I ~ 1999-IV	Mr. Pham Van Hung & others							
-Agricultural products processing 1. No. of surveys. 2. No. of reports.	Dr. K. TSuji Short Term Expert. (2002-12-04 ~ 2002-12-29) 25 days (Self evaluation)	2000-I ~ 2000-IV	Dr. Pham Van Dinh Dr. To Dung Tien Mr. Tran Huu Cuong Dr. Nguyen Mau Dung Mr. Pham Van Hung Mr. To The Nguyen							
		Agricultural products processing.	Mr. Nguyen Phuc Tho & others							
		2002-I ~ 2002-III								

Output Headings of PDM Subitems of PO Verifiable indicators	Name of Experts (time)	Term of working	Name of C/P	Contents of transferred techniques	Achievement (%)	Grade (Self evaluation)				
						5	4	3	2	1
1-3-2 : Rural Development										
a. Rural structure and economy.										
1. No. of surveys.										
2. No. of reports.										
-Traditional rural handicraft industry in the Red River Delta.	Dr. Hiroshi YOKOKAWA (Short Term Expert) (2000-09-16 ~ 10-08) 22 days	Agricultural environmental policy.	Dr. Pham Van Dinh Thuy Mr. Tran Huu Cuong	1:workshop and oral 2:Lecture on Environmental Economy and Environmental Economic policy at the Faculty. 3:Individual lecture to Dr. Thuy. 4:survey in country areas.	75		0			
1. No. of surveys.										
2. No. of reports.										
-Tea economy in the Thai Nguyen.	Dr. K. Cho / Dr. K. Tsuji	1999-III ~ 2000-I	Dr. Pham Van Dinh & others				0			
1. No. of surveys.										
2. No. of reports.										
-Tea economy in the Thai Nguyen.	Dr. K. Tsuji	2000-I ~ 2000-IV	Dr. Tran Van Duc & others				0			
1. No. of surveys.										
2. No. of reports.										
-Agricultural cooperatives management.	Dr. K. Tsuji	2000-I ~ 2000-IV	Dr. Pham Thi My Dung & others				0			
1. No. of surveys.										
2. No. of reports.										
	Dr. Takeshi MURATA	Agricultural policy	Dr. Pham Van Dinh	1:Workshop and Oral (2 themes) 2:Survey on coffee, rice &						

Output Headings of PDM Subitems of PO Verifiable indicator	Name of Experts (time)	Term of working	Name of C/P	Contents of transferred techniques	Achie- vement (%)	Grade (Self evaluation)					
						5	4	3	2	1	
-Development of farmer's agricultural finance system in the Red River Delta. 1. No. of surveys. 2. No. of reports. 1-3-3 : Farm Management a. Agricultural and rural planning 1. No. of surveys. 2. No. of reports. -Pork production in the Red River Delta. 1. No. of surveys. 2. No. of reports.	(Short Term Expert) (1999-07-31 ~ 08-27) 28 days	(Agricultural cooperatives)	Dr. Pham Van Dinh Dr. Ngo Thi Thuan Others (11 persons)	traditional industries in North Vietnam. 3: Academic meeting in Dept. of Rural Development & Agricultural Economics. 4: Guide to curriculum and its improvement. 1: Carry on training course of Linear Programming and related mathematical programming methods. 2: Survey of present situation of rural economy 3: Analysis on survey data by Linear Programming method.							
	Dr. Masatada KAWAGUCHI (Short Term Expert) (2001-09-15 ~ 2001-10-06) 21 days	Agricultural structure/rural development.									
	Dr. Koichi USAMI (Short Term Expert) (2002-10-16 ~ 11-14) 29 days	Rural finance and investment planning. 2002-I ~ 2002-IV		0							
	Dr. M. Tsuji (Short Term Expert) (1999-09-28 ~ 10-17) 29 days	Farm management (Land use planning)	Dr. To Dung Tien Dr. Do Van Vien Dr. Pham Van Dinh	1: Workshop and oral on Agricultural Management and Rural planning. 2: Lecture on Agricultural Management and Rural Planning 3: Individual guidance on Land Use Planning. 4: Survey of the state of agricultural economics in villages near Hanoi.	85						0
	Dr. K. Tsuji (Long term expert)	2000-I ~ 2000-IV	Dr. Do Van Vien & others								0

Output Headings of PDM Subitems of PO Verifiable indicator	Name of Experts (time)	Term of working	Name of C/P	Contents of transferred techniques	Achievement (%)	Grade (Self evaluation)				
						5	4	3	2	1
-Tea production in Thai Nguyen. 1. No. of surveys. 2. No. of reports.	Dr. K. Tsuji	2001-I~ 2001-IV	Dr. Tran Van Duc & others							
-Intensification and diversification of rice farming in the Red River Delta. 1. No. of survey. 2. No. of reports.	Dr. K. Tsuji	2001-I~ 2001-IV	Mr. Tran Huu Cong & others		0					
b. Sustainable farming system -Sustainable farming system in the degraded soil area in Thai Nguyen. 1. No. of survey. 2. No. of reports.	Dr. K. Cho (Long Term Expert) 1998-11-10~20 01-03-09 850 days	Team Leader 1999-I ~ 1999-IV	Mr. Nguyen Trong Dac. & others	(Tech. Report No. 1)		0				
c. Farm household economy in the Red River Delta. - Comparison of living standards of the households between the urban and rural area: Income generation and expenditure 1. No. of survey. 2. No. of reports.	Dr. K. Tsuji	2001-II~ 2001-IV	Mr. Tran Dinh Thao & others	(Tech. Report No. 7 in press)		0				
	Dr. Izumi IWAMOTO (Short Term Expert) (2000-06-22 ~ 07-20) 28 days	Farm household economy and joint family.	Tran Huu Cuong	1:Survey on food industries in Hanoi and its environs. 2:Seminar on relationship between economic higher growth and Agricultural economics in Japan and also machinaization group						

Output Headings of PDM Subitems of PO Verifiable indicator	Name of Experts (time)	Term of working	Name of C/P	Contents of transferred techniques	Achie- vement (%)	Grade (Self evaluation)				
						5	4	3	2	1
				land using and group farming in Japan. 3: Methodology of farming economics in rural area.						

Output Headings of PDM Subitems of PO Verifiable indicator	Name of Experts (time)	Term of working	Name of C/P	Contents of transferred techniques	Achievement (%)	Grade (Self evaluation)				
						5	4	3	2	1
2-1. Improve teaching materials and syllabi of Faculty of Agronomy in the fields related to research topics.	Dr.Seko Short term experts P & P members	2001-2003	Dean & related C/P of Faculty of Agronomy	Contents of all text books were translating to English from Vietnamese . (11) For example, 1: Genetics (Dr.Minh) 2 Plant breeding (Dr.Hien) 3: Plant Biotechnology 4: Diagnosis and Forecast of Agricultural crop plant 5: Plant Bacterial and virus disease 6:Plant protection etc. Experimental Manuals 1:Insect collection method 2:Isolation method for plant pathogenic bacteria. 3:Evaluation method of BLB resistance. 4. Evaluation method of amylose content in rice. (Planning above in 2003) 1: Plant breeding 2: Entomology 3: Plant pathology 4: Biotechnology 5: Crop Science etc.	50			0		
2-1-1: Monitoring and fact finding survey on teaching materials and syllabi.	Dr.M.Oniki & Short term experts	2000-I ~ 2001-III	Dean & related C/P of Faculty of Agronomy							
No. of monitoring and finding surveys	Dr.H.SEKO & Dr.K.OGATA (P&P)	2002-2003								
2-1-2: Improve teaching materials (No. of teaching materials improved)	Dr.K.Ogata Dr.H.Seko	2001-2003							0	
2-1-3: Develop experimental manuals No. of experimental manuals developed	Dr.H.Seko Dr.K.Ogata	2001-III~ 2003-II							0	
2-1-4 : Develop syllabi. No. of syllabi developed	Dr.H.Seko & Short term experts	2001-III~ 2003-II	Dean & related C/P of Faculty of Agronomy			70 70 60 70		0 0 0 0		0
2-2. Improve teaching materials and syllabi of Faculty of Land and Water Resources Management in the fields related to the research topics.	Dr.M.Kurosawa Dr.Y.Saeki & Short term experts	1999-II ~ 2003-II	Dean & related C/P			90 95 95 95 85	0 0 0 0 0			
2-2-1. Monitoring and fact finding survey on teaching materials and curriculum. No. of monitoring and fact finding surveys	Dr.Y.Kurosawa & Short term experts	1999-II ~ 2001-III								

Output Headings of PDM Subitems of PO Verifiable indicator	Name of Experts (time)	Term of working	Name of C/P	Contents of transferred techniques	Achievement (%)	Grade (Self evaluation)				
						5	4	3	2	1
2-2-2. Improve teaching materials (No. of teaching materials improved)	Dr. Y. Kurosawa Dr. Y. Saeki Dr. K. Egashira	2001-II~ 2003-II	Dean & related C/P of Faculty of Land and Water Resources Management	Basic Protocols for Soil Chemistry and Plant Nutrition study.	90	0				
2-2-3. Develop experimental manuals No. of experimental manuals developed	Dr. Y. Saeki Dr. Nagatomo Dr. M. Ikeda	2001-II~ 2003-II		1: The Operating Manual of the Atomic Absorption Spectrophotometer. 2: The operating Manual of the Flame Emission Spectrophotometer.	90	0				
2-2-4. Develop syllabi No. of syllabi developed	Dr. Y. Saeki & Short term experts	2001-III ~ 2003-II		3: The Operating Manual of the Spectrophotometer 4: The Operating Manual of the Ion Chromatograph.		0				
2-3 : Improve teaching materials and syllabi of Faculty of Economic and Rural Development in the fields related to the research topics.	Dr. K. Tsuji & Short term experts		Dean & related C/P. of Faculty of Economics and Rural Development	1: A distribution system of Agricultural products. 2: Agricultural Policy. 3: Agricultural Management. 4: Policy of Agricultural Environment.		0				
2-3-1. Monitoring and fact finding survey on teaching materials and curriculum. No. of monitoring and fact finding survey	Dr. K. Tsuji	1999-II~ 2000-III		5: Agricultural Cooperative Union. 6: Agricultural Planning by computer. 7: Agricultural Finance. 8: Monitoring of Syllabi.		0				
2-3-2. Promote to make a model of syllabi for lectures by the teaching staff who have an experience of C/P training in Japan No. of model syllabi developed	Dr. K. Tsuji Short term experts	2001-II ~ 2002-IV	Dr. Pham Van Dinh Dr. Ngo Thi Thanh Mr. Tran Huu Cupng Mr. Pham Van Hung and others.	Experts were pointed out only the point at issues on syllabi.	70			0		

Output Headings of PDM Subitems of PO Verifiable indicator	Responsible person in the project	Term of working	Name of C/P	Conditions at the end of the project	Achievement (%)	Grade (Self evaluation)				
						5	4	3	2	1
3-1 : Establish operational management system of equipment and computers.										
3-1-1. Basic survey at starting time on equipments of related 3 facilities.	All long term experts	1998-III ~ 2000	All related persons of each related 3 faculties.	No data showed in related 3 faculties at the starting time. (Can't evaluation)	-					
No. of equipments and computers at starting time of the project										
3-1-2. Establishment of the design for equipment installation	All long term Experts.	1998-III~ 2000-III	Related Deans/ related C/Ps.	Agronomy FLWRM FERD	70 80 85		0 0 0			
Faculty of Agronomy										
1) Student Lab.	Dr. M. Oniki	1999-2001	Dean & related C/Ps	Finished (Well running)	90	0				
2) Central Experiment Lab.	Dr. H. Seko	2001-2003		On going (Good running)	80		0			
3) Insect specimes Lab.	Dr. K. OGATA	2001-2003		On going	60			0		
4) Insect feeding Lab.	Dr. H. Yasui	2002-2003		On going (Well running)	80		0			
	Dr. M. Sugiura									
5) Experimental fields	Dr. M. Oniki	2001-2003		On going well except high temperature cond.	95	0				
6) Net houses and others	Dr. H. Seko			,but it was repaired in 2002.	80		0			
7) Weather Station	Dr. S. Hayashi	1999-2003			80		0			
	Dr. Y. Kurosawa									
	Dr. M. Oniki									
	Dr. H. Seko									
Faculty of Land and Water Resources Management	Dr. Y. Kurosawa	1999-2002	Dean & related C/P							
1) Student Lab.	Dr. Y. Saeki			Finished	90	0				
2) Central experiment Lab.	Dr. M. Oniki			Finished	95	0				
3) Net house				On going	70		0			
Faculty of Economics and Rural Development										
1) Seminar Room	Dr. K. Tsuji	1998-2002	Dean & related C/P	Finished	90	0				
2) Library of the Faculty				Finished	85		0			
3) Computer room for staff.				Finished	90	0				

Output Headings of PDM Subitems of PO Verifiable indicator	Responsible person in the project	Term of working	Name of C/P	Conditions at the end of the project	Achievement (%)	Grade (Self evaluation)				
						5	4	3	2	1
3-1-3. Establishment of management boards on equipment.		1998-III~ 2001-I								
1) Faculty of Agronomy	Dr. M. Oniki	1998-III~ 2001-I	Dean & related C/P	Established (Good running)	70		0			
2) Faculty of Land and Water Resources Management	Dr. Y. Kurosawa	1998-II ~ 2001-I	Dean & related C/P	Established (Well running)	90		0			
3) Faculty of Economics and Rural Development	Dr. K. Tsuji	1998-II ~ 2001-II	Dean & related C/P	Established (Well running)	90		0			
4) Administration Office Vehicles Generator	Coordinator Ms. M. Fujiwara Mr. K. Takahashi	1998-2000 2000-2003	Administrator of HAU	No information	?		?			
3-1-4. Establishment of equipment data base system for provided equipment by JICA	Mr. K. Takahashi Mrs. Saeki in 2001-2003	1998-III~ 2002-IV	No C/P	Establishment of Data base of provided equipments by JICA. (Mr. Takahashi and Mr. Saeki. (Fail Maker))	80 (?)		0	?		
3-1-5. Effective utilization of equipment		1998-III ~ 2002-IV 1998-2003								
1) Faculty of Agronomy	Related Experts		Related C/P	Good management	80		0			
2) Faculty of Land and Water Resources Management	Related Experts	1998-2003	Related C/P	Well management	90		0			
3) Faculty of Economics and Rural Development	Related Experts	1998-2003	Related C/P	Well management	90		0			
4) Administration Office Vehicles Generator	Coordinator	1998-2003	Related officer	Good running	80 60		0	0		
3-2. Establish maintenance system	All Experts	1999-II ~ 2003-I	Dean & Related C/P at each Faculty	Not complete (Main problem is a small amount of repair fee at all Faculties)	70		0			
3-3. Improvement of maintenance system	All Experts	1999-II ~ 2003-I		Response with individual (case by case)	70		0			

6-2 List of Scientific Papers and others in HAU-JICA ERCB Project Activities

List of Scientific Papers and others
in HAU-JICA ERCB Project Activities
(September 1998~ February 2003)

Faculty of Agronomy

Faculty of Land and Water
Resource Management

Faculty of Economics and
Rural Development

HAU-JICA ERCB Project

List of publication of scientific papers or oral in HAU-JICA ERCB Project activities
at the Faculty of Agronomy

PO 1-1-1

Text Book Biotechnology in Plant breeding (2001). 164pp. By Dr.P.H.Ton

- 1) Phan Huu Ton (2000) : Application of PCR-based marker to identify rice bacterial blight resistance genes, Xa-5, Xa-13 and Xa-21 in Vietnamese germplasm collection. Journal of Agricultural Science and Technology, HAU(1) : 59-66.
- 2) Phan Huu Ton (2001) : Ket qua nghien cuu mot so dong lua kieu cay lai tao. Ket Qua Nghien Cuu Hhoa Hoc 1997-2001. 89-96 pp. (with English summary)
- 3) Nguyen The Hung (2000) : Cropping system reasearch on degraded soil in Dong Tien, Pho Yen,Thai Nguyen province. Ket Qua Nghien Cuu Khoa Hoc 1997-2001, 120-128 (with English summary)
- 4) Nguyen The Hung et al. (2000) : Rain-fed agriculture and clever use of water resources in Vietnam. Proceeding of the 12nd Asian Agricultural Symposium, 25-39 pp.
- 5) Nguyen The Hung (2001) : A survey on production and irrigation for rice in the district of Tien Son, Bac Ninh province, Case studies on water management and land use in Red River Delta villages, 45-68 pp.
- 6) Kubota, F. (1999) : Leaf photosynthesis and tuberous root production in sweet potato, *Ipomoea batatas* Lam. Proceeding of the 1st Joint workshop in the Field of Agronomy. Achievements and future developments on agriculture in Japan and Vietnam- Crop culture, crop breeding and plant protection. 5-8 pp.
- 7) Kubota, F. (1999) : Production and photosynthesis in rice genotypes -for yield improvement. Proceeding of the 1st Joint workshop in the Field of Agronomy. Achievements and future developments on agriculture in Japan and Vietnam- Crop culture, crop breeding and plant protection. 27-32 pp.
- 8) Nguyen Van Hoan (2002) : Breeding two line hybrid rice combination Viet Lai 20, presentation at the National Council of Agronomy for recprd new varieties, Hanoi 15-18.
- 9) P.V.Cuong and M.Murayama (2003) : Studies on heterosis in F₁ hybrids rice using thermo-sterile line. I. Sterility of TGMS and its heterosis for grain yield and related characters. Plant production Science (In preparing)
- 10) P.V.Cuong and M.Murayama (2003) : Hetrosis for photosynthetic rate, leaf area and dry matter accumulation. Plant production Science 72 (Suppl. 1).
- 11) P.V.Cuong and M.Murayama (2003) : Heterosis for photosynthesis and some physiological characters. Plant production Science 72 (. Suppl. 1).
- 12) N.T.Hung O.Hirota, F.Ahmed and T.haraguchi (2003) : Response of mungbean to soil water content in photosynthesis, leaf water potential, growth characteristics and yield. Bull.Inst. Tropical Agr.,Kyushu Univ. 25. (in press).

- 1) Ngo Huu Tinh, Nguyen The Hung (2000) : Maize germplasm of Vietnam.
Proceeding of the 3rd Joint Workshop in Agronomy., Plant genetic resources, 1-12pp. -
- 2) Phan Huu Ton (2000) : Application of PCR-based markers to identify rice bacterial leaf blight (Xa-5, Xa-13, Xa-21) and blast (Pi-2) resistance genes in Vietnamese germplasm collection.
Proceeding of the 3rd Joint Workshop in Agronomy., Plant genetic resources, 13-22 pp.
- 3) Nguyen Van Hoan (2000): Use rice gene pool for hybrid rice breeding by two line system.
Proceeding of the 3rd Joint Workshop in Agronomy., Plant genetic resources, 23-27 pp.
- 4) Seko, H. (2000) : Plant genetic resources activities at MAFF gene bank of Japan.
Proceeding of the 3rd Joint Workshop in Agronomy., Plant genetic resources, 29-40 pp.
- 5) Nguyen Viet Tung (1999) : Crop protection and sustainable agricultural development.
Proceeding of the 1st Joint Workshop in Agronomy.
Achievements and future developments on agriculture in Japan and Vietnam- Crop culture, crop breeding and plant protection. 59-64 pp.
- 6) Ha Quang Hung, Nguyen Duc Khien and Tran Dinh Chien (1999) : Natural enemies of rice insect pests and their effectiveness in controlling rice leaf folder in Gia Lam, Hanoi.
Proceeding of the 2nd Joint Workshop in Agronomy , Biological control in IPM for controlling insect pests in Japan and Vietnam. 21-31 pp.
- 7) Tran Dinh Chien (1999) : Composition of predacious insects and spiders of major soybean pests in Hanoi and surrounding areas and biological characteristics of Chlanius bioculatus.
Proceeding of the 2nd Joint Workshop in Agronomy , Biological control in IPM for controlling insect pests in Japan and Vietnam. 33-42 pp.
- 8) Pham Binh Quyen, Ka Quang Hung and Tran Ngoc Lan (1999)
The effect of pesticides on natural enemies of rice insect pest (vegetables insect pest) in Vietnam.
Proceeding of the 2nd Joint Workshop in Agronomy , Biological control in IPM for controlling insect pests in Japan and Vietnam. 53-59 pp.
- 9) Ho Thi Giang (1999) : Parasite insects of vegetable insect pests in Hanoi - Some biological characteristics of Cotesia Kurdjumov parasitizing larvae of diamondback moth, Plutella Xylostella L.
Proceeding of the 2nd Joint Workshop in Agronomy , Biological control in IPM for controlling insect pests in Japan and Vietnam. 71-76 pp.
- 10) Dang Thi Dung (1999) : Parasitic insect composition on soybean and some eco-biological characteristics of Trathala Flavo-Orbitaris (Cameron) (Hym : Pyralidae) , parasitic on soybean leaf folder Lamprosema Indcate Fabricius (Lep. : Pyralidae) in Hanoi and surrounding areas in Vietnam.
Proceeding of the 2nd Joint Workshop in Agronomy , Biological control in IPM for controlling insect pests in Japan and Vietnam. 91-97 pp.
- 11) Takagi, M. (1999) : Insect ecology for integrated pest management.
Proceeding of the 2nd Joint Workshop in Agronomy , Biological control in IPM for controlling insect pests in Japan and Vietnam. 1-7 pp.
- 12) Murakami, Y. (1999) : Theory and practice of IPM.
Proceeding of the 2nd Joint Workshop in Agronomy , Biological control in IPM for controlling insect pests in Japan and Vietnam. 43-51 pp.
- 13) Murakami, Y. (1999) : Biological control of insect pests.
Proceeding of the 2nd Joint Workshop in Agronomy , Biological control in IPM for controlling insect pests in Japan and Vietnam. 77-84 pp.
- 14) Matsumoto T. (1999) : Taxonomic study on Rhizoctonia spp. the causal agents of soil-borne disease using chemotaxonomic methods
Proceeding of the 1st Joint workshop in the Field of Agronomy.
Achievements and future developments on agriculture in Japan and Vietnam- Crop culture, crop breeding and plant protection. 47-52 pp.

- 15) Day Sam An, Ha Quang Hung (2002) : Parasitism of the soybean stemfly, Melanagromyza sojae (Diptera : Agromyzidae), in four seasons in Gia Lam, Hanoi 2000-2001. Proceeding of the 4th Vietnam National Conference on Entomology, 131-136 pp.
- 16) Ho Thu Giang (2002) : The influence of Cotesia plutellae Kurdj (Hym : Braconidae) to oviposition capacity, parasited larvae and sex ratio of Diamondback moth. Proceeding of the 4th Vietnam National Conference on Entomology, 154-158 pp.
- 17) Ha Quang Hung, Bui Thanh Huong (2002) : Study on morphological, biological and ecological characteristics of predaceous bug Q. sauteri Poppius (Hemiptera : Anthocoridae) reared on Thrips palmi and eggs of Corcyra. Proceeding of the 4th Vietnam National Conference on Entomology, 210-214 pp.
- 18) Nguyen Van Vien (2003) : Some results of survey Rice Blast Disease in the spring crop 2001 in some provinces in Red River Delta. Plant Protection Bulletin No. 3. (in press)
- 19) Furuya, N., Taura, S., Bui Trong Thuy, Matsumoto M., Seint San Aye and Phan Huu Ton (2003) : Isolation and preservation of Xanthomonas oryzae pv. Oryzae from Vietnam in 2001-2002. (in submitting)
- 20) H.T.Giang, N.V.Tung, K.Takasu and K.Ogata (2001) : Development and host-stage selection by a Vietnamese strain of the larval parasitoid Cotesia plutellae Kurdjumov. Bull. Inst. Trop. agr. Kyushu Univ. 24 : 11-18.
- 21) H.T.T.Giang and T.Ueno (2002) : Biology of hemiptarsenus varicornis (Hymenoptera : Eulophidae) a parasitoid wasp of leafminer Liriomyza trifolii (Diptera : Agromyzidae). J.Fac.Agr.Kyushu Univ. 47: 45-54.
- 22) H.T.T.Giang and K.Ogata (2001) : An overview of the ant genera in Vietnam. Anet The 3rd International Workshop, Hanoi (2001,Nov.) : Abstract : 5.

PO 1-1-3

- 1) N.T.P.Thao, K.Ureshino, I.Miyajima, Y.Ozaki and H.Okubo (2003)
Induction of tetraploids in ornamental Alocasia through colochicines and oryzalin -
treatments.
Plant Cell Tissue and Organ Culture 72: 19-25.
- 2) N.T.Thao, Y.Ozaki and H.Okubo (2003) : Callus induction and plantlet regeneration
in ornamental Alocasia(Alocasia micholitziana Green Velvet)
(In submitting Plant Cell,Tissue and Organ Culture)
- 3) N.T.P.Thao, Y.Ozaki and H. Okubo (2003) : Para-Fluorophenylalanine - induced
aneuploidy in Alocasia.
(in susbmitting Journal of Japanese Society for Horticultural Science)
- 4) N.T.P.Thao, Y.Ozaki and H.Kubo(2003) : Colchicine - and oryzalin - induced
tetraploids in ornamental Alocasia. (In preparation)
- 5) N.T.P.Thao. Y.Ozaki and H.Okubo (2003) : Micropropagation of ornamental Alocasia
(In preparation)
- 6) Shigyo M.,A.Kagawa, T.T.M.Hang and N.Yamauchi (2002) : Effect of shallot-
monosomic additions on ascorbic acid, sugar, chlorophll and its derivative contents
in leaf blade of Japanese bunching onion.
Jour. Japan Soc. Hort. Sci. 71 (Suppl. 1) :109 pp.
- 7) Hang, T.T.M. M. Shigyo. T. Utsunomiya and N.Yamauchi (2002) : Production of
hypo-allotriploid line which deleted one A. fistulosum from allotriploids between
shallot and A. fistulosum.
Jour. Japan Soc. Hort.Sci. 71 (Suppl. 2) 243 pp.
- 8) T.M. Pham and Y. Tashiro (2002) : Allium crops in Vietnam (A preliminary report)
Jour. Japan Soc. Hort.Sci. 71 (Suppl. 2) 339 pp.

PO 1-1-4

- 1) Doan Van Diem (2001) : Agrometeorological calamities of fruit and perennial
industrial trees, control and mitigation measures.
Training workshop on agromrterorology. 109-119 pp.
- 2) Doan Van Diem, Nguyen Thi Bich Yen and Tran Danh Thin (2001) : Studying affects
of weather factors to growth, development, yield of some foods crops in the Red
River Delta.
Research project at Ministry level 1999-2001.
- 3) Hayashi.S. and N.T.B.Yen (2000) : On hydro-meterological circumstances in Vietnam.
Bull. of Applied Meterorology and Climate Resources 12 : 15-16 pp.
- 4) Hayashi S. and N.T.B.Yen (2000) : Conditions of water resources and agriculture.
Agrometerology in Kyushu 2-9 : 29-30. pp.

List of publicatio of scientific papers or oral in HAU-JICA ERCB Project activities at the Faculty of Land and Water Resources Management.

PO 1-2-1

- 1) Ho Lam Tra, Nguyen Dinh Manh, Do Nguyen Hai and Kazuhiko Egashira (1998)
Pollution of water and agricultural soils in Tuliem and Districts of Hanoi City, Vietnam.
Journal of Fac. Agr. Kyushu Univ. 42 (No.3 & 4) :509-521.
- 2) Ho Thi Lam Tra and K.Egashira (1999) : Heavy metal status of agricultural soils in Tuliem and Thanhtri Districts of Hanoi City, Vietnam.
Journal of Fac. Agr. Kyushu Univ. 43 (No.3 & 4) :489-497.
- 3) Ho Thi Lam Tra and K.Egashira (1999) : Sequential fractionation of copper, nickel, lead and zinc in agricultural soils and river-sediment in Tuliem and Thanhtri Districts of Hanoi City, Vietnam.
Journal of Fac. Agr. Kyushu Univ. 43 (No.3 & 4) :499-508.
- 4) Ho Lam Tra, Nguyen Dinh Manh and K. Egashira (2000) : Yield and heavy metal concentration of white cabbage and beet cultivated in soil amended with river-sediment from Hanoi, Vietnam.
Journal of Fac. Agr. Kyushu Univ. 44 (No.3 & 4) :455-462.
- 5) Ho Lam Tra and K.Egashira (2000) : Heavy metal characterization of river sediments in Hanoi, Vietnam.
Communications in Soil Science and Plant Analysis. Vol. 31(No.17 & 18):2901-2916.
- 6) Ho Thi Tra and K. Egashira (2001) : Solid/solution ratio on extraction of heavy metals by dilute acids from agricultural soils and river-sediments in Hanoi,Vietnam.
Communications in Soil Science and Plant Analysis. Vol. 32(No.5 & 6):643-660.
- 7) Ho Thi Lam Tra and K. Egashira (2001) : Status of heavy metals in agricultural soils of Vietnam.
Soil Science and Plant Nutrition 47 (2) : 419-422.
- 8) Nguyen Tat Canh, K. Kurosawa and J.Chikushi (2001) : Quantity and quality of agricultural water use in the Red River Delta of Vietnam.
Bull. Inst. Trop. Agriculture, Kysushu Univ. 24 : 24-51.
- 9) Kurosawa,K.,Do Nguyen Tat Canh,Nguyen Huu Thanh, Nguyen Dinh Manh and K.Egashira (2002) : A preliminary monitoring of the NO₃-N concentration in the surface water in the paddy-cultivated area of the control Red River Delta, Viet Nam.
Journal of Fac. Agri. Kyushu Univ. 47 (1) (in press)
- 10) Ho Thi Lam Tra, Hoang Xuan Phuong and K.Egashira (1998) : Chemical, physical and mineralogical properties of soils in Tuliem and Thanhtri Districts of Hanoi City, Vietnasm. Jour, Fac. Agri.Kyushu Univ. 42(1&2) : 281-291.
- 11) Nguyen Huu Thanh and K.Egashira (2000) : Clay mineralogical composition of some Fluvisols in Vietnam.
Clay Science. 11 (3): 205-217.
- 12) Ho Thi Lam Tra, Nguyen Huu Thanh and K. Egashira (2000) : Clay mineralogical composition of Vietnam soils derived from different parent rocks.
Clay Science 11 (3) : 285-297.
- 13) Nguyen Huu Thanh and K. Eagashira (2000) : Potassium fixation of some Fluvisols in Viet Nam.
Journal Agrcultural Science and Technology Vol. 1 : 155-160. (in Veietnamese)
- 14) Do Nguyen Hai, Trinh Quang Huy and K. Egashira (2001) : Mineralogy and clay degradation in grey degraded soils of Viet Nam.
Clay Science (in press)
- 15) K.Eagashira, Nobuko Tokunaga and Ho Thi Lam Tra (2003) : Phosphorus of status of agricultural soils in northern and middle Viet Nam.
Soil Science and Plant Nutrition (in press)

PO 1-2-2

Experimental manual :

- 1) Saeki, Y., M. Ikeda, T. Yamakawa and Y. Nagatomo (2002)
Basic protocols for soil chemistry and plant nutrition, 84 pp.
- 2) The operating manual of the Atomic Absorption Spectrophotometer. (2002)
- 3) The operating manual of the Flame Emission Spectrophotometer. (2002)
- 4) The operating manual of the Spectrophotometer (2002)
- 5) The operating manual of the Ion Chromatograph.

Scientific Papers and others

- 1) Ikeda M (2001) : An aspect metabolism linked to assimilation of ammonium and nitrate in higher plants.
Proceeding of the 4th workshop on [Plant nutrition for sustainable Agricultural Development] : 1-15. pp.
- 2) Saeki Y. and Nguyen Thi Minh (2001) : Comparison of nitrogen content among soybean varieties.
Proceeding of the 4th workshop on [Plant nutrition for sustainable Agricultural Development] : 25-30. pp.
- 3) Nguyen Huu Than and Cao Viet Ha (2001)
Some potassium forms and fixation of potassium in Red River alluvial soil.
Proceeding of the 4th workshop on [Plant nutrition for sustainable Agricultural Development] : 31-38. pp.
- 4) Nguyen Dinh Manh (2001)
The absorption of microelements (Me^{2+}) into leaf after foliar spray with microelement solution.
Proceeding of the 4th workshop on [Plant nutrition for sustainable Agricultural Development] : 39-45. pp.
- 5) Le Bich Dao and Y. Saeki (2001)
Study of rice cultivation on hydroponic culture.
Proceeding of the 4th workshop on [Plant nutrition for sustainable Agricultural Development] : 47-51. pp.
- 6) Nguyen Nhu Ha (2001)
Study on nutrient and fertilizing of post rice grown soybean on the Red River alluvial soil.
Proceeding of the 4th workshop on [Plant nutrition for sustainable Agricultural Development] : 53-58. pp.

PO 1-2-3

- 1) Do Nguyen Hai and K. Egashira (2002) : Irrigation and drainage systems and their impact and land use and rice production after renovation (Doi Moi) in the Red River Delta of Vietnam - A case study in Tien Son District, Bac Ninh province.
Journal Fac. Agri. Kyushu Univ. 46(2) : 411-422.
- 2) Nguyen Tat Canh, Do Nguyen Hai, Nguyen The Hung and K. Egashira (2002) :
Agricultural development in the Red River Delta, Vietnam - Water management, land use, and rice production.
Journal Fac. Agri. Kyushu Univ. 46(2) : 445-464.

List of publication papers or oral in HAU-JICA ERCB Project
at the Faculty of Economics and Rural Development from 1998 to 2003.

Faculty of Economics and Rural Development

By Dr. Kazunari TSUJI
(Long term expert)

PO : 1-3-1

- 1) P.V.Hung and T.Murata (2001) : Impacts of redorm policies on agricultural sector in Vietnam. J.Fac.Agr.,Kyushu Univ.,46(1);165-183.
- 2) Ng.T.M.Hien and K.Kawaguchi (2002) : Comparative study of the rice production systems in northern Vietnam. J.Fac.Agr.,Kyushu Univ.,46(2) ; 481-499.
- 3) Ng.T.M.Hien and K.Kawaguchi (2002) : Overview of rice production system in the Mekong Delta - Vietnam. J.Fac.Agr.,Kyushu Univ.,47(1); 221-231.
- 4) Ng.T.M.Hien and K.Kawaguchi (2002) : On the basic features of farming system in the Mekong Delta - Vietnam. J.Fac.Agr.,Kyushu Univ.,47(1); 195-204.
- 5) B.T.Gia (2001) : Production and marketing on safe vegetables in Gia Lam. Hanoi province (in Vietnam). Tap chi Hoat dong khoa hoc. MOSTE,pp 32-33.
- 6) B.T.Gia (2001) : Production and marketing of clean vegetable in Gia Lam district,Hanoi City, Vietnam. Proceeding of 1st and 2 nd workshops on March 24 and April 3, 2001, by Humbolt Univ., Hue Univ. and HAU,17-22.
- 7) B.T.Gia (2001) : Vegetable production and marketing system in the Red River Delta of Vietnam, Proceeding of 3 rd workshop, Humbolt Univ.,Hue Univ.,and HAU, 23-29.
- 8) B.T.Gia (2002) : Vegetable marketing system in peri-urban of Hanoi - Organization, operation and performance, presented at workshop on market appraisal of peri-urban food commodities, Hanoi (RIFAV),Feb.26-March 6, 2002.

PO : 1-3-1/13-3

- 1) T.H.Cuong (2001) : Prices and marketing on pork in Hanoi province and some areas of the Red River Delta (in Vietnamese). Tap chi Hoat dong khoa hoc 508,MOSTE, 27-29.
- 2) T.H.Cuong (2001) : pork production of farm households in Hanoi province. Tap chi Hoat dong khoa hoc 508, MODTE,37-39.
- 3) N.T.Thuan,Kai,S.,Yutaka,T.(2000) : An overview on pig @roduction and pork market in the Red River Delta in Vietnam. J. Fac.Agr.,Kyushu Univ. 45(1): 325-334.
- 4) P.T.M. Nguyet and Tsuji M.(2003) : Dairy development in the households located in Hanoi outskirts. J.Fac.Agr.,Kyushu Univ.,47(2) (in press)
- 5) P.T.M. Nguyet (2001) : Production on dairy milk cow in Hanoi (in Vietnamese). Tap chi Hoat dong khoa hoc 508, MODTE,30-31.
- 6) T.T.K.Loan and M.Kawaguchi (2002): (In Japanese)
Vietnam oyobi Thailand ni okeru ryakunou no haxtutennhoukou ni kannsuru hikaku kennkyuu . kyushuu daigaku shuxtupannkai : 141-172.

PO 1-3-1/1-3-2

- 1) Kim Thi Dung (2001) : Credit for agriculture and rural area in countries of Asia (in Vietnam). Tap chi Hoat khoa hoc 508,MOSTE, 19-21.
- 2) Ngo Thi Thuan (2001) : Real situation on raw material sugarcane for sugar factory in Hoa Binh province (in Vietnamese). Tap chi Hoat khoa hoc 508,MOSTE, 34-35.

PO 1-3-2

- 1) P.V.Dinh, Murata, T., and P.V.Hung (2001) : Key issues in the process of rural economy development in Vietnam. J.Fac.,Agr.,Kyushu Univ., 45 (2) : 643-650.

- 2) Tsuji K. and P.V.Dinh (2002) : Structural changes and sustainable development of traditional handicraft villages in the Kinh Bac area, northern Vietnam. J.Fac.,Agr.,Kyushu Univ., 47 (1) : 205-219.
- 3) P.V.Dinh (2001) : Impacts of policies on agriculture of Vietnam in 1990s (in Vietnamese) Tap chi Hoat dong khoa hoc 508, MOSTE, 16-18.

PO 1-3-2/1-3-3

- 1) T.V.Duc (2003) : Improvement in tea households' income (in press)
- 2) T.V.Duc (2003) : Nang cao thu nhap cho ho san xuat che (in press)

PO 1-3-2

- 1) P.V.Dinh (2001) : Two main facts in Vietnamese cooperative today, Mazazine of science activities of MOET, MOET : ? ? pp.
- 2) D.V.Vien (2001) : Enhancing advanced training for staff of the agricultural cooperatives (in Vietnamese). Tap chi dong khoa hoc 508, MOSTE, 3.
- 3) P.T.M.Dung (2001) : Real situation on managers of the agricultural cooperatives in Hanoi province (in Vietnamese), Tap chi Hoat dong khoa hoc 508, MOSTE, 7-8.

PO 1-3-3

- 1) T.H.Cuong and P.A.Tuan (2001) : Agribusiness production of commercial farms in Chi Linh, Hai Doung province (in Vietnamese). Tap chi Hoat dong khoa hoc 508, MOSTE, 44-47.
- 2) T.H.Cuong (2002) : The transition to commercial farm model in the mountainous area : A case study in Yen Binh district, Yen Bai province, Vietnam. (Unpublished)
- 3) Ng.T.Tam (2001) : Commercial farms in Dac Lac Province (in Vietnamese). Tap chi Hoat dong khoa hoc 508, MOSTE, 40-41.
- 4) Ng.M.Dung (2000) : Economic efficiency of rice production in farm households - A case study in the Red River Delta of Vietnam. Japan J. of Farm Management. 38(2):129-132.
- 5) Ng.M.Dung and Tsuji,M. (2000) : An analysis on income status of farm households - A case study in the Red River Delta of Vietnam. J.Fac.Agr.,Kyushu Univ.,45(1):365-380.
- 6) Ng.M.Dung and Tsuji,M. (2000) : An overview of rice production in farm households - A case study in the Red River Delta of Vietnam. Farm Management and Rural Planning Vol. 1, Farm management seminar, Department of Agricultural and Resource Economics, Graduate school of Bioresource and Bioenvironmental Science, Kyushu Uni..103-111.
- 7) Ng.M.Dung and Tsuji,M. (2001) : An analysis on the relationship between cropping intensity and agricultural income of the farm households - A case study in the Red River Delta of Vietnam. Japanese Jopurnal of Farm Management, 39(1): 171-174.
- 8) Ng. M. Dung (2001) : An analysis on determinants influencing rice farming income of farm households - A case study in the Red River Delta of Vietnam. Farm Management and Rural Planning Vol. 2, Farm Management Seminar, Department of Agricultural and Resource Economics, Graduate School of Bioresource and Bioenvironmental Sciences, Kyushu Univ. 99-110.
- 9) Ng.M.Dung and Tsuji, M. (2001) : A study on cropping intensity and agricultural income of farm households in Vietnam. Farm Management and Rural Planning Vol.2, Farm Management Seminar, Department of Agricultural and Resource Economics, Graduate School of Bioresource and Bioenvironmental Sciences, Kyushu Univ. 89-97.
- 10) Ng.M.Dung (2002) : An overlook into large scale farm economy in Vietnam, Farm Management and Rural Planning Vol.3, Farm Management Seminar, Department of Agricultural and Resource Economics, Graduate School of Bioresource and Bioenvironmental Sciences, Kyushu Univ. 205-211.

PO 1-3-3/(3)-4.

- 1) D.Ng.Hai () : Assessment of degraded soils and measures to improve soil fertility for crop production in Dong Tien commune, Thai Nguyen province. _____

JICA