

## Questionnaire to counterparts

17 counterparts answered and the collecting rate will be 50% approximately. The details are as follows;

Counterparts	Technical transfer Level of Understanding	Level of impact of technical transfer	Books donated by Japanese side	Equipment donated by Japanese side	Exchange Activities
Advanced Laboratory 3 Dept., of Veterinary Medicine 2	High and faire 100%	Large and faire 100%	Usefulness	Usefulness	Research/education /information exchange Yes 13 No 3 Other 1
Very much 10			Very much 11		
Very 2			Very 3		
No so much 5			Not so much 2		
			Other 1		
Frequency of utilization			Introduction into education and research		
Very often 11	Very much 8	Extension activities Yes 10 No 4 Other 3			
Not so much 5	Very 7				
Not 1	Not so much 1				
Main reason of not so much and not : Japanese books	Other 1				
Dept., of Crop Science 3 Dept., of Environment 5 Dept., of Plant Protection 4 Total responders 17					

The survey through questionnaires were conducted from end February to early March, 2002 for the counterparts of Can Tho University of the Project.

Questionnaire to counterparts trained in Japan

8 counterparts out of 10 counterparts answered. The collecting rate was 80%. The details are as follows;

Counterparts	Level of Effectiveness	Level of Understanding
Dept., of Crop science      3	Very much      6	Very much      4
Advanced Laboratory      2	Very      2	Very      3
Dept., of Plant Protection      2		Not so much      1
<u>Dept., of Environment</u> 1		
8 counterparts in total		

The reason why answered as very and not so much in Level of Understanding , were the first experience to experiment in advanced laboratory . A few responders had some issues in language.

**Mini-Project Type Technical Cooperation for  
Improvement of Environmental Education in Agricultural Sciences in Cantho University  
in the Socialist Republic of Vietnam**

**QUESTIONNAIRE TO COUNTERPARTS**

Your college :  College of Agriculture     College of Education     Others (\_\_\_\_\_)

Your Department :  Dept., of Environment     Dept., of Crop Science     Dept., of Veterinary  
Medici     Dept., of Plant Protection     Others ( Dept., of \_\_\_\_\_)

Your Specialty : \_\_\_\_\_

**1. Technical Transfer by Japanese short-term and long-term experts**

① Your experience of technical transfer by Japanese experts

1                      2                      3                      4                      5

Topic No.:

Detailed fields:

Total hours:

(If you have more than 5 kinds, write at back side of this paper)

② Level of your understanding

- |   |                            |                             |                           |                                |
|---|----------------------------|-----------------------------|---------------------------|--------------------------------|
| 1 | <input type="radio"/> High | <input type="radio"/> Faire | <input type="radio"/> Low | <input type="radio"/> Very low |
| 2 | <input type="radio"/> High | <input type="radio"/> Faire | <input type="radio"/> Low | <input type="radio"/> Very low |
| 3 | <input type="radio"/> High | <input type="radio"/> Faire | <input type="radio"/> Low | <input type="radio"/> Very low |
| 4 | <input type="radio"/> High | <input type="radio"/> Faire | <input type="radio"/> Low | <input type="radio"/> Very low |
| 5 | <input type="radio"/> High | <input type="radio"/> Faire | <input type="radio"/> Low | <input type="radio"/> Very low |

③ Reason of above level of your understanding

- 1 \_\_\_\_\_
- 2 \_\_\_\_\_
- 3 \_\_\_\_\_
- 4 \_\_\_\_\_
- 5 \_\_\_\_\_

④ Level of impact of technical transfer on your education and research

- Large       Faire       Small       None

Reason of above answer : \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

⑤ Books donated by Japanese side

1. Level of usefulness

- Very much       Very       Not so much       Not

Reason of above answer : \_\_\_\_\_

2. Level of frequency of utilization

- Very often       Very       Not so much       Not

Reason of above answer : \_\_\_\_\_

⑥ Equipment donated by Japanese side

1. Level of usefulness

- Very much       Very       Not so much       Not

Reason of above answer : \_\_\_\_\_

2. Introduction into your education and research

- Very much       Very       Not so much       Not

Reason of above answer : \_\_\_\_\_

⑦ Positive and negative changes produced, directly or indirectly, as a result of the implementation of the Project, including those not anticipated at the planning stage of the Project.

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

⑧ Activities of education/research/information exchange with other universities and institutes

1. Have you done any kind of activities? Yes No
2. Are you doing any kind of activities? Yes No
3. If your answer is yes on above 1. and 2., please write the rough contents of your activities.

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⑨ Activities of education/research/information exchange with experiment station and local government in Mekong Delta

1. Have you done any kind of activities? Yes No
2. Are you doing any kind of activities? Yes No
3. If your answer is yes on above 1. and 2., please write the rough contents of your activities.

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⑩ Extension activities for local governments, communities and farmers on environmental issues

1. Have you done any kind of activities? Yes No
2. Are you doing any kind of activities? Yes No
3. If your answer is yes on above 1. and 2., please write the rough contents of your activities.

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4. How is your activities related to the Project ? How do the Project contribute to your activities ?

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5. Are the communities and farmers aware of the water, soil and food pollution ?

Yes  No

6. If your answer is yes on above 5, please write what kind of reaction or activity came out to protect the environment.

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**Mini-Project Type Technical Cooperation for  
Improvement of Environmental Education in Agricultural Sciences in Cantho University  
in the Socialist Republic of Vietnam**

**QUESTIONNAIRE TO COUNTERPARTS TRAINED IN JAPAN**

Your college : <input type="checkbox"/> College of Agriculture <input type="checkbox"/> College of Education <input type="checkbox"/> Others (_____)
Your Department : <input type="checkbox"/> Dept., of Environment <input type="checkbox"/> Dept., of Crop Science <input type="checkbox"/> Dept., of Veterinary Medici <input type="checkbox"/> Dept., of Plant Protection <input type="checkbox"/> Others ( Dept., of _____)
Your Specialty : _____

① Level of effectiveness on your education and research

Very much     Very     Not so much     Not

Reason of above answer : \_\_\_\_\_

② Level of your understanding

Very much     Very     Not so much     Not

Reason of above answer : \_\_\_\_\_

③ Problems and issues on your training in Japan/Any question or request on the training in Japan.

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

**Schedule of Workshop on "Improvement of Environmental Education in Agricultural Sciences" from 20-21 March 2002, Cantho University.**

JICA カンホ大学三プロジェクト

→ 20 March 2002

08:00-09:00 Registration

終了時ワークショップ 題目

09:00-09:10 Guest, Delegate introduction by TRAN VAN HAI

09:10-09:20 Opening by Rector TRAN THUONG TUAN

①~⑧ は アナウンス配布 C/P

09:20-09:30 Preface by Shioya Tetsuo

09:30-09:50 General report by Hirata Hiroshi and Ken Watanabe

09:50-10:10 *Coffee Break*

Oral presentations:

**Topic 1: Research on soil and water environment in the Mekong Delta**

Chairpersons: Dr. NGUYEN HUU CHIEM, Dr. MASAYUKI SETO

10:10-10:30 -Study on Present Situation of Ground and Surface Water Quality of Six Provinces in the Mekong Delta (Part 1)

① Nguyen Huu Chiem, Nguyen Bao Ve, Le Tuyet Minh et al.

10:30-10:50 -Study on Present Situation of Ground and Surface Water Quality of Six Provinces in the Mekong Delta (Part 2)

Nguyen Huu Chiem, Nguyen Bao Ve, Le Tuyet Minh et al.

10:50-11:10 -Soil Environment and Rice Growth under Intensified Rice Cropping System in the Mekong Delta

④ Nguyen Bao Ve, Ngo Ngoc Hung, Nguyen Thanh Hoi.

11:10-11:30 -Water Qualities of 37 Samples from Six Provinces in The Mekong Delta with Reference to Geological Characteristics and Human Activities

Masayuki Seto [Tokyo Univ. of Agric. & Tech.]

11:30 *Lunch time at Cantho Univ. Restaurant*

13:00-13:20 -Reliability of Coliform, *Escherichia coli*, or Fecal Streptococcus as Fecal Contamination Indicator and Current Situation of Fecal Contamination in the Mekong Delta

Tarao Mitsunori [Tokyo Univ. of Agric. & Tech.]

13:20-13:40 -Water Quality and Prawn Growth in The Rice - Prawn Integrated Farming System in Omon District, Cantho Province

⑥ Lam My Lan, Duong Nhut Long, Nguyen Van Lan et al.  
(研究済み)

13:40-14:00 -Investigation on Water Quality Parameters in Wet Season Rice in related with Integrated Agricultura-Aquaculture System Development in the Mekong Delta

Duong Nhut Long, Bui Minh Tam, Lam My Lan et al.  
(外国留学中) (海外研修中)

**Topic 2: Research on Bio-diversity and Genetic Resources in the Mekong Delta**

Chairpersons: Prof. CHAU BA LOC, Dr. YUTAKA HIRATA

14:00-14:20 -Characters, Growth and Role of of Phuquoc Dogs.

Nguyen van Bien

14:20-14:40 -Distribution and Genetic Diversity of Local Pig Breeds in the Mekong Delta, Vietnam. (2)

Luu Huu Manh, Vo Cong Thanh and Yutaka Hirata [Tokyo Univ. of Agric. & Tech.]

(8)

(9)

14:40-15:00 -Prevalence of *Salmonella* spp. in Domestic Animals in the Mekong Delta, Vietnam.

Tran thi Phan, Ly thi Lien Khai, Hideki Hayashidani [Tokyo Univ. of Agric. & Tech.] et al.

(10)

(11)

15:00-15:30 Tea break

15:30-15:50 -Prevalence and Characterization of Shiga Toxin-Producing *Escherichia coli* O157 Isolated from Cattle, Food and Children in Some Provinces in the Mekong Delta by Using an Immunomagnetic Separation Method

Ly Thi Lien Khai, Tran Thi Phan, Hideki Hayashidani [Tokyo Univ. of Agric. & Tech.] et al.

15:50-16:10 -Characteristics of Aquatic Organism in Different Rice Cultivation Patterns in The Mekong Delta

Dương Trí Dũng, Nguyễn Hữu Chiêm, Nguyễn Văn Công et al.

(12)

(研究助手)

16:10-16:30 -Study on Diversity of Snakehead Fish Species in Dong Thap, An Giang and Camau Provinces, Vietnam

Nguyen Bach Loan, Vo Cong Thanh and Yutaka Hirata

(13)

16:30-16:50 -High Potentiality of Genetic Resources in The Mekong Delta

Yutaka Hirata [Tokyo Univ. of Agric. & Tech.]

16:50-17:10 -Diversity of Mango (*Mangifera indica* L.) Varieties in the Mekong Delta, Vietnam.

Nguyen Thi Xuan Thu, Isao Ogiwara [Tokyo Univ. of Agric. & Tech.]

(農工大 PhD コース 受講中)

17:10-17:40 -Results of Collaborative Research Project on Plant Biodiversity of Soybean, Rice, Mango, Pomelo, Yam and Taro from 1999-2001.

Vo cong Thanh, Yutaka Hirata [Tokyo Univ. of Agric. & Tech.]

18:00 Dinner time at Cantho Univ. Restaurant

→ 21 March 2002 -----

08:00-08:30 -Video film on Environment

08:30-08:50 -Evaluation of Taro Collection in The Mekong Delta basing on Morphological Characteristics and SDS-PAGE Electrophoresis

Lê Việt Dũng, Huỳnh Kỳ, Vũ Anh Pháp et al.

(14)

(学生)

(学生)



08:50-09:10 -Evaluation of Jam Collection in The Mekong Delta basing on Morphological Characteristics and SDS-PAGE Electrophorensis

Lê Việt Dũng, Huỳnh Kỳ, Vũ Anh Pháp *et al.*

09:10-09:40 Tea break

Topic 3: Study on Technology of Reducing Agrochemical Residues in Plants in the Mekong Delta.

Chairpersons: Prof. NGUYEN THI THU CUC, Prof. TOHRU TERAOKA

09:40-10:00-Diversity of Pathogenesis of Rice Blast Fungus (*Magnaporthe grisea*) in the Mekong Delta Area of Viet Nam

Tohru Teraoka [Tokyo Univ. of Agric. & Tech.], Pham Van Kim.

10:00-10:20 -Major Factors Affecting the Population Dynamics of three Major Insect Pests of Vegetables Growing in the Green Belt of Can Tho City

Nguyen Van Huynh, Tran Thanh Hai, Nguyen Thi Dieu and Vo Truong Giang

(15)

(16)

10:20-10:40 -Effects of Plastic Mulching and Reasonable Pesticide Application on Insect Pest and Yield in Cucumber.

Tran Thi Ba, Nguyen Van Huynh, Pham Kim Son *et al.*

(17)

研究スタッフ

10:40-11:00 -Research on Reducing Number of Pesticide Sprayings in Water Melon Production at Vinh Chau District, Soc Trang Province.

Trần Văn Hải, Trần Thị Ba và Nguyễn Khởi Nghĩa

研究スタッフ

11:00-11:20 -Field Attraction of Male Moths Distributed in Vietnam by Synthetic Pheromones

Tran Van Hai, Le Van Vang, Shin-Ichi Inomata and Tetsuo Ando [Tokyo Univ. of Agric. & Tech.]

11:30 Lunch time at Cantho Univ. Restaurant

13:00-13:20 -Entomopathogen and Parasitoids of *Spodoptera litura* on Vegetables in the Mekong Delta of Vietnam

Nguyen Thi Thu Cuc, Madoka Nakai, Yasuhisa Kurimi.

(18)

13:20-13:40 -Field Application of an Insect Virus in Can Tho: Effects of Nucleopolyhedrovirus on *Spodoptera litura* and Its Parasitic Natural Enemies

Madoka Nakai, Nguyen Thi Thu Cuc, Tran Truong Giang *et al.*

学生

13:40-14:00 -Abundance and Diversity of the Spider Fauna (Arachnida: Araneae) and Its Capacity as Natural Enemies of Insect Pests on Major Crop Plants in the Mekong Delta (Vietnam)

Nguyen Van Huynh, Huynh Cong Tuan, Nguyen Van Duyet *et al.*

14:00-14:30 Tea break

14:30-17:00 General Discussion on Education and Research for Future Cooperation.

17:00-17:20 Closing Workshop: Dr. Nguyen Bao Ve

18:30 Dinner at Ninh Kieu Restaurant.

INPUT OF THE PROJECT DISPATCH OF JAPANESE EXPERT (APRIL 1999 - March 2002)

SUBJECT	CONTENTS	Project Year 1												Project Year 2												Project Year 3												REMARK
		1999												2000												2001												
		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	
Mission	Mission for Before Project Implimentati	Dr.Shioya, Dr.Kamata, Dr.Oe, Mr.Soma (1998.12.16-12.26)																																				
	Mission for Project Planning	Dr.Shioya, Dr.Kamata, Mr.Amatsu																																				
	Mission for Final Evaluation	Members are not yet confirmed																																				◆ (PLANNED 2002.3.13-3.20)
Log	1 Hiroshi HIRATA	Team leader												→ (1998.10.5-2000.10.15)																								
	2 Ken WATANABE	Team leader												→ (2001.4.1-2002.3.31)																								
	3 Akira KODAMA	Project coordinator												→ (1999.4.1 - 2001.4.15)																								
	4 Tokiko KUBO	Project coordinator												→ (2001.7.15-2002.7.14)																								
Year	1 Dr. SETO	Environmental Microbiology												→ (2000.3.15-4.12)																								
	2 Dr. TARAO	Environmental Microbiology												→ (1999.9.29-10.31)																								
	3 Dr. TABUCHI	Paddy Field Engineering												→ (1999.11.25-12.19)																								
	4 Dr. Izumi WATANABE	Environmental Toxicology												→ (1999.12.12-2000.1.9)																								
	5 Dr. Y. HIRATA	Plant Genetics												→ (1999.12.23-2000.1.25)																								
	6 Dr.SATO	Ethology												→ (1999.12.12-2000.1.25)																								
	7 Dr. HOSHINO	Vegetation Management												→ (2000.3.15-4.12)																								
	8 Dr. KUNIMI	Applied Genetics and Ecology												→ (1999.12.18-1.13)																								
	9 Dr. NAKAI	Applied Genetics and Ecology												→ (1999.12.18-1.13)																								
	10 Dr. Iwao WATANABE	Soil Biochemistry												→ (2000.3.15-4.23)																								
	11 Dr. NAKAI	Applied Genetics and Ecology												→ (2000.4.3-4.11)																								
Dispatch of Japanese experts	12 Dr.SETO	Environmental Microbiology												→ (2000.9.13-10.10)																								
	13 Dr. TARAO	Environmental Microbiology												→ (2000.10.7-10.19)																								
	14 Dr.TAKADA	Aquatic Environment Conservation												→ (2000.10.7-10.19)																								
	15 Dr.Izumi WATANABE	Environmental Toxicology												→ (2000.11.5-11.23)																								
	16 Dr. Yutaka HIRATA	Plant Genetics												→ (2001.3.1-3.25)																								
	17 Dr. HAYASHIDANI	Animal Health												→ (2000.7.20-8.31)																								
	18 Dr. OGIWARA	Horticulture												→ (2001.3.1-3.25)																								
	19 Mr.Kazuhiko WATANABE	Electron Microscopy												→ (2001.3.5-3.16)																								
	20 Dr. TERAOKA	Plant Pathology												→ (2000.12.25-2001.1.18)																								
	21 Dr. NAKAI	Applied Genetics and Ecology												→ (2000.12.23-2001.1.18)																								
	22 Dr. Hiroshi HIRATA	Plant Nutrition												→ (2001.2.8-2001.3.17)																								
	23 Dr.NAKAI	Applied Genetics and Ecology												→ (2001.2.27-3.18)																								
	24 Dr.HAYASHIDANI	Animal Health												→ (2001.7.23-9.20)																								
	25 Dr.ANDO	Molecular Mechaism of Bio-interaction												→ (2001.7.28-8.16)																								
3	26 Dr. Yutaka HIRATA	Plant Genetics												→ (2001.8.2-9.2)																								
	27 Dr. SATO	Ethology												→ (2001.8.20-9.20)																								
	28 Dr. SETO	Environmental Microbiology												→ (2001.9.5-10.3)																								
Year	29 Dr.KUNIMI	Applied Genetics and Ecology												→ (2001.12.22-2002.1.6)																								
	30 Dr. MOTOBAYASHI	Agricultural Production Technology												→ (2002.2.27-3.16)																								
	31 Dr.NAKAI	Applied Genetics and Ecology												→ (2002.2.27-3.24)																								
	32 Dr. OGIWARA	Horticulture												→ (2002.2.25-3.15)																								
	33 Dr.TAKADA	Aquatic Environment Conservation												→ (2002.3.2-3.13)																								
	34 Dr. TARAO	Environmental Microbiology												→ (2002.3.2-3.23)																								
	35 Dr. Izumi WATANABE	Environmental Toxicology												→ (2002.2.27-3.16)																								



3 YEARS IMPLEMENTATION INPUT  
Mini-Project

Improvement of Environmental Education in Agricultural Sciences Cantho University

Year		1998					1999					2000					2001					2002					2003	REMARK						
Japanese fiscal year (JFY)		JFY1998					JFY 1999					JFY 2000					JFY 2001					JFY 2002						Subtotal						
Title / Name	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		
J A P A N E S E  S I D E	Provision Equipment for Central Laboratory(供与機材)																																294.963 US\$	
	Provision Equipment for Department(専門家携行機材)												2,560,800 Yen (19,699 US\$)																			51.805 US\$		
	Expert's Donated Equipment(Articles of Consumption)(携行機材消耗品)												5,034,050 Yen (38,723 US\$)																			97.767 US\$		
	Activity Expenses of Experts(ミニプロ現地業務費)												44,740 US\$																				147.540 US\$	
	Research Promotion (研究支援費)												30,130 US\$																				126.194 US\$	
	<b>Total</b>																																	<b>\$718,268</b>
Year		1998					1999					2000					2001					2002					2003							
Vietnamese fiscal year (VFY)		VFY1998					VFY1999					VFY2000					VFY2001					VFY2002												
O P E R A T I O N  V I E T N A M  S I D E	CTU budget																																	
	Total budget from MOET																																	
	Total budget from other sources																																	
	Grand total																																	
	Department of Crop Science																																	
	from MOET																																	
	other sources																																	
	Total																																	
	Department of Soil Science																																	
	from MOET																																	
	other sources																																	
	Total																																	
	Department of Plant Protection																																	
	from MOET																																	
	other sources																																	
	Total																																	
	Department of Animal Husbandry																																	
	from MOET																																	
	other sources																																	
	Total																																	
	Department of Veterinary Medicine																																	
	from MOET																																	
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Department of Food Science																																		
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other sources																																		
Total																																		
Department of Environment and Natural Resource Management																																		
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other sources																																		
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Aqua-Science Research Institute																																		
from MOET																																		
other sources																																		
Total																																		

## Project Steering Committee Members

Name	Title	Other Information
Dr. Tran Thuong Tuan	Rector, Dean of College of Agriculture	
Dr. Nguyen Bao Ve	Deputy Dean, Head of Crop Science Dep. Leader of Project	
Dr. Tran Van Hai	Lecturer of Plant Protection Dep. Leader of Topic3 Managing Secretary of Project	JICA C/P training( JPFY2001)
Dr. Chau Ba Loc	Head of Veterinary Medicine Dep. Leader of Topic2 Head of Environment and Natural Resource Management Dep.	
Dr. Nguyen Huu Chiem	Senior Lecturer of Plant Protection Dep. Deputy	
Dr. Nguyen Van Huynh	Leader of Topic3 Deputy Assistant of Animal Science Dep. Deputy	
Dr. Luu Huu Manh	Leader of Topic2	

Topic1 Soil and Aquatic Environmental Science				
Japanese Expert	Field	Period	Counterpart Name	Department/Title
Dr. Masayuki Seto	Environmental Microbiology	2000/3/15-4/12 (H11) 2000/9/13-10/10(H12) 2001/9/5-10/3(H13)	Dr. Nguyen Huu Chiem	Head of Dep., Environment
Dr. Mitsutoku TARAO	Environmental Microbiology	1999/9/29-10/3(H11) 2000/10/7-10/19(H12)	Mr. Le Anh Kha Mr. Truong Hoan Dan Ms. Tran Thi Hong An Ms. Le Tuyet Minh Mr. Ky Van Thanh	Researcher, Environment Dep. Researcher, Environment Dep. Researcher, Environment Dep. Lecturer, Environment Dep. Researcher, Environment Dep.
Dr. Toshio TABUCHI	Paddy Field Engineering	1999/11/25-12/19(H11)	Dr. Nguyen Huu Chiem	Head of Dep., Environment
Dr. Izumi WATANABE	Environmental Toxicology	1999/12/12-2000/1/9(H11) 2000/11/5-11/23(H12)	Dr. Nguyen Bao Ve Dr. Truong Thi Nga Dr. Duong Tri Dung Dr. Ngo Ngoc Hung Msc. Bui Thi Nga Msc. Le Tuyet Minh Mr. Le Anh Kha Mr. Pham Van Dung Mr. Vuong Thanh Tung Mrs. Truong Hoan Dan Mr. Ky Van Thanh Ms. Nguyen Thi Tuyet Ma Ms. Tran Thi Thu Trinh Mr. Huynh Quoc Tinh	Head of Dep. Crop Science Lecturer, Environment Dep. Lecturer, Environment Dep. Lecturer, Soil Science Dep. Lecturer, Environment Dep. Lecturer, Environment Dep. Researcher, Environment Dep. Researcher, Central Laboratory Researcher, Central Laboratory Researcher, Environment Dep. Researcher, Environment Dep. Researcher, Environment Dep. JICA Project Secretary Researcher, Environment Dep.
Dr. Hideshige TAKADA	Aquatic Environment Conserva	2000/10/7-10/19(H12)	Ms. Le Tuyet Minh Mr. Le Anh Kha Mrs. Truong Hoan Dan Ms. Tran Thi Hong An Mr. Ky Van Thanh	Lecturer, Environment Dep. Researcher, Environment Dep. Researcher, Environment Dep. Researcher, Environment Dep. Researcher, Environment Dep.
Topic2 Impact of Development activities on the Bio-diversities				
Japanese Expert	Field	Period	Counterpart Name	Department/Title
Dr. Yutaka HIRATA	Plant Genetics	1999/12/23-2000/1/25(H11) 2001/3/1-3/25(H12) 2001/8/2-9/2(H13)	Msc. Vo Cong Thanh Mr. Pham Van Phuong Msc. Tran Thi Ba	Lecturer, Crop Science Dep. Staff, Crop Science Dep. Lecturer, Crop Science Dep.
Dr. Toshiyuki SATO	Ethnology	1999/12/12-2000/1/25(H11)	Msc. Nguyen Van Bien	Veterinary Medicine
Dr. Yoshinobu HOSHINO	Vegetation Management	2000/3/15-4/12 (H11)	Ms. Pham Thi Nga	College of Education
Dr. Hideki HAYASHIDA	Animal Health	2000/7/20-8/31(H12) 2001/7/23-9/20(H13)	Dr. Chau Ba Loc Msc. Tran Thi Phan Msc. Ly Thi Lien Khai Msc. Nguyen Van Bien	Head of Dep. Veterinary Medicine Lecturer, Veterinary Medicine Dep. Lecturer, Veterinary Medicine Dep. Lecturer, Veterinary Medicine Dep.
Dr. Isao OGIWARA	Horticulture	2001/3/1-3/25(H12)	Msc. Tran Thi Kim Ba Dr. Tran Kim Tinh Mr. Pham Van Dung Mr. Vuong Thanh Tung Mr. Tran Chi Nhan	Lecturer, Crop Science Dep. Head, Central Laboratory Researcher, Central Laboratory Researcher, Central Laboratory Researcher, Central Laboratory
Topic3 Foundation of Environment-Symbiotic Agricul				
Japanese Expert	Field	Period	Counterpart Name	Department/Title
Dr. Hirohisa KUNIMI	Applied Genetics and Ecology	1999/12/18-2000/1/13(H11)	Dr. Pham Van Kim Dr. Nguyen Thi Thu Cuc Dr. Nguyen Van Huynh Dr. Tran Van Hai	Head of Dep. Plant Protection Associate Prof. Plant Protection Dep. Senior Lecturer, Plant Protection Dep. Lecturer, Plant Protection
Dr. Madoka NAKAI	Applied Genetics and Ecology	1999/12/18-2000/1/13(H11) 2000/4/3-2000/4/11(H11) 2000/12/23-2001/1/18(H12) 2001/2/27-3/18(H12)	Dr. Pham Van Kim Dr. Nguyen Thi Thu Cuc Dr. Nguyen Van Huynh Dr. Tran Van Hai	Head of Dep. Plant Protection Associate Prof. Plant Protection Dep. Senior Lecturer, Plant Protection Dep. Lecturer, Plant Protection
Dr. Jwao WATANABE	Soil Biochemistry	2000/3/15-4/11 (H11)	Mr. Ngo Ngoc Hung Mr. Nguyen Thanh Hoi	Lecturer, Soil Science Dep. Lecturer, Crop Science Dep.
Dr. Toru TERAOKA	Plant Pathology	2000/12/25-2001/1/18(H12)	Dr. Pham Van Kim	Head of Dep. Plant Protection

\* Remark : Above table does not include 6 Japanese Expert's counterparts, who will visit CTU in March 2002

## List of Outputs in Terms of PDM

Evaluation Grid

(Ver.3; 2002.01.16)

<i>Evaluated Parameter</i>	<i>Evaluated Item</i>	<i>Source of Information</i>	<i>Result of Survey</i>	<i>Others</i>				
<b>Project Goal :</b> The research staff capability of environmental education and research is improved in College of Agriculture, Can Tho University.	0.1. The number of analytical techniques and the research methods / technologies newly introduced.	* by CTU's report	Topic	1	2	3	Total	
	0.2. The newly started research themes		0.1 The number of analytical techniques:	6	9	10	25	
	0.3. The number of papers / thesis reported to academic journals/societies		research methodologies:	2	1	3	6	
	0.4. The number of Texts and teaching materials improved and developed		0.2 The number of research themes: *	6	9	8	23	
	0.5. Contribution to improvements for lessons / practices in environmental education (the enforcement number of cases, the number of participants, etc.)		0.3 The number of thesis reported:	4	4	3	11	
		papers published/in print:		5	1	6		
		0.4 The number of text books:	16	1	1	18		
		other teaching materials:	3	1		4		
		0.5 The number of seminars: (Times) (Participants)	5	9	13	27		
		workshops: (Times) (Participants)	5	11	9	25		
<b>Output 1:</b> Improvements on educational contents in environmental field are tried.	1.1 The number of the curriculums of which the contents have been improved and/or establishment was done	by interview to C/P of CTU	Topic	1	2	3	Total	B; Under graduate course M; Masters course
			1.1 The number of curriculums established: B		3		3	
			M	1	4		5	
			curriculums improved: B	1	5	1	7	
M	1	2	1	4				

	1.2 The number of times of an experiment and the number of subjects which are taken in trial and constructed.		1.2 The number of subjects taken in trial: B M	Topic <u>1</u> <u>2</u> <u>3</u> <u>Total</u>	
<u>Output 2</u> : Researches on environment are carried out and these are created.	2. The number of reported papers and theses		2. The number of reports published: reports in print: oral reports:	Topic <u>1</u> <u>2</u> <u>3</u> <u>Total</u>  5 1 6 4 4 3 11	
<u>Output 3</u> : Technological training and transfer is done through training in Japan	3. The number of trainees and new technical items mastered		3. The number of trainees: new techniques:	Topic <u>1</u> <u>2</u> <u>3</u> <u>other pr.</u> <u>Total</u> 4 1 3 2 10 3 2 9 (1) 14	
<u>Output 4</u> : Master and/or doctor degree are obtained through assistance and advice of Japanese experts.	4. The number of degrees which are acquired or are in acquisition stage		4. The number of degrees: acquired: Msc. Dr. in acquisition stage: Msc. Dr.	by JICA course experts by Other program Total - - 1 1 - - 1 1 1 - - 1 1 4 3 8	
<u>Output 5</u> : Activities of education / research / information exchange with organizations concerned ( experiment station, provincial organizations ) in the Mekong Delta area are established.	5. The number of cooperation activities with other organizations		5. The number of cooperation activities with Other universities: Local governments:	3 universities 5 programs	

----- Details -----

01. Analytical techniques newly introduced:(by Expert's reports)

Topic 1. Anion exchange chromatograph ( Seto, 1999)

Cation exchange chromatograph ( Seto, 2000)

Determination of *E. coli* and *coliform* (Tarao, 1999)

Determination of *Streptococci* (Tarao, 2000)

Atomic absorption spectrophotometry (Izumi.Watanabe, 2000)

Determination of detergents by HPLC with fluorescence detector (Takada, 2000)

Topic 2. Determination of proteins by SDS poly-acrylamide gel electrophoresis (PAGE) method (Y.Hirata, 1999)

Determination of proteins by iso-electro focusing (Y. Hirata, 2000)

Determination of Protein by two dimensional electrophoresis (Y. Hirata, 2001)

Extraction of DNA from biological materials (Sato, 1999)

Amplifying of DNA by polymer chain reaction (PCR) method (Sato, 2001)

Analysis of genetic variety by treatment with restriction nucleases (Sato, 2001)

Isolation and Identification of *salmonellae* (Hayashidani, 1999)

Operation of Scanning Electron Microscope (Ogiwara, 2000)

Sensitivity test of pathogenic bacteria against medicines (Hayashidani, 2001)

Topic 3. Isolation and Identification of insect pests (Kunimi, Nakai, 1999)

Operation of phase contrast microscope (Nakai, 1999)

Diagnosis of diseased insects trapped on the field (Nakai, 1999, Kunimi, 2001)

Method of artificial propagation of *Spodoptera litura* (Nakai, 2000)

Ecological methods for sampling insects (Kunimi, 2001)

Rearing methods of the sampling insects (Kunimi, 2001)





- electrophoresis” (Nguyen Bach Loan, Nguyen Van Kiem, Vo Cong Thanh, Nguyen Thanh Long, Lam My Lan, Vu Nam Son, Nguyen Thi Ngoc Thanh)
- “The distribution of local pig variety in different ecological zones in the Mekong Delta of Vietnam”
- “The distribution of ducks and cattle in the region” (2 titles above; Luu Huu Manh, Nguyen Nhut Xuan Dung, Le Van Cuong, Vo Cong Thanh)
- “Analysis of the genetic diversity of waxy strain in rice”
- “Genetic resources diversity and adaptability of mango to severe environment soil aluminum and water condition”
- “Characterization and applicability of genetic diversity of Can Tho University soybean germplasm”
- “Screening and improvement of five rice cultivars for good quality export”
- (4 titles above; Vo Cong Thanh, Nguyen Bao Ve, Le Thi Kinh, Le Viet Dung, Huynh Ky, Duong Thi Re)
- “Genetic diversity of taro species (*Colocasia sp.*, *Alocasia sp.*), in the Mekong Delta” (Le Viet Dung)
- “Genetic diversity of species yam (*Dioscorea sp.*), in the Mekong Delta” (Le Viet Dung)
- Topic 3. “Diversity of the spider fauna and recommendation for conservation and utilization as natural enemies of insect pests in the Mekong Delta”
- “Seasonal occurrence of the major insect pest on vegetables in the Mekong Delta” (2 titles above; Nguyen Van Huynh)
- “Natural occurrence of natural enemies (parasitoids and entomo-pathogen) of *S. litura* and *S. exigua* and isolation of the candidate agents for microbial control insect pests on vegetables in the Mekong Delta”
- “Interaction of entomo-pathogen and parasitoids of *S. litura* in the Mekong Delta”
- “Evaluation of the efficiency of newly found *Sp. NPV* in the field” (3 titles above; Nguyen Thi Thu Cuc)
- “Field attraction of male moths distributed in Vietnam by synthetic pheromones”(Tran Van Hai, Pham Kim Son, Le Van Vang, Nguyen Ngoc Han)
- “Preliminary study affects of different color mulch materials on *Thrips*”
- “Preliminary study affects of different color mulch materials on *Aphids*”
- (2 titles above; Tran Thi Ba, Nguyen Van Huynh, Pham Kim Son, Nguyen Ngoc Han)

03. Research papers reported to academic journals: (= duplicate of “1.3”)

- Topic 2. “Variation of storage protein in cultivated soybean and its relative wild species in Vietnam”

Thao Trung Ba, Yutaka Hirata, Vo Cong Thanh; *Tropical Agriculture*, (2002) = plan

“Inheritance of the –subunit deficiency of 7S in soybean (*Glycine max L. Merrill*)

Vo Cong Thanh, Dai Thi Xuan Trang, Yutaka Hirata; *Tropical Agriculture*, (2002) = plan

“Characteristics of antenna protein diversity of prawns (*Macrobrachium*) in Cantho Province, using SDS-PAGE method”

Nguyen Thanh Ngoc, Vo Cong Thanh, Yutaka Hirata, Nguyen Van Thuong; *Tropical Agriculture*, (2002) = plan

“Soybean production situation during these 25 years in the Mekong Delta” Vo Cong Thanh, Yutaka Hirata; *Tropical Agriculture*, (2002) = plan

“Rice storage protein variations in the Mekong Delta” Vo Cong Thanh, Yutaka Hirata; *Tropical Agriculture*, (2002) = preparing

Topic 3. “Interaction of entomopathogen and parasitoids of *Spodoptera litura* in the Mekong Delta”

Nguyen Thi Thu Cuc, Madoka Nakai, Yasuhisa Kunimi; *Biocontrol and Technology* (2002) = plan

--- Research thesis reported to academic societies: (= duplicate of “1.3”)

Topic 2. - “Variation of tropical soybean storage protein in Vietnam” Vo Cong Thanh, Truong Ba Thao and Yutaka Hirata;

The 3<sup>rd</sup> International Conference of Soybean Processing and Utilization, p.121-122, (2000)

- “Change of storage protein during storage for long time”

C. Dong, Truong Ba Thao and Yutaka Hirata; The 3<sup>rd</sup> International Conference of Soybean Processing and Utilization, p.159, (2000)

- “Variation of seed storage proteins in Vietnamese soybean genetic resources” V. C. Thanh, T. B. Thao, Huynh Ky and Y. Hirata;

The 3<sup>rd</sup> International Conference of Soybean Processing and Utilization, p.161-162, (2000)

- “Variation of storage protein in cultivated soybean and its relative wild species in Vietnam”

Truong Ba Thao and Yutaka Hirata; The 8<sup>th</sup> Conference of Japan Academic Society for Tropical Agriculture, p.29-30, (2000)

“Proceeding of the first joint workshop on environmental conservation and sustainable agriculture”

Topic 1. - “Distribution of sediment load on agro- and aqua-ecology in An Giang Province” (Dr. Truong Thi Nga)

- “Nitrogen mineralization and effect of some agricultural chemicals on the soil with two rice, three rice and upland crops at Tien Giang Province” (Dr. Nguyen Bao Ve)

- “Impact of intensive cultivation of triple cropping of rice to agro-ecological environment in the Mekong Delta” (Dr. Nguyen Huu Chiem)

- "Feasibility and prospect of applying VACB model in household in relation to rural environmental improvement" (MSc. Le Tuyet Minh)

Topic 3. - "Survey of cultivating situation, pesticide-use way and controlling methods of insect on vegetables at Can Tho Province, summer-autumn crops in 1998" (Dr. Tran Van Hai, MSc. Tran Thi Ba)

- "Residues of some insecticides in soil, water and fruits and effect of insecticides on the abundance of soil fauna in fruit orchards"

(Dr. Nguyen Thi Thu Cuc, MSc. Nguyen Thi Xuan Thu, Mr. Ngo Thanh Tri)

- "Some early studies on the predatory capacity of spiders on insect pest of crop plants in the Mekong Delta" (Dr. Nguyen Van Huynh)

#### 04. Texts developed;

Topic 1. 100: Outline of Environmental Science (by Dr. Seto, Dr. Chiem, 2001) = **plan**

111: Recycle Organic Waste

112: Air, Soil and Water Quality Assessment

113: Basic Environmental Science

114: Hazardous Waste Management

121: Solid Waste Treatment

122: Environmental Pollution

123: Air and Noise Pollution 1

124: Environmental Indicator

131: Air and Noise Pollution 2

132: Environmental Impact Assessment

133: Soil Resource

134: Inland Water Management

141: Inland Water Resource

142: Environmental Management

( 加外-大学の予算 )

## The Budget system of Can Tho University (CTU)

CTU budget consists of the following income.

1. MOET budget
2. Student fee such as entrance fee and yearly school fee
3. Funds from other countries.

### 1. MOET Budget

MOET budget is further divided into two categories of 1) common expenditures mainly for the staff salaries, education and research, and 2) development expenditures for basic construction and research activities. The expended amount by MOET for five(5) years for common expenditure was about 23 billion Vietnam Dong (15.3 million US\$, 3.05 million US\$ per year in average). For development expenditure, 25% to 30% of the common expenditure is generally expended by the MOET besides the common expenditure. Their amounts are generally increased by 10% every year.

### 2. Student Fee

The total student fee amounted to 13 billion Dong per year (8.6 million US\$). The expenditure of student fee are limited to the labour cost (55%) and reconstruction, machinery and facilities (45%).

### 3. Funds from other countries

The funds from other countries varied every year. Total amount of funds from other countries amounted to US\$1.3 million last year. The biggest donor in CTU are from Holland in the field of management, information technology, economy, basic science research, pedagogy, technology, engineering, bio-technology, forest and medicine and the next is Belgium in the fields of management, information technology, economy, pedagogy, technology, engineering, bio-technology and forest.

The College of Agriculture has just started the control of expenditure since last year however many expenditure from CTU are still flowed directly to each department.

**Budget for the College of Agriculture from MOET (Jan to July, 2001)**

Items	Grand total	Expense budget	Other budget
I. Administrative activity	US\$7,400	US\$2,074	US\$5,326
II. Practice/Experiment	US\$54,267	US\$38,039	US\$16,228
Dept., of Soil Science	US\$3,093	US\$713	US\$2,380
Dept., of Environment	US\$3,221	US\$1,109	US\$2,113
Dept., of Plant Protection	US\$2,439	US\$671	US\$1,767
Dept., of Food Technology	US\$9,149	US\$4,044	US\$5,105
Dept., of Crop Science	US\$3,079	US\$4,268	-US\$1,189
Dept., of Animal Science	US\$11,153	US\$8,899	US\$2,255
Dept., of Veterinary Medicine	US\$3,091	US\$3,799	-US\$707
Institute of Aquaculture	US\$7,361	US\$5,111	US\$2,250
For Part-time Lecturers	US\$937	US\$427	US\$510
Purchasing Consumables (Chemicals, materials etc.,)	US\$10743	US\$8,998	US\$1,745
III. Maintenance and repair of equipment and facilities	US\$7,933	US\$7,854	US\$79
<b>Total</b>	<b>US\$69,601</b>	<b>US\$47,967</b>	<b>US\$21,633</b>

Remark: Vietnamese Dong converted into US Dollars at the rate of 15,000 Dong per US Dollar.

Source : College of Agriculture, CTU, excluding the staff salaries

**Budget for for the College of Agriculture from MOET for 2002**

Item	Amount
Fuel	US\$3,400
Sanitary goods etc.,	US\$800
Conference & Meeting	US\$102
Allowance	US\$3,133
Lecturers coming from outside	US\$667
Office materials	US\$5,667
Laboratory materials and consumables	US\$70,267
Maintenance / repair of equipment and facilities	US\$13,333
Education and Research	US\$1,753
<b>Total</b>	<b>US\$99,122</b>

Remark: Vietnamese Dong converted into US Dollars at the rate of 15,000 Dong per US Dollar.

Source : CTU, excluding staff salaries