

4. 評価グリッド（結果）

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調査項目	データ/情報	情報源	結果
カリキュラム改訂進捗状況	カリキュラム数 レベルと質	四半期報告書 専門家報告書	A
実験・実習の改善状況	改善実験・実習数 妥当性	四半期報告書 専門家報告書	A
教科書及び教材の改訂進捗状況	カリキュラム、教材数 レベルと質	四半期報告書 専門家報告書	A
技術移転による C/P の能力向上	C/P の理解度	アンケート/インタビュー アンケートカ	B
機材の有効利用	教育への使用 機材操作レベル	アンケート/インタビュー インタビュー-専門家 実査	A
文献情報の整備と利用	文献の数と種類 利用状況	四半期報告書 インタビュー/アンケート 実査	A
研究及び論文の状況 論文に対する評価	論文の分野と数 レベルと質 国際学会/ジャーナル	四半期報告書 インタビュー-専門家 インタビュー-専門家	A B C
習得された技術の状況	研修生数と技術数 研修内容 理解度	四半期報告書 四半期報告書 インタビュー/アンケート	A A A
学位取得の状況	学位取得数 学位取得中数	四半期報告書 四半期報告書	A A
協力指導の状況	指導法、内容	専門家報告書	A
関係機関との教育・研究交流、情報交換の活動の状況と内容	協力活動数、内容 活動評価	四半期報告書 インタビュー-専門家	C B
活動と成果の関係	活動計画・実績 モニタリング指標	四半期報告書	-
成果と投入の関係	投入計画・実績 モニタリング指標	四半期報告書	-
代替案の検討と実現の可能性調査	計画案の問題点	インタビューカ インタビュー-専門家	A C
他のプロジェクト調査	他のプロジェクト 本プロジェクトとの関係	インタビュー-専門家 インタビューカ	C
環境教育・研究の進捗状況 環境教育・研究能力の向上の度合い	分析・研究技術手法 新しい研究テーマ 学会及び学会誌論文 改訂教科書及び教材 環境教育への貢献 学位取得状況 環境教育・研究レベル 機材の利用状況	四半期報告書 インタビュー-専門家 インタビュー/アンケート 実査	A
成果とプロジェクト目標の関係 プロジェクト目標達成上の問題点	成果と目標設定経緯 考え方と方針 実施上の問題点 PDM 変更の経緯	四半期報告書 事前調査報告書 実施協議報告書 巡回指導報告書 インタビュー-専門家 インタビューカ	B
独自に取り組んだ項目	開発教科書及び教材 研究分野 カリキュラム	四半期報告書 インタビュー-専門家 インタビューカ	-
プロジェクト目標と上位目標の指標の関係 及び数値の関係	指標設定経緯 ヘースラインサーベイ結果	事前調査報告書 実施協議報告書 インタビュー-専門家	-
上位目標達成に必要な外部条件	必要条件	インタビュー-専門家	-
予想し得なかったインパクト	プラス・マイナス	インタビュー-専門家 アンケート/インタビュー	B
上位目標と相手国開発政策との整合性 要請の背景とその後の変化 分野における計画の継続性 ターゲットグループ選定の適正度 ターゲットグループのニーズ ヴァエトナム側の受け入れ体制	同左	開発計画 統計資料 MET インタビュー MPI インタビュー 事前調査報告書 実施協議報告書 インタビューカ インタビュー-専門家	A
日本の援助方針	同左	外務省資料	A

援助方針との整合性		事前調査報告書	
ベトナム側の方針の継続性 本プロジェクトの重要性 農学部的发展能力(教員、機材、意欲等) 財政的独立 社会・文化的側面への影響 女性、貧困層への配慮等	同左	MIET インタビュー MPI インタビュー アンケート/インタビュー CTU 経理部調査 インタビュー専門家 現地資料(新聞・雑誌等) 実査	B
地方自治体、コミュニティ及び農民の環境に対する意識 環境データ	同左	現地資料(公開論文等) 統計資料	-
予算措置 教職員配置計画 維持管理体制等	CTU 予算配分 他ドナーの状況 教員の定着・定年 機材維持状況	学長インタビュー CTU 経理部 インタビュー専門家 インタビューカ 実査	B

注) インタビューカ=カウンターパートへのインタビュー
アンケート/インタビュー=カウンターパートへのアンケート及びインタビュー
結果: A=非常に良い或いは妥当、B=良い或いは問題無し、C=普通、D=問題有り、E=問題多い
- =データ不足或いは判定困難

Project Design Matrix(PDM) Initial Version

Project Title : Improvement of Environmental Education in Agricultural Sciences in Can Tho University in the Republic of Vietnam

Period of Cooperation : 3 years from April 1, 1999 to March 31, 2002

Implementing Agency : College of Agriculture, Can Tho University

Narrative Summary	Objectively Verifiable Indicators	Means of Verification	Important Assumption
(Overall Goal) The environment-oriented agricultural techniques will be introduced and the environment will be improved in the model area through extension activities of the College of Agriculture, Can Tho University.	Decreasing the quantities of the dosage of chemical fertilizers, insecticide and pesticide compared with the level when the project commenced.	Data collected in the model area by the staff of the College of Agriculture, Cantho Univ..	
(Project Purpose) Environmental education in Agricultural Sciences in Can Tho University will be improved	1. Increasing the number of the students who attend the related lectures. 2. Increasing the request of farmers and communities for extension activities.	Annual report Reports of JICA experts	1. The role of Cantho Univ., will not be changed in the Mekong Delta. 2. The relations with farmer and communities in the Mekong Delta will not deteriorate.
(Output) 1. The system of environmental education in the Department will be improved. 2. Human resources in the field of environmental education will be developed. 3. The extension activities for farmers and communities in the Mekong Delta areas will be improved. 4. Relations with other universities and institutes will be established.	1-1. The number of the related lecturers, experiments, and field studies. 1-2. The number of content of the material. 2-1. Percentage that lectures carry out the lecturers, experiments and fields studies in accordance with the revised curriculum. 2-2. The number of the lecturers who acquire degrees. 2-3. The number of academic societies and reports on related issues. 3-1. The number of seminars, symposiums, and workshops 3-2. The number of extension activities for farmers and communities. 4. The number of collaborative activities with other universities and institutes.	Annual report Reports of JICA experts	1. The present management of Cantho Univ., will not change. 2. The amount of the budget of Cantho Univ., will not change. 3. The lecturers and engineers of Cantho Univ., will continue to work.
(Activities) 1-1 Make a master plan for Implementation of program to improve education and research capability on environmental issues. 1-2 Establish and hold a committee for curriculum development 1-3 Collect data for environmental conditions in the Mekong Delta periodically for curriculum/teaching materials development. 1-4 Develop teaching materials for lectures. 1-5 Develop teaching materials for experiments and field studies 1-6 Develop a system of management and maintenance for the machinery and equipment. 2-1 Suggest education research and development for lecturers 2-2 Promote the acquisition of degrees. 2-3 Develop human resources who are in charge of the engineers of the operation of the machinery and equipment. 3-1 Hold open seminars on related issues. 3-2 Establish information linkage among related government agencies (including municipal government), institutes, and communities in the Mekong Delta. 4-1 Establish a network with other universities. 4-2 Exchange research and development activities.	(Input) [Vietnamese side] 1. Land, facilities and equipment 2. Running expenses 3. Assigning counterpart staff (including administration staff and secretaries) 4. Urban transportation facilities for experts [Japanese side] 1. Dispatching expert(s) 1) Long-term expert(s) (Project Manager/Coordinator) 2) Short-term experts 8 in total 2. Provision of machinery, equipment and other materials 3. Training of counterpart staff in Japan 1 or 2 /year		The present management of Cantho University will not change. (Pre-conditions) The Master plan for the improvement of the quality of agricultural education and research is established.

Annex II

Project Design Matrix Original Version (Revised on Sept., 13, 2001)

Project Title : Improvement of Environmental Education in Agricultural Sciences in Can Tho University in the Republic of Vietnam

Period of Cooperation : 3 years from April 1, 1999 to March 31, 2002

Implementing Agency : College of Agriculture, Can Tho University

Project Area : Can Tho University

Super Goal : Development of Mekong Delta Area

(28/11/99)

Narrative Summary	Objectively Verifiable Indicators	Means of Verification	Important Assumption
<p>(Overall Goal) Human resources in the Mekong Delta area are developed through enrichment of agricultural and environmental education in Can Tho University.</p>	<ol style="list-style-type: none"> 1. Texts and contents of teaching materials uniquely developed by the university research staff. 2. The new research field uniquely designed and started by the university research staff. 3. The contents of a curriculum uniquely enacted by the University research staff. 	<p>1/2/3 Reports by Faculty of Agriculture, or interview to the person concerned</p>	<p>Required financial support of CTU and Ministry of Education and Training is continued, without change in policy, after the project terminate</p>
<p>(Project Purpose) The research staff capability of environmental education and research is improved in College of Agriculture, Can Tho University.</p>	<ol style="list-style-type: none"> 1. The number of the analytical techniques and the research methods/technologies newly introduced. 2. The newly started research themes. 3. The number of papers/thesis reported to academic journals/societies. 4. The number of texts and teaching materials improved and developed. 5. Contribution to improvements for lessons/practices in environmental education (the enforcement number of cases, the number of participants, etc., 	<p>1/2/4/5 Expert reports 1/2/4/5 Interviews to C/P 4/5 Evaluation by the experts</p>	<p>Time and economical margin for C/P to concentrate on the improvements of education and research are secured.</p>
<p>(Output) 1. Improvements on educational contents in environmental field are tried. 2. Researches on environment are carried out and theses are created 3. Technological training and transfer is done through training in Japan. 4. Master and/or doctor degree are obtained through assistance and advice of Japanese experts. 5. Activities of education/research/information exchange with other concerned organizations.</p>	<ol style="list-style-type: none"> 1(1) The number of the curriculums of which the contents have been improved and/or establishment was done. 1(2) The number of times of an experiment and the number of subjects which are taken in trial and constructed. 2 The number of reported papers and theses. 3. The number of trainees and new technical items mastered. 4. The number of the degrees which were acquired or are in an acquisition stage. 5. The number of cooperation activities with other organizations. 	<p>1/2/3/5 Reports of College of Agriculture 4 Reports of ex-participants of training</p>	<ol style="list-style-type: none"> 1. Experts are sent as the schedule. 2. It is supported by CTU continually. 3. The acceptance of training members are secured. 4. The equipment are introduced as the schedule.
<p>(Activities) 1. Implementation of environmental education and research (1) Assistance and advice for lecturers by Japanese experts (2) Assistance and advice of laboratory experiment and practice to research staff by Japanese experts. (3) Assistance and advice of field investigation study to research staff by Japanese experts. (4) Assistance and advice towards improvement of educational contents to research staff by Japanese experts. (5) Thesis creation assistance and advice to research staff by Japanese experts. 2. Joint activity for text teaching materials development. 3. Training in Japan. 4. Promotion of degree acquisition of research staff. 5. Enhancement of educational and research materials and equipment (1) Advice for enhancement and management of research materials, equipment and facilities. (2) Enhancement of reference information on education and research 6. Advice for strengthening of cooperation with other concerned organizations.</p>	<p>(Input) [Vietnamese side] (1) Offer of institution, such as work rooms and laboratories (2) Arrangement of C/P (3) Maintenance administrative expenses (4) Research cost [Japanese side] (1) Experts (Long-term + short-term) (2) To accept trainees (Long-term + short-term) (3) Supply of equipments and reference (4) Research support expense</p>		<p><u>Precondition</u> 1. The education and research in environmental field are comparatively new fields, and the improvement in teachers' education/research capability is desired in CTU. 2. The equipments and institution for environmental education and research are inadequate.</p>

Annex III

PDMc

Project Design Matrix for Evaluation

Project Title : Improvement of Environmental Education in Agricultural Sciences in Can Tho University in the Republic of Vietnam

Period of Cooperation :3 years from April 1, 1999 to March 31, 2002

Implementing Agency : College of Agriculture, Can Tho University

Project Area : Can Tho University

Super Goal : Development of Mekong Delta Area

Target Group : Lecturers and researchers in Cantho University

Narrative Summary	Objectively Verifiable Indicators	Means of Verification	Important Assumption
<p>(Overall Goal) Human resources in the Mekong Della area are developed through enrichment of agricultural and environmental education in Can Tho University.</p>	<ol style="list-style-type: none"> 1. Texts and contents of leaching materials uniquely developed by the university research staff. 2. The new research field uniquely designed and started by the university research staff. 3. The contents of a curriculum uniquely enacted by the University research staff. 4. The number of communities or farmers participated in the extension activities 5. The number of communities or farmers had a interest in the environmental issues. 6. The number of communities or farmers tried to improve the pollution. 	<ol style="list-style-type: none"> 1 Project reports Data of CTU 2/3/4/5/6 Project reports Interview or questionnaire survey 	<ul style="list-style-type: none"> • The financial support for CTU by the Government is continued. • The policy of the Government to support CTU is continued.
<p>(Project Purpose) The research staff capability of environmental education and research is improved in College of Agriculture, Can Tho University.</p>	<ol style="list-style-type: none"> 1. The number of the analytical techniques and the research methods/technologies newly introduced. 2. The newly started research themes. 3. The number of papers/thesis reported to academic journals/societies. 4. The number of texts and teaching materials improved and developed. 5. Contribution to improvements for lessons/practices in environmental education (the enforcement number of cases, the number of participants, etc., 6. The number of the degrees which were acquired or are in an acquisition stage. 7. The introduction of equipment into the education and research. 	<ol style="list-style-type: none"> 1 Project reports 2/3/4/5/6 Data of CTU 7 CTU interview 	<ul style="list-style-type: none"> • The trained C/Ps continue to work in the College of Agriculture, CTU
<p>(Output) 1. Improvements on educational contents in environmental field are tried. 2. Researches on environment are carried out and theses are created 3. Technological training and transfer is done through training in Japan. 4. Master and/or doctor degree are obtained through assistance and advice of Japanese experts. 5. Activities of education/research/information exchange with other concerned organizations.</p>	<ol style="list-style-type: none"> 1(1)The number of the curriculums of which the contents have been improved and/or establishment was done. 1(2)The number of times of an experiment and the number of subjects which are taken in trial and constructed. 1(3)The textbooks and teaching materials revised 1(4)The utilization of equipment on education 1(5)The utilization of reference information provided 2(1)The number of reported papers and theses. 2(2)The number of reported papers accepted by the academic societies and journals. 3. The number of trainees and new technical items mastered. 4. The number of the degrees which were acquired or are in an acquisition stage. 5. The number of cooperation activities with other organizations. 	<ol style="list-style-type: none"> 1 Project reports and interview survey 2 Project reports Data of CTU 3 Project reports C/P interview 4 Project reports 5 Project reports 	<ul style="list-style-type: none"> • The environmental condition in Mekong Delta area is not changed drastically
<p>(Activities) 1. Implementation of environmental education and research (1) Assistance and advice for lecturers by Japanese experts (2) Assistance and advice of laboratory experiment and practice to research staff by Japanese experts. (3) Assistance and advice of field investigation study to research staff by Japanese experts. (4) Assistance and advice towards improvement of educational contents to research staff by Japanese experts. (5) Advice for enhancement and management of research materials, equipment and facilities (6) Enhancement of reference information on education and research (7) Joint activity for text teaching materials development. 2. Thesis creation assistance and advice to research staff by Japanese experts. 3. Training in Japan. 4. Promolion of degree acquisition of research staff. 5. Advice for strengthening of cooperation with other concerned organizations.</p>	<p>(Input)</p> <p>[Vietnamese side] (1) Assignment of administrative personnel (2) Provision of land and facilities (3) Provision of equipment (4) Running expenses necessary for the implementation of the Project. (5) Assignment of counterpart personnel (6) Provision of urban transportation facilities</p> <p>[Japanese side] (1) Long-term and short-term experts (2) Training of Vietnamese counterpart personnel in Japan (3) Provision of equipment and reference materials</p>		<ul style="list-style-type: none"> • The trained C/Ps continue to work in the College of Agriculture, CTU • The farmers in Mekong Delta area collaborate with the extension activities of the College of Agriculture, CTU. <p><u>Preconditions</u> The local governments and communities in Mekong Delta area collaborate with the Project.</p>

Project Design Matrix for Evaluation

プロジェクト名：農学における環境教育の充実
 期間：1999年4月1日から2002年3月31日までの3年間
 ターゲットグループ：メコンデルタ地域の農村部

実施機関：カントー大学農学部
 Super Goal：メコンデルタ地域の発展

対象地域：カントー大学及びメコンデルタ地域

Narrative Summary	Objectively Verifiable Indicators	Means of Verification	Important Assumption
(Overall Goal) カントー大学における農学・環境教育の充実を通して、メコンデルタ地域の人材が育成される。	1 大学教員が独自に開発したテキスト・教材内容 2 大学教員が独自にとり組んだ新たな研究分野 3 大学教員が独自に制定したカリキュラム内容 4 普及活動に参加したコミュニティあるいは農民の数 5 環境問題に関心を寄せたコミュニティ及び農民の数 6 汚染削減に取り組んだコミュニティ及び農民の数	1 Project reports Data of CTU 2/3/4/5/6 Project reports Interview or questionnaire survey	<ul style="list-style-type: none"> ● 政府によるカントー大学に対する財政的支援が継続する。 ● カントー大学の環境教育への政府の方針が継続する。
(Project Purpose) カントー大学農学部において、大学教員の農学分野における環境教育・研究能力が向上する。	1 新たに導入された分析技術・研究手法の数 2 新たに開始された研究テーマの数 3 学会／論文発表の件数 4 テキスト教材が改善・開発される数 5 環境教育における授業・実習改善への寄与（実施件数、受講者数等） 6 取得された、または取得段階の学位の数 7 機材の研究・教育への導入	1 Project reports 2/3/4/5/6 Data of CTU 7 CTU interview	<ul style="list-style-type: none"> ● 訓練されたカウンターパートが農学部で引き続き働く。
(Output) 1. 環境分野の教育内容の改善が試みられる。 2. 環境に関する研究が実施され論文が作成される。 3. 日本での研修によって技術が習得される。 4. 専門家の協力・指導によって学位が取得される。 5. 関係機関との教育・研究交流、情報交換等の活動が定着する。	1(1) 内容が改善され／新設されたカリキュラムの数 (2) 試行的にとり組まれた実験・実習の回数・科目数 (3) 改訂された教科書及び教材 (4) 機材の教育への利用状況 (5) 整備された文献とその利用状況 2(1) 作成された論文の数 (2) 学会及び学会誌に取り上げられた論文の数 3 研修員数および習得された技術項目数 4 取得された、または取得段階にある学位の数 5 連携活動の数	1 Project reports and interview survey 2 Project reports Data of CTU 3 Project reports C/P interview 4 Project reports 5 Project reports	<ul style="list-style-type: none"> ● メコンデルタの環境状況が劇的に変化しない。
(Activities) 1 環境に関する教育・研究の実施 (1) 専門家による教員への講義協力・指導 (2) 専門家による教員への実験・実習の協力・指導 (3) 専門家による教員へのフィールド調査協力・指導 (4) 専門家による教員への教育内容改善にむけた協力・指導 (5) 教育・研究機材の整備と運営指導 (6) 教育・研究に関する文献情報の整備 (7) テキスト教材の共同開発 2 専門家による教員への論文作成協力・指導 3 日本での研修実施 4 教員の学位取得の促進 5 関係機関（地域諸機関ならびに他大学）との連携強化	(Input) [Vietnamese side] . Assignment of administrative personnel . Provision of land and facilities . Provision of equipment . Running expenses necessary for the implementation of the Project . Assignment of counterpart personnel . Provision of urban transportation facilities [Japanese side] . Long-term experts . Short-term experts . Training of Vietnamese counterpart personnel in Japan . Provision of equipment	<ul style="list-style-type: none"> ● 訓練されたカウンターパートが農学部で引き続き働く。 ● メコンデルタの農民が農学部の普及活動に協力する。 (Pre-conditions) 地方公共団体及びコミュニティがプロジェクトに協力する。	

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OUTPUT	ACTIVITIES	TARGET		JFY1999												JFY 2000												JFY 2001												MODIFICATION	RESPONSIBLE PERSON IN PROJECT TEAM	INPUT	REMARKS												
				CY1999												CY2000												CY2001																C2002											
				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																
1. Improvements on educational contents in environmental field are tried.	1. Implementation of environmental education and research			[Planned]												[Planned]												[Planned]																											
	(1) Assistance and advice for lecturers by Japanese experts	Capacity building	Planned	[Planned]												[Planned]												[Planned]													Dean of College of Agriculture	C/P Experts													
		(1) Assistance and advice for lecturers by Japanese experts	Implemented																																																				
		(2) Assistance and advice of laboratory experiment and practice to research staff by Japanese experts.	Topic 1 Soil and aquatic environmental	Planned	[Planned]												[Planned]												[Planned]													Head of Dept., of Environment	C/P Experts												
			Topic 2 Impacts of development activities on the bio-diversity	Implemented																																																			
			Topic 3 Foundation of environment-symbiotic agriculture	Planned	[Planned]												[Planned]												[Planned]													Head of Dept., of veterinary Medicine	C/P Experts												
			Topic 3 Foundation of environment-symbiotic agriculture	Implemented																																																			
		(3) Assistance and advice of field investigation study to research staff by Japanese experts.	Topic 1 Soil and aquatic environmental sciences	Planned	[Planned]												[Planned]												[Planned]													Head of Dept., of Environment	C/P Experts												
			Topic 2 Impacts of development activities on the bio-diversity	Implemented																																																			
			Topic 3 Foundation of environment-symbiotic agriculture	Planned	[Planned]												[Planned]												[Planned]													Head of Dept., of Plant Protection	C/P Experts												
			Topic 3 Foundation of environment-symbiotic agriculture	Implemented																																																			
		(4) Assistance and advice towards improvement of educational contents to research staff by Japanese experts.	Topic 1 Soil and aquatic environmental sciences	Planned	[Planned]												[Planned]												[Planned]													Head of Dept., of Environment	C/P Experts												
			Topic 2 Impacts of development activities on the bio-diversity	Implemented																																																			
		Topic 3 Foundation of environment-symbiotic agriculture	Planned	[Planned]												[Planned]												[Planned]													Head of Dept., of veterinary Medicine	C/P Experts													
		Topic 3 Foundation of environment-symbiotic agriculture	Implemented																																																				
	(5) Advice for enhancement and management of research materials, equipment and facilities.	Management & maintenance	Planned	[Planned]												[Planned]												[Planned]													Head of Dept., of environment, veterinary, plant	C/P Experts Equipment													
		Management & maintenance	Implemented																																																				
	(6) Enhancement of reference information on education and research	Reference information	Planned	[Planned]												[Planned]												[Planned]													Dean of College of Agriculture	Reference information													
		Reference information	Implemented	[Planned]												[Planned]												[Planned]																											
	(7) Joint activity for text teaching materials development.	Teaching materials	Planned	[Planned]												[Planned]												[Planned]																											
		Teaching materials	Implemented																																																				
2. Researches on environment are carried out and theses are created.	2. Thesis creation assistance and advice to research staff by Japanese experts.	Thesis & research paper	Planned																																																				
		Thesis & research paper	Implemented																																																				
3. Technological training and transfer is done through training in Japan.	3. Training in Japan.	Training	Planned																																																				
		Training	Implemented																																																				
4. Master and/or doctor degree are obtained through assistance and advice of Japanese experts.	4. Promotion of degree acquisition of research staff.	Studying abroad	Planned																																																				
		Studying abroad	Implemented																																																				
5. Activities of education/research/information exchange with other concerned organizations.	5. Advice for strengthening of cooperation with other concerned organizations.	Education & research information	Planned	[Planned]												[Planned]												[Planned]													Head of Dept., of environment, veterinary, plant	C/P													
		Education & research information	Implemented																																																				

☐ Activities of JFY1999 ☒ Activities of JFY2000 ☑ Activities of JFY2001