

[添付資料]

- 1 事前評価ミニッツ（英語）
- 2 事前評価ミニッツ（西語）
- 3 要員配置の予算措置に関するメモランダム（英語）（事前評価時）
- 4 事前評価調査団 主要面談者リスト
- 5 R/D（英語）
- 6 実施協議時ミニッツ（英語）
- 7 成果の指標 2-3 及び 4-1 に係るコスト面に関する覚書き
- 8 実施協議時のPDM(日語)
- 9 実施協議時の活動計画（PO/日語）
- 10 実施概念図
- 11 水産開発局組織図
- 12 種苗生産施設整備計画に係る土居団員報告書
- 13 住民の資源管理意識に関するアンケート調査結果（評価分析団員がローカルコンサルタントとともに実施）

[添付資料]

1 事前評価ミニッツ（英語）

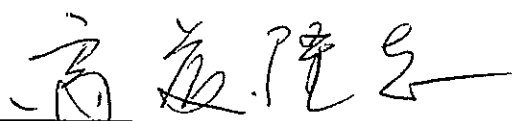
MINUTES OF MEETINGS
BETWEEN
THE JAPANESE PREPARATORY STUDY TEAM AND
THE AUTHORITIES CONCERNED OF THE REPUBLIC OF EL SALVADOR
ON JAPANESE TECHNICAL COOPERATION
FOR
THE PROJECT FOR SHELLFISH AQUACULTURE DEVELOPMENT
IN THE REPUBLIC OF EL SALVADOR

The Japanese Preparatory Study Team (hereinafter referred to as “the Team”), organized by Japan International Cooperation Agency (hereinafter referred to as “JICA”), headed by Mr. Takashi Saito, visited the Republic of El Salvador from September 26th to October 7th, 2004 for the purpose of identifying an outline of Japanese technical cooperation concerning the Project for Shellfish Aquaculture Development in the Republic of El Salvador (hereinafter referred to as “the Project”).

During its study in the Republic of El Salvador, the Team exchanged their views and had a series of discussions with the authorities concerned of the Government of the Republic of El Salvador (hereinafter referred to as “the Salvadorian Sides”) and the representatives of fishery sector, in respect of the desirable measures to be taken by both Government for the successful implementation of the Project.

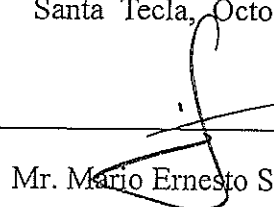
As a result of meetings, the both sides agreed upon the matters referred to in the documents attached hereto.

Done in duplicate in English and Spanish languages, each text is considered equally authentic. In case of any divergence of interpretation, the English text shall prevail.



Mr. Takashi Saito
Leader
Preparatory Study Team
Japan International Cooperation Agency
Japan

Santa Tecla, October 6th, 2004



Mr. Mario Ernesto Salaverria
Minister
Ministry of Agriculture and Livestock
The Republic of El Salvador

ATTACHED DOCUMENTS

The Salvadorian Sides and the Team agreed upon the following articles.

I . The Outcome of the Discussions

The both sides discussed upon the tentative framework of the project and measures to be taken based upon the results of the past Project on “Aquaculture Development in Estuarine Areas”, the Development Study “Artisanal Fisheries Development in El Salvador”, and the results of the study done by Japanese Expert in the field of the Coastal Fisheries Development dispatched from February to April 2004.

As the outcome of the discussions, the tentative framework of the Project and the measures to be taken by both sides have been clarified.

The both sides agreed that the Salvadorian side will take ownership and overall responsibilities for the successful and effective implementation of the Project.

II . Tentative Framework of the Project

1. Name of the Project

“Project for Shellfish Aquaculture Development in the Republic of El Salvador”

2. Overall Goal

Shellfish culture is developed and extended in the Jiquilisco Bay and the coastal area of the Department of La Union based on the awareness of sustainable use of natural resources.

(※Note: Department means Prefecture in Japan.)

3. Project Purpose

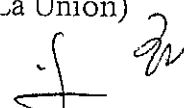
1) Shellfish culture technique is established in the Jiquilisco Bay and the coastal area of the Department of La Union based on the awareness of sustainable use of natural resources.

2) Measures to stabilize and improve income source for model groups are examined.

4. Target group

(1) Artisanal fishers and aquaculturist and their families that live around the Jiquilisco Bay and the coastal area of the Department of La Union.

(2) CPT(CENDEPESCA Puerto El Triunfo) and CLU(CENDEPESCA La Union)



5. Target areas

The Jiquilisco Bay and the coast area of La Union Department

6. Outputs

- 1) The shellfish seeds production technique is established.
- 2) The shellfish culture technique, which is acceptable to local fishers is established.
- 3) The awareness of inhabitants in model group communities on sustainable use of natural resources and conservation of the marine and coastal areas is increased.
- 4) Shellfish culture, including commercialization techniques developed by the project are validated in Model projects.
- 5) Comprehensive plans to stabilize and improve income of model groups, including shellfish culture, are formulated by model project groups.

Note: Tentative Selection Criteria of Model Project Groups is shown in Annex V.

7. Activities

1-1: Investigate planktonic larva of *Anadara* in the Jiquilisco Bay.

1-1-1. Transfer survey techniques to counterparts.

1-1-2. Collect natural *Anadara* seeds.

1-1-3. Transfer natural seed collection methods to counterparts.

1-1-4. Prepare investigation outcome reports.

1-1-5. Prepare technical manual on investigation methodology of planktonic larva and seed collection.

1-2: Carry out seed production of Pacific Oyster at the wet laboratory.

1-2-1. Carry out seed production, using imported larvae (eye oyster).

1-2-2. Prepare technical manual on seed production of Pacific Oyster for biologists and technical staffs at CENDEPESCA.

1-3. Continue installation activities of artificial reefs for local oyster in maritime areas.

1-3-1. Investigate the environment of the natural reefs of local oyster.

1-3-2. Design and develop appropriate form for artificial reefs for Pacific Oyster.

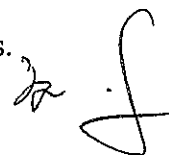
1-3-3. Monitor the fixation situation of spats.

2-1: Carry out experimental culture of Pacific Oyster.

2-1-1. Continue experiments of Pacific Oyster culture with cooperation of model groups.

2-1-2. Create technical manual on Pacific Oyster culture for marine biologists and technical staffs at CENDEPESCA.

2-1-3. Instruction manual for fishermen is prepared by counterparts.



- 2-2: Carry out experiment on Anadara culture.
 - 2-2-1. Continue experiments on Anadara culture in model project areas.
 - 2-2-2. Instruction manual of Anadara culture for fishers is prepared by counterparts.
- 3-1: Plan awareness promotion activities for sustainable use of coastal resources for residents with concerned organizations.
- 3-2: Create materials on awareness promotion activities for sustainable use of coastal resources .
- 3-3: Conduct awareness promotion activities for sustainable use of coastal resources with participation of local residents.
- 3-4: Prepare an extension manual on fishers' consciousness building about sustainable use of coastal resources.
- 4-1: Select model groups out of shellfish culture Model Groups.
- 4-2: Carry out Anadara culture with model groups.
- 4-3: Carry out local oyster culture with model groups.
- 4-4: Construct local oyster reef with model groups.
- 5-1: Select model groups out of shellfish culture Model Project Groups.
- 5-2: Carry out investigation on productive activities besides shellfish culture.
- 5-3: Facilitate model groups with making model project plans to comprehensively stabilize and improved their income including shellfish culture.

8. Duration of the Project

Three (3) years.

III. Administration of the Project

1. Implementing organization

(1) Executing Institute

Fisheries and Aquaculture Development Center (Centro de Desarrollo de la Pesca y la Acuicultura), Ministry of Agriculture and Livestock (hereinafter referred to as "CENDEPESCA") will bear overall responsibilities for the implementation of the Project. Activities referred in the PDM will be conducted with CENDEPESCA Puerto El Triunfo(hereinafter referred to as "CPT"), CENDEPESCA La Union (hereinafter referred to as "CLU"), Division of Social Development(Desarrollo Social) and Division of Education and Training (Capacitacion).

(2) Collaborating organizations



The Project will be implemented with the collaboration of concerned organizations in the fields referred below;

- a. Social development of communities
- b. Coastal environment and resources management
- c. Environmental education
- d. Women in development (WID)

The Salvadorian side will have further discussions to clarify the organizations to join the Project and their functions.

2. Management of the Project

For effective and successful management of the Project, the appointment of the following position will be required as well as the establishment of committees as the following. The tentative functions and members of the followings are showed in Annex III.

- (1) Project Director
- (2) Project Manager
- (3) Project Sub-Manager
- (4) General Coordinator
- (5) Joint Coordinating Committee
- (6) Project Steering Committee
- (7) The Technical Committee
- (8) Monthly meetings

IV. Measures to be taken by both sides

1. Japanese sides

The Japanese sides will take, at its own expense, the following measures through JICA.

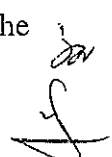
(1) Dispatch of Japanese expert(s) concerned the following expertise:

A. Long-term experts

- 1) Chief Advisor/ Fishery Development and Organization of Artisanal Fishers
- 2) Project Coordinator
- 3) Oyster Culture

B. Short-term experts

Short-term experts will be dispatched when the Salvadorian sides and the



Japanese sides find it necessary for the Project within the framework of the Project. The terms of reference will be elaborated through mutual consultation between both sides. Expected cooperation fields are such as Environmental Study of Oyster Reefs, Investigation of Planktonic Larvas of Anadaras, Social Development and so on.

Short-term expert may possibly be recruited from third countries which have expertise in related field.

(2) Provision of machinery and equipment

The Government of Japan will provide such equipment, machinery and materials (hereinafter referred to as "the Equipment") necessary for the implementation of the Project. The Equipment will become the property of the Government of the Republic of El Salvador, specifically CENDEPESCA, Ministry of Agriculture and Livestock upon being delivered C.I.F. (cost, insurance and freight) to the Salvadorian authorities concerned at the ports and/or airports of disembarkation. Payment of the transportation cost will be the responsibility of the Government of the Republic of El Salvador, after being delivered to the Salvadorian authorities above-mentioned at the ports and/or airports of disembarkation.

The Equipment will be clarified in the Record of Discussion (hereinafter referred to as "the R/D").

(3) Training of Salvadorian personnel

The Government of Japan will accept Salvadorian personnel involved in the Project to participate in technical training in Japan and third countries, through mutual consultation between both sides.

(4) Local Cost

The Japanese side will budget local cost which is necessary to implement the Project except the local cost which the Salvadorian side will be required to pay, through mutual consultation between both sides.

2. Measures to be taken by the Salvadorian Government

The Government of the Republic of El Salvador will take necessary measures to ensure the self-reliant operation of the Project. The following measures must be taken before the commencement of the Project;

(1) Provision of buildings and facilities needed for implementation of the Project



The Salvadorian side will provide the buildings and facilities as the same scale as the previous project (Project on Aquaculture Development in Estuarine Areas). The buildings and facilities includes land, buildings and facilities necessary for shellfish culture technique development, rooms and space necessary for installation and storage of the equipment, office space and necessary facilities for the Japanese experts.

The Salvadorian sides will provide other facilities mutually agreed upon, if necessary.

(2) Assignment of the necessary number of counterparts and other persons

For the successful implementation of the Project, the Salvadorian side will provide counterparts and other persons to work with the Japanese experts. The required number of personnel and their roles are shown in AnnexIV.

(3) Budget Security

For the successful implementation of the Project, the Salvadorian side will secure the necessary budget. The budget is expected to be as same scale as that of the previous project (Project on Aquaculture Development in Estuarine Areas).

(4) Local Cost

The Salvadorian side will budget necessary local cost during the validity the Project. Local cost includes the followings;

- a. Operational cost of the hatchery.
- b. Insurance fee for the work boat.

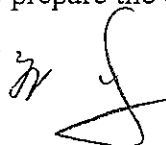
※Note: Insurance for the work boat is subject to the availability of nautical insurance in local market.

- c. Fuels for vehicles and work boats provided for the Project
- d. Others

The Salvadorian will look for the alternative source to achieve the sustainability of the Project after the completion.

(5) Maintenance of the Equipment

The Salvadorian side will budget and take necessary action to maintain the Equipment provided in the Project and in the previous Project (Project on Aquaculture Development in Estuarine Areas). Before the commencement of the Project, the Salvadorian side is required to prepare the condition of work boats, outboard motors and vehicles for smooth operation.



V. Remarks

- (1) Close Collaboration with related organizations is indispensable for the effective and successful implementation of the Project, especially in the field of; Social Development in Communities, Coastal Resources Management, Environmental Education and Women in Development (WID). The Salvadorian side will have further discussions with related organization and define the followings by the signing of R/D.
 - a. Implementation strategy of the Project activities concerned with the field mentioned above.
 - b. The commitment and expected roles of the related organizations.
 - c. Members and participation categories of the organizations of the JCC and the PSC.

- (2) The content of this Minutes of Meetings is subject to be modified upon mutual agreement between both sides before signing of the R/D.

- Annex I Tentative Project Design Matrix (PDM)
- Annex II Tentative Plan of Operation (PO)
- Annex III Administration of the Project
- Annex IV Tentative numbers and TOR of the counterparts
- Annex V Tentative Selection Criteria of Model Project Groups



ANNEX I Project Design Matrix (PDM)

Project Name: Project for Shellfish Aquaculture Development in the Republic of El Salvador
 Target Area: The Jiquilisco Bay and the coastal area of the Department of La Union
 Implementing Agency: CENDEPESCA

Target Group: Artisanal fishers and aquaculturist and their families that live around the Jiquilisco Bay and the coastal area of the Department of La Union,
 CPT(CENDEPESCA Puerto El Triunfo) and CLU(CENDEPESCA La Union) (※:Note: Department refers to Prefecture in Japan.)
 Duration of the Project: 3 years

As of 6th of October 2004

Narrative Summary	Objectively Verifiable Indicators	Means of Verification	Important Assumption
<p>Super Goal: Household income for artisanal fishers, including aquaculturist in the eastern coastal area of El Salvador is improved and stabilized.</p> <p>Overall Goal: Shellfish culture is developed and extended in the Jiquilisco Bay and the coastal area of the Department of La Union based on the awareness of sustainable use of natural resources.</p> <p>Project Purpose: 1) Shellfish culture technique is established in the Jiquilisco Bay and the coastal area of the Department of La Union based on the awareness of sustainable use of natural resources. 2) Measures to stabilize and improve income source for model groups are examined.</p> <p>Outputs: 1) The shellfish seeds production technique is established. 2) The shellfish culture technique, which is acceptable to local fishers is established.</p>	<p>1) The catch of shellfishes (Note i) is increased and stabilized. 2) The income of shellfish pickers is increased and stabilized. 3) Proposals of regulations that clearly define the use of marine and coastal areas is examined.</p> <p>1) The number of groups which utilize shellfish culture technique developed in the Project increases in target area. 2) The income of model group communities is increased by shellfish culture and other income generating activities.</p> <p>1) Model groups can continuously engage in the activities on shellfish culture with the technical instruction of CENDEPESCA. (5 groups for Anadara culture, 5 groups for Pacific oyster culture, and 1 group for construction of artificial reef for local oyster) (Note ii) 2) Economic profitability of shellfish culture is proved. 3) Shellfish culture is accepted in Model Group communities. 4) CENDEPESCA Counterparts are able to instruct shellfish pickers in shellfish culture without any support of Japanese experts. (Note iii) 5) Handbooks on shellfish culture (Pacific Oyster, anadaras) for shellfish pickers are launched. 6) 3 measures to stabilize and improve income sources are put into practice.</p> <p>1-1 Density of planktonic larvae of Anadara at the seeds collection stage is revealed. 1-2 Technical manual on planktonic larvae investigation and capturing of natural seed of Anadara is launched. 1-3 Fixation rate of Pacific oyster goes beyond 20%. (Note iv) 1-4 Survival rate of Pacific oyster in seed size goes beyond 5% (Note v). 1-5 Technical manual on Pacific oyster seed production is launched. 1-6 The number of artificial reef for local oyster fixation increases from its present number of 35. (Note vi) 1-7 CENDEPESCA Counterparts are able to conduct Oyster seed production without any support of Japanese experts. 2-1 At least one model project reaches 60% of survival rate of Pacific oyster from intermediate stage to final stage of culture. 2-2 Measures to prevent robbery are taken by model group communities of Pacific oyster culture. 2-3 Measures to prevent robbery are taken by model group communities of Anadara culture. 2-4 The cost of Pacific oyster and Anadara culture is estimated. 2-5 CENDEPESCA, specifically Counterparts, are able to conduct Pacific oyster culture and Anadara without any support of Japanese experts. 2-6 Technical manual on Pacific oyster culture is launched.</p>	<p>• Fishery Statistics • Post Project Evaluation Report</p> <p>• Post Project Evaluation Report</p> <p>• Project Report • Interviews with Shellfish pickers • Interview with Model Groups</p> <p>• Project Report • Interview • Questionnaire • Site visit</p>	<p>• Fideicomiso PESCAR Fund is continued. • CENDEPESCA functions to extend the aquaculture techniques.</p> <p>• The shellfish consumption does not decrease. • The shellfish price does not extremely decline.</p> <p>• Natural environment is not further deteriorated. • CENDEPESCA Counterparts remain at the same post.</p>

<p>3) The awareness of inhabitants in model group communities on sustainable use of natural resources and conservation of the marine and coastal areas is increased.</p> <p>4) Shellfish culture, including commercialization techniques developed by the project are validated in Model Projects.</p> <p>5) Comprehensive plans to stabilize and improve income of model groups, including shellfish culture, are formulated by model project groups.</p>	<p>3-1 Appropriate teaching aids and promotion materials for different groups concerned are developed.</p> <p>3-2 The level of understanding of participants is elevated.</p> <p>3-3 Knowledge of participants is increased.</p> <p>4-1 Model Projects (5 groups) of Anadara culture are initiated. (Note ii)</p> <p>4-2 Revenue from Anadara production exceeds its production cost (including robbery countermeasure cost) in Model Groups.</p> <p>4-3 Records of Anadara production starts to be kept in Model Groups.</p> <p>4-4 Model Projects (5 groups) of Pacific oyster culture are initiated. (Note ii)</p> <p>4-5 Revenue from Pacific oyster production exceeds its production cost (including robbery countermeasure cost) in Model Groups.</p> <p>4-6 Model groups are able to culture Pacific oyster.</p> <p>4-7 Model project on construction of artificial reef for local oyster (one zone with about 173 beneficiaries) starts. (Note iii)</p> <p>4-8 Record of the number of the local oyster fixation on artificial reef starts to be kept.</p> <p>4-9 Commercialization channel of shellfish products made by Model Groups is established.</p> <p>5-1 Income generating activities besides shellfish culture are proposed.</p> <p>5-2 List of members who continuously participate in planning and implementation of Model Projects is registered.</p> <p>5-3 The number of project plans and that of implemented projects to stabilize and to improve income source, including shellfish cultivation.</p>	<p>Observation of environmental educational classes</p>	<p>Government budget does not change</p>
<p>Activities:</p> <p>1-1 Investigate planktonic larvae of Anadara in the Jiquilisco Bay.</p> <p>1-1-1 Transfer survey techniques to Counterparts.</p> <p>1-1-2 Collect natural Anadara seeds.</p> <p>1-1-3 Transfer natural seed collection methods to Counterparts.</p> <p>1-1-4 Prepare investigation outcome reports.</p> <p>1-1-5 Prepare technical manual on investigation methodology of planktonic larva and seed collection.</p> <p>1-2 Carry out seed production of Pacific Oyster at the wet laboratory.</p> <p>1-2-1 Carry out seed production using imported larvae (eye oyster).</p> <p>1-2-2 Prepare technical manual on seed production of Pacific Oyster for biologists and technical staffs at CENDEPESCA.</p> <p>1-3 Continue initiation activities of artificial reefs for local oyster in maritime areas.</p> <p>1-3-1 Investigate the environment of the natural reefs of local oyster.</p> <p>1-3-2 Design and develop appropriate form for artificial reefs for Pacific Oyster.</p> <p>1-3-3 Monitor the fixation situation of spats.</p>	<p>Inputs:</p> <p>[Japanese side]</p> <p>1. Personnel</p> <p>(1) Long-term experts</p> <p>1) Chief Advisor/ Fishery Development and Organization of Artisanal Fishers</p> <p>2) Coordinator</p> <p>3) Oyster culture</p> <p>(2) Short-term experts</p> <p>To be dispatched when necessary.</p> <p>2. Equipment necessary for the implementation of the Project</p> <p>3. Counterparts' Overseas Training 2 -3 persons / year</p> <p>4. Local cost</p> <p>Necessary budget for project activities</p>	<p>[Salvadorian side]</p> <p>1. Personnel</p> <p>(1) Project Director</p> <p>(2) Project Manager</p> <p>(3) Project coordinator</p> <p>(4) Counterparts of CENDEPESCA</p> <p>(5) Other necessary staff</p> <p>2. Equipment including vehicles</p> <p>3. Land, Buildings and Facilities including office for Japanese experts</p> <p>4. Local cost</p> <p>Necessary budget for project activities</p>	<p>Preconditions:</p> <ul style="list-style-type: none"> Organizations concerned with the Project will cooperate for culture of Pacific oyster, local oyster and rAnadara. CENDEPESCA will cooperate to obtain permission to culture Pacific oyster, local oyster and Anadara

<p>2-1: Carry out experimental culture of Pacific Oyster.</p> <p>2-1-1. Continue experiments of Pacific Oyster culture with cooperation of model groups.</p> <p>2-1-2. Create technical manual on Pacific Oyster culture for marine biologists and technical staffs at CENDEPESCA.</p> <p>2-1-3. Instruction manual for fishermen is prepared by counterparts.</p> <p>2-2: Carry out experiment on Anadara culture.</p> <p>2-2-1. Continue experiments on Anadara culture in model project areas.</p> <p>2-2-2. Instruction manual of Anadara culture for fishers is prepared by counterparts.</p> <p>3-1: Plan awareness promotion activities for sustainable use of coastal resources for residents with concerned organizations.</p> <p>3-2: Create materials on awareness promotion activities for sustainable use of coastal resources.</p> <p>3-3: Conduct awareness promotion activities for sustainable use of coastal resources with participation of local residents.</p> <p>3-4: Prepare an extension manual on fishers' consciousness building about sustainable use of coastal resources.</p> <p>4-1: Select model groups out of shellfish culture Model Groups.</p> <p>4-2: Carry out Anadara culture with model groups.</p> <p>4-3: Carry out local oyster culture with model groups.</p> <p>4-4: Construct local oyster reef with model groups.</p> <p>5-1: Select model groups out of Mollusk culture Model Project Groups.</p> <p>5-2: Carry out investigation on productive activities besides shellfish culture.</p> <p>5-3: Facilitate model groups with making model project plans to comprehensively stabilize and improved their income including shellfish culture.</p>	<p>-Ministry of education will cooperate on coastal resources management and environmental education activities.</p> <p>-Organizations concerned will cooperate on improvement of household income generating activities along with shellfish culture.</p>
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Note i: In this document, the shellfish means Pacific oyster (*Crassostrea gigas*), local oyster (*Crassostrea iridescens*) and Anadaras (*Curulis tuberculosa*, *casco de burro*).

Note ii: In case of Anadara culture group, when 5 groups have achieved to work continuously, evaluation grade is "excellent". When 4 groups have achieved, it is "very good". When 3 groups have achieved, it is "good". When 2 groups, it is "poor", and when one group has achieved, it is "very poor". For the Pacific oyster culture group, it is the same. For the local oyster group, if one group has achieved to work continuously, it is individual evaluation on each Counterpart's job performance.

Note iii: The Counterparts are not assigned according to the shellfish type, but all the Counterparts participate in all aquaculture activities. Evaluation is done to Counterparts as a group. However, CENDEPESCA will do individual evaluation on each Counterpart's job performance.

Note iv: Fixation rate was 11.8% in the previous project, therefore in this project the goal is set to 20%.

Note v: Survival rate was 1.3% in the previous project, therefore the goal in this project is set to 5%. Production volume is not used as indicator.

Note vi: There are 35 artificial reefs when the Project starts. Expected number of artificial reefs to be increased after the environmental study for the possible zone for artificial reef construction is finished. This study will be conducted by a short-term expert soon after the Project starts.



ANNEX II

Plan of Operation (PO)

Outputs / Activities	YEAR		
	1	2	3
1. The shellfish seeds production technique is established.			
1-1: Investigate planktonic larva of Anadara in the Jiquilisco Bay.			
1-1-1. Transfer survey techniques to counterparts.	■		
1-1-2. Collect natural Anadara seeds.	■	■	■
1-1-3. Transfer natural seed collection methods to counterparts.	■		
1-1-4. Prepare investigation outcome reports.	■		
1-1-5. Prepare technical manual on investigation methodology of planktonic larva and seed collection.	■		
1-2: Carry out seed production of Pacific Oyster at the wet laboratory.			
1-2-1. Carry out seed production, using imported larvae (eye oyster).	■		
1-2-2. Prepare technical manual on seed production of Pacific Oyster for biologists and technical staffs at CENDEPESCA.			
1-3: Continue installation activities of artificial reefs for local oyster in maritime areas.			
1-3-1. Investigate the environment of the natural reefs of local oyster.	■		
1-3-2. Design and develop and construct appropriate form for artificial reefs for Pacific Oyster.	■		
1-3-3. Monitor the fixation situation of spats.	■	■	■

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Outputs / Activities	YEAR		
	1	2	3
2. The shellfish culture technique, which is acceptable to local fishers is established.			
2-1: Carry out experimental culture of Pacific Oyster.			
2-1-1. Continue experiments of Pacific Oyster culture with cooperation of model groups.			
2-1-2. Create technical manual for marine biologists and technical staffs at CENDEPESCA.			
2-1-3. Instruction manual for fishermen is prepared by counterparts.			
2-2: Carry out experiment on Anadara culture.			
2-2-1. Continue experiments on Anadara culture in model project areas.			
2-2-2. Instruction manual of Anadara culture for fishers is prepared by counterparts.			
3. The awareness of inhabitants in model group communities on sustainable use of natural resources and conservation of the marine and coastal areas is increased.			
3-1: Plan awareness promotion activities for sustainable use of coastal resources for residents with concerned organizations.			
3-2: Create materials on awareness promotion activities for sustainable use of coastal resources.			
3-3: Conduct awareness promotion activities for sustainable use of coastal resources with participation of local residents.			
3-4: Prepare an extension manual on fishers' consciousness building about sustainable use of coastal resources.			
4. Shellfish culture, including commercialization techniques developed by the project are validated in Model projects.			
4-1: Select model groups out of shellfish culture Model Groups.			
4-2: Carry out Anadara culture with model groups.			
4-3: Carry out local oyster culture with model groups.			
4-4: Construct local oyster bank with model groups.			
5. Comprehensive plans to stabilize and improve income of model groups, including shellfish culture, are formulated by model project groups.			
5-1: Select model groups out of Mollusk culture Model Project Groups.			
5-2: Carry out investigation on productive activities besides shellfish culture.			
5-3: Facilitate model groups with making model project plans to comprehensively stabilize and improved their income including shellfish culture.			

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Annex III

Administration of the Project

For effective and successful implementation of the Project, the Project will manage with establishment of the positions and committees shown below;

(1) Project Director

The Vice-Minister of Agriculture and Livestock will be Project Director and bear overall responsibilities of the administration and implementation.

(2) Project Manager

The Director General of CENDEPESCA will be Project Manager and bear responsibilities of the managerial and technical matters of the Project.

(3) Project Sub-Manager

Zone Coordinator of CPT will be Project Sub-Manager and bear responsibilities of the managerial and technical matters of the activities concerned with the Project.

(4) General Coordinator

General Coordinator will be an official of CENDEPESCA and bear responsibilities of administrative coordination and relations with organizations involved in the Project.

(5) Joint Coordinating Committee

The Joint Coordinating Committee (hereinafter referred to as "JCC") will be established for the effective and successful implementation of the Project. The JCC will meet at least once a year or whenever necessity arises, in order to fulfill the following functions.

1) Functions

- a. To formulate annual work plan for the Project.
- b. To review the overall progress of the Project as well as the achievement of the above-mentioned annual work plan.
- c. To review and exchange of views on major issues arising from or in connection with the Project.
- d. To examine of the local budget-draft and staffing necessary for the Project.
- e. To coordinate the Project with collaborating organizations.
- f. Others



2) Committee members

- Chairperson: Project Director
- Vice Chairperson: Project Manager
- Members:

(El Salvadorian Sides)

- a. Representatives of CENDEPESCA (2 persons)
- b. Zone Coordinators of CPT and CLU
- c. Counterparts of Japanese Experts
- d. Representatives of Collaborating organizations *1)
- e. Other personnel concerned with the Project appointed by the Chairperson, if necessary

(Japanese Sides)

- a. Chief Advisor
- b. Japanese Experts
- c. Resident Representative of JICA/JOCV El Salvador Office
- d. Other personnel concerned with the Project decided by JICA, if necessary. *2)

Note: *1) Participation category of the collaborating organizations mentioned III 1.(2) will be clarified in R/D after the discussions between the organizations and CENDEPESCA.

*2) Official(s) of the Embassy of Japan in El Salvador may attend the Joint Coordinating Committee as observer(s).

(6) Project Steering Committee

The Project Steering Committee (hereinafter referred to as "PSC") will be established for the effective management, implementation, monitoring and evaluation of the Project. The PSC will meet every three (3) months, with participation of following members.

1) Committee members

- Chairperson: Project Director
- Vice-Chairperson: Project Manager
- Members:

(El Salvadorian Sides)

- a. Representative of CENDEPESCA (including General Coordinator, chief officers of divisions of Social Development, Training and



Education, Planning, Finance, and Procurement of Goods and Services) .

b. Zone Coordinators of CPT and CLU.

c. Counterparts of Japanese Experts.

d. Representatives of Collaborating organizations *3)

e. Other personnel concerned with the Project appointed by the Chairperson, if necessary

(Japanese Sides)

a. Chief Advisor

b. Japanese Experts

c. Resident Representative of JICA/JOCV El Salvador Office

d. Other personnel concerned with the Project decided by JICA, if necessary

Note: *3) Participation category of the collaborating organizations mentioned III 1.(2) will be clarified in R/D after the discussions between the organizations and CENDEPESCA.

(7) The Technical Committee

The Technical Committee will be established to discuss the technical aspects of the Project. The Technical Committee will meet once every three (3) months before the PSC is held.

1) Members

a. CCCNPESCA (National Science Consultation Committee for Fishery and Aquaculture)

b. Counterparts of Japanese Experts

c. General Coordinator

d. Japanese Experts

(8) Monthly meetings

Monthly meetings will be held once a month to monitor the progress of the Project, to draft the monthly work plan and to discuss the problems and solutions.

1) Members

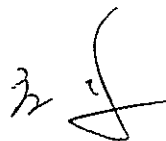
a. Counterparts of Japanese Experts

b. Personnel of CPT and CLU

c. General Coordinator

d. Japanese Experts

e. Other personnel, if necessary.



Annex IV Tentative numbers and TOR of the counterparts and other persons

1. Counterpart of Japanese Chief Advisor in CENDEPESCA

(1) Number

1 person

(2) Terms of Reference

Project Manager is responsible for managerial and technical matters of the Project as a counterpart of Japanese Chief Advisor.

2. Counterpart for the administrative coordination in CENDEPESCA

(1) Number

1 person

(2) Terms of Reference

General Coordinator is responsible for administrative coordination concerned with the Project as a counterpart of Japanese Project Coordinator.

3. Technical Counterparts of CENDEPESCA Puerto El Triunfo

(1) Number

At least 5 persons

(2) Terms of Reference

- a. Counterparts are required to have technical and academic background of Shellfish Aquaculture. At least they must have background of Biology at university level.
- b. Counterparts are required to be mainly engaged in the Project as their duties.
- c. Counterparts are required to attend committees and meetings which are agreed to be held during the Project in R/D.
- d. Counterparts are strongly preferable to be engaged in the Project through the Project duration. In case that they need to leave the Project for unavoidable reason, CENDEPESCA must assign other personnel as Counterparts.
- e. One of the Counterparts will be assigned as Chief, who leads other Technical Counterparts and has responsibility of their activities.

4. Counterparts of CENDEPESCA La Union

(1) Number

At least 1 person

(2) Terms of Reference

- a. Counterparts are required to have technical and academic background of Shellfish



Aquaculture. At least they must have background of Biology at preferably university level.

- b. Counterparts are required to attend committees and meetings which are agreed to be held during the Project in R/D.
- c. Counterparts are strongly preferable to be engaged in the Project through the Project duration. In case that they need to leave the Project for unavoidable reason, CENDEPESCA must assign other personnel as Counterparts.

5. Counterparts of Division of Social Development, CENDEPESCA

(1) Number

At least 1 person

(2) Terms of Reference

- a. Counterparts are required to engage in the Project activities concerning social development in communities and coastal resources management education.
- b. Counterparts are required to coordinate the Project with collaborating organizations to implement the Project activities.
- c. Counterparts are strongly preferable to be engaged in the Project through the Project duration. In case that they need to leave the Project for unavoidable reason, CENDEPESCA must assign other personnel as Counterparts.

6. Workers to support the Project

(1) Number

At least 2 persons

(2) Role

- a. Workers are required to be hired and financed by CENDEPESCA at the early stage of the Project to support works which does not require technical skills of the Project.
- b. Workers are required to work fulltime.

7. Driver

(1) Number

1 person

(2) Role

- a. Driver is provided by CENDEPESCA to drive the vehicle when it is necessary for the Project activities.
- b. Driver is required to work fulltime for the Project.



8. Captain of the work boats

(1) Number

1 person

(2) Role

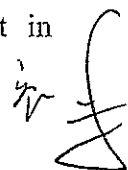
- a. Captain of the work boats is hired by CENDEPESCA to steer the work boat when it is necessary for the Project activities.
- b. Captain of the work boats is required to work fulltime for the Project.

A handwritten signature in black ink, consisting of a stylized 'M' followed by a large, sweeping flourish that ends in a hook.

Tentative Selection Criteria of Model Project Groups

The Model Project Groups will be selected based upon the following criteria;

1. Communities where the majority of the people live on artisanal fishery and aquaculture.
2. Communities where the local fishers are organized.
3. Communities where the people have worked together for any type of activities.
4. Communities that locate in the suitable environment for shellfish culture.
5. Communities which have appropriate leaders with coordination capacity.
6. Communities with people or groups who have ownership and interest in participation on the Project.

A handwritten signature in black ink, consisting of a vertical line on the right, a horizontal line across the middle, and a loop on the left side.

[添付資料]

2 事前評価ミニッツ（西語）

**MINUTA DE REUNIONES
ENTRE
EL EQUIPO JAPONES DE ESTUDIO PREPARATIVO
Y
LAS AUTORIDADES DEL GOBIERNO
DE
LA REPUBLICA DE EL SALVADOR
SOBRE
LA COOPERACION TECNICA JAPONESA
PARA EL PROYECTO PARA EL
DESARROLLO DE LA ACUICULTURA DE MOLUSCOS
EN LA REPUBLICA DE EL SALVADOR**

El Equipo Japonés de Estudio Preparativo (en adelante denominado “el Equipo”), organizado por la Agencia de Cooperación Internacional del Japón (en adelante denominado “JICA”) y encabezado por el Sr. Takashi Saito, visitó la República de El Salvador, del 26 de septiembre al 7 de octubre de 2004, con el propósito de identificar el esquema de la cooperación técnica japonesa relacionada con el Proyecto para el Desarrollo de la Acuicultura de Moluscos en la República de El Salvador (en adelante denominado “el Proyecto”).

Durante su estadía en la República de El Salvador, el Equipo hizo intercambio de puntos de vista y tuvo una serie de reuniones con las autoridades relacionadas con el Gobierno de la República de El Salvador (en adelante denominada “la Parte salvadoreña”) y representantes del sector pesquero, con respecto a las medidas deseables a ser tomadas por ambos Gobiernos para la implementación exitosa del Proyecto.

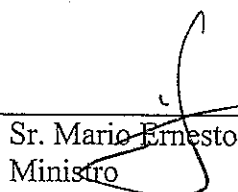
Como resultado de las reuniones, ambas partes tomaron acuerdos sobre los puntos referidos en los documentos adjuntos.

Se elaboraron duplicados en los idiomas inglés y español respectivamente, siendo cada documento igualmente auténtico. En el caso de algunas divergencias de interpretación prevalecerá el texto en inglés.

Santa Tecla, 6 de octubre de 2004



Sr. Takashi Saito
Líder
Equipo de Estudio Preparativo
Agencia de Cooperación Internacional del
Japón



Sr. Mario Ernesto Salaverría
Ministro
Ministerio de Agricultura y Ganadería
de la República de El Salvador

DOCUMENTOS ADJUNTOS

La Parte salvadoreña y el Equipo tomaron acuerdos sobre los siguientes puntos:

I. Resultados de las Reuniones

Ambas partes intercambiaron sus puntos de vista sobre el marco provisional del Proyecto y las medidas que serán tomadas, basados en los resultados del proyecto anterior sobre “Desarrollo de la Acuicultura en los Estuarios de El Salvador”, el Estudio de Desarrollo sobre el “Desarrollo de la Pesca Artesanal en El Salvador”, y los resultados del estudio realizado por el Experto japonés en el campo del desarrollo de pesca costera, enviado de febrero a abril de 2004.

Como resultado de intercambio de opiniones, el marco tentativo del Proyecto así como las medidas a tomar por ambas partes fueron esclarecidos.

Ambas partes acordaron que la Parte salvadoreña tomará la iniciativa y responsabilidades globales para la exitosa y efectiva implementación del Proyecto.

II. Marco Provisional del Proyecto

1. Nombre del Proyecto

“Proyecto para el Desarrollo de la Acuicultura de Moluscos en la República de El Salvador”.

2. Objetivo Superior

En la Bahía de Jiquilisco y área costera del Departamento de La Unión se difunden y desarrollan las actividades de acuicultura de moluscos, basadas en un manejo conciente de los recursos naturales.

3. Objetivos del Proyecto

- 1) En los grupos modelo de la Bahía de Jiquilisco y área costera del Departamento de La Unión se establecerá la técnica para la acuicultura de moluscos, basada en un manejo conciente de los recursos naturales.
- 2) Avanzar en los medios para estabilizar el ingreso de los grupos modelo.

4. Grupo objetivo

- (1) Pescadores y acuicultores artesanales y sus familiares en la Bahía de Jiquilisco y área costera del Departamento de La Unión
- (2) CPT (CENDEPESCA, Puerto El Triunfo) y CLU (CENDEPESCA, La Unión)

5. Áreas objetivo

La Bahía de Jiquilisco y área costera del Departamento de La Unión.

6. Resultados

- (1) Establecimiento de la técnica de producción de semillas de moluscos.
- (2) Establecimiento de la técnica de acuicultura de moluscos, difundible entre los pescadores.
- (3) Aumento de la conciencia relacionada con el uso sostenible de recursos costeros y la conservación del medio ambiente de las áreas marino costeras en las comunidades de grupos modelo.
- (4) Validación de las técnicas de acuicultura de moluscos y comercialización en las

herramientas para el uso sostenible de recursos costeros.

- 4-1 Ejecución del estudio para seleccionar los grupos modelo.
- 4-2 Ejecución, junto con los grupos modelo, de proyectos modelo de acuicultura de Anadaras.
- 4-3 Ejecución, junto con los grupos modelo, proyectos modelo de acuicultura de ostra del Pacífico.
- 4-4 Construcción, junto con los grupos modelo, de arrecifes artificiales para ostra local.

- 5-1 Selección de grupos modelo entre los grupos modelo de acuicultura de moluscos.
- 5-2 Ejecución del estudio sobre las actividades productivas que no sean acuicultura de moluscos.
- 5-3 Apoyan la elaboración del plan de un proyecto modelo para estabilizar y mejorar el ingreso incluyendo la acuicultura de moluscos.

- 8. Duración del Proyecto
Tres (3) años.

III. Administración del Proyecto

1. Organización para su Implementación

(1) Institución Ejecutora

El Centro de Desarrollo de la Pesca y la Acuicultura, dependencia del Ministerio de Agricultura y Ganadería (en adelante denominado "CENDEPESCA") asumirá las responsabilidades globales para la implementación del Proyecto. Las actividades referidas en PDM serán ejecutadas con CENDEPESCA en Puerto El Triunfo (en adelante denominado, "CPT"), CENDEPESCA en La Unión (en adelante denominado, "CLU"), unidades de desarrollo social y capacitación de CENDEPESCA.

(2) Organizaciones colaboradoras

El Proyecto será implementado con colaboración de las organizaciones relacionadas en las siguientes áreas:

- a. Desarrollo social de las comunidades
- b. Medio ambiente costero y manejo de recursos
- c. Educación ambiental
- d. Desarrollo de la mujer (*Women in development: WID*)

La Parte salvadoreña tendrá reuniones futuras para esclarecer organizaciones que participan en el Proyecto y sus funciones.

2. Administración del Proyecto

Para la administración efectiva y exitosa del Proyecto, se requiere del nombramiento de las siguientes posiciones así como del establecimiento de los comités como se muestra a continuación. Las funciones y miembros tentativos de los siguientes están mostrados en el Anexo III.

- (1) Director del Proyecto
- (2) Gerente del Proyecto
- (3) Sub-gerente del Proyecto



- (4) Coordinador General
- (5) Comité Conjunto de Coordinación
- (6) Comité Ejecutivo del Proyecto
- (7) Comité Técnico
- (8) Reunión Mensual

IV. Medidas a tomar por ambas partes

1. Parte japonesa

La Parte japonesa tomará, bajo su propio costo, las siguientes medidas a través de JICA:

(1) Envío de experto(s) japonés(es) considerando las siguientes especialidades:

A. Experto de largo plazo

- 1) Asesor en jefe que tenga especialidad en desarrollo pesquero y organización de pescadores artesanales.
- 2) Coordinador del Proyecto
- 3) Cultivo de ostra

B. Experto de corto plazo

Los expertos de corto plazo serán enviados cuando las partes salvadoreña y japonesa consideren necesario para el Proyecto dentro del marco del Proyecto. Los términos de referencia serán elaborados mediante la consulta mutua entre ambas partes. Las áreas de cooperación esperadas serán tales como; estudio ambiental de los bancos ostreros, investigación de larvas planctónicas de Anadaras y desarrollo social, etc.

Los expertos de corto plazo serán posiblemente reclutados desde terceros países que tengan expertos en áreas relacionadas.

(2) Donación de maquinaria y equipos

El Gobierno del Japón proporcionará equipos, maquinaria y materiales (en adelante denominado "el Equipo") necesarios para la implementación del Proyecto. El Equipo se convierte en propiedad del Gobierno de la República de El Salvador, específicamente de CENDEPESCA, del Ministerio de Agricultura y Ganadería (MAG) una vez que sea entregado valor C.I.F. (costo, seguro y flete) a las autoridades salvadoreñas antes mencionadas, en puertos y/o aeropuertos de desembarco.

El pago de costo de transporte será responsabilidad del Gobierno de El Salvador, después de haber entregado a las autoridades salvadoreñas relacionadas en puertos y/o aeropuertos de desembarco.

El Equipo será esclarecido en el Registro de Discusiones (en adelante denominado R/D).

(3) Entrenamiento del personal salvadoreño

El Gobierno del Japón aceptará el personal salvadoreño involucrado en el Proyecto para participar en entrenamiento técnico en Japón y en terceros países, mediante consultas mutuas entre ambas partes.

(4) Gastos locales

La Parte japonesa presupuestará gastos locales que sean necesarios para implementar el Proyecto, excepto gastos locales requeridos que serán pagados por la Parte salvadoreña, mediante consultas mutuas entre ambas partes.

2. Medidas a tomar por parte del Gobierno salvadoreño



El Gobierno de la República de El Salvador tomará las medidas necesarias para asegurar operación independiente del Proyecto. Las siguientes medidas deben ser tomadas antes del inicio del Proyecto:

(1) Proporcionar los edificios e instalaciones necesarios para la implementación del Proyecto. La Parte salvadoreña proporcionará edificios e instalaciones en la misma escala que el proyecto anterior (Proyecto del Desarrollo de Acuicultura en los Estuarios de El Salvador). Los edificios e instalaciones incluyen el terreno, edificios e instalaciones necesarios para el desarrollo de técnicas de acuicultura de moluscos, los cuartos y espacios necesarios para la instalación y almacenamiento del equipo, espacio para oficina e instalaciones necesarios para los expertos japoneses.

La Parte salvadoreña proporcionará otras instalaciones bajo acuerdos mutuos, si son necesarias.

(2) Asignación del número necesario de Contrapartes y otras personas.

Para la implementación exitosa del Proyecto, la Parte salvadoreña proporcionará Contrapartes y otras personas para trabajar con los expertos japoneses. El número del personal necesario y sus funciones están mostrados en el Anexo IV.

(3) Seguridad de presupuesto

Para la implementación exitosa del Proyecto, la Parte salvadoreña asegurará el presupuesto necesario. Se espera que el presupuesto sea de la misma escala que el proyecto anterior (Proyecto del Desarrollo de la Acuicultura en los Estuarios de El Salvador).

(4) Gastos locales

La Parte salvadoreña presupuestará los gastos locales necesarios durante la vigencia del Proyecto. Los gastos locales incluyen los siguientes:

a. Costo de operación del laboratorio húmedo.

b. Primas de seguro para el barco.

Nota: El seguro del barco está sujeto a la disponibilidad de seguros náuticos en el mercado local.

c. Combustibles para vehículos y barcos proporcionados para el Proyecto.

d. Otros.

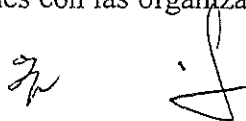
La Parte salvadoreña buscará las alternativas para lograr la sustentabilidad del Proyecto después de su finalización.

(5) Mantenimiento del Equipo

La Parte salvadoreña presupuestará y tomará las acciones necesarias para mantener el Equipo proporcionado en este Proyecto y en el Proyecto anterior (Proyecto del Desarrollo de la Acuicultura en los Estuarios de El Salvador). Antes del inicio del Proyecto, la Parte salvadoreña preparará las condiciones de las embarcaciones, motores fuera de borda y vehículos para la mejor operación del Proyecto

V. Comentarios.

1. Una colaboración estrecha con las organizaciones relacionadas es indispensable para la efectiva y exitosa implementación del Proyecto, especialmente en áreas de: desarrollo social de las comunidades, el manejo de los recursos costeros, la educación ambiental y el desarrollo de la mujer (WID). La Parte salvadoreña tendrá reuniones con las organizaciones relacionadas y definirá los siguientes puntos antes de la firma de R/D.



- a. Estrategia para implementar las actividades del Proyecto, relacionadas con las áreas antes mencionadas.
 - b. Compromisos y funciones esperadas de las organizaciones relacionadas.
 - c. Miembros y categorías del Comité Conjunto de Coordinación y del Comité Ejecutivo del Proyecto.
2. El contenido de esta minuta está sujeto a modificación por acuerdo mutuo de las partes previa la firma de R/D

Anexo I	Matriz de Diseño del Proyecto Tentativo (PDM)
Anexo II	Plan de Operación Tentativo (PO)
Anexo III	Administración del Proyecto
Anexo IV	Números y Términos de Referencia para el Personal Contraparte Tentativos
Anexo V	Criterio Tentativo de Selección de Grupos para Proyectos Modelo



comunidades de los grupos modelo.

- (5) Elaboración del plan de estabilización y mejoramiento del ingreso, incluyendo la acuicultura y comercialización de moluscos, en los grupos modelo.

Nota: Un criterio tentativo para la selección de grupos de proyectos modelo está mostrado en el Anexo V.

7. Actividades

- 1-1 Ejecución de investigación sobre las larvas planctónicas de Anadaras en la Bahía de Jiquilisco.
 - 1-1-1 Transferencia de la técnica de estudio a los C/Ps.
 - 1-1-2 Ejecución de la captación de semillas naturales.
 - 1-1-3 Transferencia de la técnica de captación de semillas naturales a los C/Ps.
 - 1-1-4 Consolidación del resultado del estudio de larvas planctónicas.
 - 1-1-5 Elaboración de manual técnico sobre el estudio de larvas planctónicas y del método de captación de semillas naturales.
- 1-2 Ejecución de producción artificial de semillas de ostra del Pacífico en el laboratorio húmedo.
 - 1-2-1 Ejecución de producción artificial de semillas de ostra del Pacífico usando larvas con ojo de importación.
 - 1-2-2 Elaboración de manual técnico para la producción de ostra del Pacífico para los biólogos y equipo técnico de CENDEPESCA.
- 1-3 Continuación de las actividades de la instalación de arrecifes artificiales de fijación de ostra local en áreas marítimas de grupos modelo.
 - 1-3-1 Ejecución de estudio del medio ambiente de zona pesquera con el fin de seleccionar lugares para la instalación de las bases de fijación.
 - 1-3-2 Diseño y desarrollo de una forma apropiada para la base de fijación.
 - 1-3-3 Monitoreo del estado de fijación de larvas.
- 2-1 Ejecución de experimentos sobre el cultivo de ostra del Pacífico.
 - 2-1-1 Continuación, con la colaboración de grupos modelo, de experimentos sobre el cultivo de ostra del Pacífico.
 - 2-1-2 Elaboración de manual técnico para los técnicos de CENDEPESCA.
 - 2-1-3 Elaboración por los C/Ps de guías del cultivo de ostra del Pacífico para los pescadores.
- 2-2 Ejecución de experimentos sobre el cultivo de Anadaras.
 - 2-2-1 Los Contrapartes ejecutan ensayos de cultivo de Anadaras en áreas de proyectos modelo.
 - 2-2-2 Elaboración por los C/Ps de guías del cultivo de Anadaras para los pescadores.
- 3-1 Definición junto con la organización ejecutora del plan de ejecución de las actividades para fomentar el uso sostenible de los recursos costeros, dirigido a los habitantes de la comunidad.
- 3-2 Creación de los materiales para las actividades de promoción para concientizar en el uso sostenible de recursos costeros
- 3-3 Ejercen actividades de promoción en el uso sostenible de recursos costeros con la participación de habitantes locales.
- 3-4 Elaboración con participación de los C/Ps, de manuales para la difusión de metodologías y

ANEXO I Matriz de Diseño del Proyecto (PDM)

Nombre del Proyecto: Proyecto para el Desarrollo de la Acuicultura de Moluscos en la República de El Salvador
 Área del Proyecto: Bahía de Jiquilisco y área costera del Departamento de La Unión.
 Organización Ejecutora: CENDEPESCA
 Grupo objetivo: Pescadores y acuicultores artesanales y sus familiares en la Bahía de Jiquilisco y área costera del Departamento de La Unión, CPT (CENDEPESCA Puerto El Triunfo), CLU (CENDEPESCA La Unión)
 Duración del Proyecto: 3 años

Resumen del Proyecto		Indicadores verificables		Fecha de elaboración: 6 de octubre de 2004	
Super-Objetivo		Indicadores verificables		Método de obtención de datos para verificación	Condiciones exteriores
Se estabiliza el ingreso de los hogares de pescadores artesanales incluyendo acuicultores de la Bahía de Jiquilisco y la costa de la zona oriental.		<ol style="list-style-type: none"> Se aumenta y estabiliza el volumen de captura de moluscos (Nota 1). Se aumenta y estabiliza el ingreso de los extractores de moluscos. Se analizan propuestas de los reglamentos claros del uso de las áreas marino costeras. 		Estadística pesquera, Informe de evaluación del post-proyecto	
Objetivo Superior En la Bahía de Jiquilisco y área costera del Departamento de La Unión se difunden y desarrollan las actividades de la acuicultura de moluscos, basadas en un manejo conciente de los recursos naturales.		<ol style="list-style-type: none"> Se aumenta el número de grupos que utilizan la técnica de acuicultura de moluscos desarrollada en el Proyecto en toda el área objetivo. Se incrementan los ingresos por la captura de los moluscos y por otras actividades productivas en las comunidades de grupos modelo. 		<ul style="list-style-type: none"> Informe de evaluación del post-proyecto 	<ul style="list-style-type: none"> Segue existiendo el Fideicomiso PESCAR. CENDEPESCA realiza la difusión de las técnicas desarrolladas.
Objetivo del Proyecto <ul style="list-style-type: none"> En los grupos modelo de la Bahía de Jiquilisco y área costera del Departamento de La Unión establecer la técnica para la acuicultura de moluscos, basada en un manejo conciente de los recursos naturales. Avanzar en los medios para estabilizar el ingreso de los grupos modelo. 		<ol style="list-style-type: none"> Los grupos modelo (Cultivo de Anadaras: 5 grupos. Cultivo de ostra del Pacífico: 5 grupos. Construcción de un banco artificial para ostra local: 1) logran continuar las actividades con la ayuda técnica del CENDEPESCA (Nota 2). Se valida la rentabilidad económica de las actividades de acuicultura de moluscos. Son aceptadas las actividades de acuicultura de moluscos en las comunidades objetivo. Los técnicos contrapartes de CENDEPESCA logran asesorar a los grupos de pescadores adecuadamente sin apoyo de expertos japoneses (Nota 3). Se elaboran guías de acuicultura de moluscos para los pescadores (Ostra del Pacífico, Anadaras). Se llevan a cabo por parte de los pescadores 3 propuestas de los medios a aplicar para mejorar el ingreso. 		<ul style="list-style-type: none"> Informes del Proyecto Entrevistas a los pescadores Entrevistas a grupos modelo 	<ul style="list-style-type: none"> No disminuye el consumo de moluscos. No se devalúa drásticamente el precio de los moluscos.
Resultados 1. Establecimiento de la técnica de producción de semillas de moluscos.		<ol style="list-style-type: none"> 1-1 Se esclarece el nivel de la densidad de larvas planctónicas de Anadaras en la época de captación de semillas. 1-2 Se editan manuales técnicos del estudio de larvas planctónicas y del método de captación de semillas naturales de Anadaras. 1-3 Supera la tasa de fijación de la ostra del Pacífico al 20%(Nota 4) 1-4 La tasa de sobrevivencia del tamaño de semilla supera el 5% (Nota 5). 1-5 Se edita manual de producción de semilla de ostra del Pacífico. 1-6 Incrementa el número de arrecifes artificiales para la fijación de ostra local, en comparación con el número actual de 35 (Nota 6). 1-7 Los contrapartes logran hacer producción de semilla de ostra del Pacífico sin apoyo de los expertos japoneses. 		<ul style="list-style-type: none"> Informes del Proyecto Entrevistas Encuestas Visitas/observación a las clases 	<ul style="list-style-type: none"> No empeora el medio ambiente. Permanecen en su lugar los C/Ps.

<p>2. Establecimiento de la técnica de acuicultura de moluscos, difundible entre los pescadores.</p>	
<p>3 Aumento de la conciencia relacionada con el uso sostenible de recursos costeros y la conservación del medio ambiente de las áreas marino costeras correspondientes a las comunidades modelo.</p> <p>4. Validación del proyecto modelo en el que se usa la técnica de acuicultura de moluscos (incluyendo comercialización) en las comunidades modelo.</p>	<p>2-1 Se obtiene en al menos un grupo modelo una tasa de sobrevivencia de cultivo intermedio a cultivo final de ostra del Pacífico del 60 %</p> <p>2-2 Se toman las medidas por las comunidades para evitar el robo en el proyecto modelo de cultivo de ostra del Pacífico.</p> <p>2-3 Se toman las medidas por las comunidades para evitar el robo en el proyecto modelo de cultivo de Anadaras.</p> <p>2-4 Se estima el costo de cultivo de ostra del Pacífico y el de Anadaras.</p> <p>2-5 CENDEFESCA y específicamente los C/Ps logran ejercer las actividades de cultivo de ostra del Pacífico y de Anadaras sin apoyo de expertos japoneses.</p> <p>2-6 Se completan manuales técnicos relacionados con cultivo de ostra del Pacífico.</p> <p>3-1 Se desarrollan materiales didácticos y de apoyo apropiados al grupo objetivo.</p> <p>3-2 Se mejora el nivel de comprensión de los participantes.</p> <p>3-3 Aumento de los conocimientos de los participantes.</p> <p>4-1 Se inician proyectos modelo de cultivo de Anadaras (5 lugares) (Nota 2).</p> <p>4-2 El valor de la producción en proyectos modelo supera el costo de producción de Anadaras (incluyendo el costo de contramedidas para robo).</p> <p>4-3 Se inicia registro de la producción de Anadaras en grupos modelo.</p> <p>4-4 Se inician proyectos modelo de cultivo de ostra del Pacífico (5 lugares) (Nota 2).</p> <p>4-5 El valor de la producción en proyectos modelo supera el costo de producción de ostra del Pacífico (incluyendo el costo de contramedidas para robo).</p> <p>4-6 Los grupos modelo logran cultivar ostras del Pacífico.</p> <p>4-7 Se inicia un proyecto modelo de construcción de arrecifes artificiales para ostras locales (Una zona, los beneficiarios son 173 personas) (Nota 2).</p> <p>4-8 Se inicia registro del número de fijación de ostras locales en los arrecifes artificiales de los grupos modelo.</p> <p>4-9 Se establece el canal de comercialización de la producción de los grupos modelos.</p> <p>5-1 Se hacen propuestas de actividades productivas que no sean la acuicultura de moluscos.</p> <p>5-2 Se elabora la lista de personas que hayan participado continuamente en el proceso de planeación y ejecución del proyecto modelo.</p> <p>5-3 Número de planes para estabilizar y mejorar el ingreso por grupos modelo de la acuicultura de moluscos. El número de planes ejecutados.</p>
<p>5. Elaboración del plan de estabilización y mejoramiento del ingreso, incluyendo la acuicultura y comercialización de moluscos, en los grupos modelo.</p>	

Anexo II Plan Global de Actividades

Resultado / Actividades	Año		
	1	2	3
	04/05-03/06	04/06-03/07	04/07-03/08
1. Establecimiento de la técnica de producción de semillas de moluscos.			
1-1: Ejecución de investigación sobre las larvas planctónicas de Anadaras en la bahía de Jiquilisco.			
1-1-1. Transferencia de la técnica de estudio a los C/Ps.			
1-1-2. Ejecución de la captación de semillas naturales.			
1-1-3. Transferencia de la técnica de captación de semillas naturales a los C/Ps.			
1-1-4. Consolidación del resultado de estudio de larvas planctónicas.			
1-1-5. Elaboración de manual técnico sobre el estudio de larvas planctónicas y del método de captación de semillas naturales.			
1-2: Ejecución de producción de semillas artificiales de ostra del Pacífico en el laboratorio húmedo.			
1-2-1. Ejecución de producción artificial de semillas de ostra del Pacífico usando larvas con ojo de importación.			
1-2-2. Elaboración de manual técnico para la producción de ostra del Pacífico para los biólogos y equipo técnico de CENDEPESCA.			
1-3. Continuación de la instalación de arrecifes artificiales para fijación de ostra local en áreas marítimas de grupos modelo.			
1-3-1. Ejecución de estudio del medio ambiente de zona pesquera con el fin de seleccionar lugares para la instalación de las bases de fijación.			
1-3-2. Diseño y desarrollo de una forma apropiada para la base de fijación.			
1-3-3. Monitoreo del estado de fijación de larvas.			

Resultado / Actividades	Año		
	1	2	3
	04/05-03/06	04/06-03/07	04/07-03/08
2. Establecimiento de la técnica de acuicultura de moluscos, difundible entre los pescadores.			
2-1: Ejecución de experimentos sobre el cultivo de ostra del Pacífico.			
2-1-1: Continuación, con la colaboración de grupos modelo, de experimentos sobre el cultivo de ostra del Pacífico.			
2-1-2: Elaboración de manual técnico para los técnicos de CENDEPESCA.			
2-1-3: Elaboración por los C/Ps de guías del cultivo de ostra del Pacífico para los pescadores.			
2-2: Experimentación sobre el cultivo de Anadaras llevada a cabo por los C/Ps con la colaboración de grupos modelo.			
2-2-1: Los contrapartes ejecutan ensayos de cultivo de Anadaras en áreas de proyectos modelo.			
2-2-2: Elaboración por los C/Ps de guías del cultivo de Anadaras para los pescadores.			
3. Aumento de la conciencia relacionada del uso sostenible de recursos costeros y la conservación del medio ambiente de las áreas marino costeras en las comunidades de grupos modelo..			
3-1: Definición junto con la organización ejecutora del plan de ejecución de las actividades para fomentar el uso sostenible de recursos costeros, dirigido a los habitantes de la comunidad.			
3-2: Creación de materiales para las actividades de promoción para concientizar en el usosostenibles de recursos costeros.			
3-3: Ejercen actividades de promoción en el uso sostenible de recursos costeros con la participación de habitantes locales..			
3-4: Elaboración con participación de los C/Ps, de manuales para la difusión de metodologías y herramientas para el uso sostenible de recursos costeros.			
4. Validación de las técnicas de acuicultura de moluscos y comercialización en las comunidades de grupos modelo.			
4-1: Ejecución del estudio para seleccionar los grupos modelo.			
4-2: Ejecución, junto con los grupos modelo, de proyectos modelo de cultivo de Anadaras.			
4-3: Ejecución, junto con los grupos modelo, proyectos modelo de cultivo de ostra del Pacífico.			
4-4: Construcción, junto con los grupos modelo, de arrecifes artificiales para ostra local.			
5. Elaboración del plan de estabilización y mejoramiento del ingreso, incluyendo el acuicultura y comercialización de moluscos, en los grupos modelo.			
5-1: Selección de grupos modelo entre los grupos modelo de acuicultura de moluscos.			
5-2: Ejecución del estudio sobre las actividades productivas que no sean acuicultura de moluscos.			
5-3 Apoyan la elaboración del plan de un proyecto modelo integral para estabilizar y mejorar el ingreso incluyendo la acuicultura de moluscos.			

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Actividades	Inversión	Precondiciones:
<p>1-1 Ejecución de investigación sobre las larvas planctónicas de Anadaras en la bahía de Jiquilisco.</p> <p>1-1-1 Transferecia de la técnica de estudio a los C/Ps.</p> <p>1-1-2 Ejecución de la captación de semillas naturales.</p> <p>1-1-3 Transferecia de la técnica de captación de semillas naturales a los C/Ps.</p> <p>1-1-4 Consolidación del resultado del estudio de larvas planctónicas.</p> <p>1-1-5 Elaboración de manual técnico sobre el estudio de larvas planctónicas y del método de captación de semillas naturales.</p> <p>1-2 Ejecución de producción artificial de semillas de ostra del Pacífico en el laboratorio húmedo.</p> <p>1-2-1 Ejecución de producción artificial de semillas de ostra del Pacífico usando larvas con ojo de importación.</p> <p>1-2-2 Elaboración de manual técnico sobre la producción de semillas de ostra del Pacífico para los técnicos de GENDEPESCA.</p> <p>1-3 Continuación de las actividades de la instalación de arrecifes artificiales de fijación de ostra local en áreas marítimas de grupos modelo.</p> <p>1-3-1 Ejecución de estudio del medio ambiente de zona pesquera con el fin de seleccionar lugares para la instalación de las bases de fijación.</p> <p>1-3-2 Diseño y desarrollo de una forma apropiada para la base de fijación.</p> <p>1-3-3 Monitoreo del estado de fijación de larvas.</p> <p>2-1 Ejecución de experimentos sobre el cultivo de ostra del Pacífico.</p> <p>2-1-1 Continuación, con la colaboración de grupos modelo, de experimentos sobre el cultivo de ostra del Pacífico.</p> <p>2-1-2 Elaboración de manual técnico para los técnicos de GENDEPESCA.</p> <p>2-1-3 Elaboración por los C/Ps de guías del cultivo de ostra del Pacífico para los pescadores.</p> <p>2-2 Ejecución de experimentos sobre el cultivo de Anadaras.</p> <p>2-2-1 Los contrapartes ejecutan ensayos de cultivo de Anadaras en áreas de proyectos modelo.</p> <p>2-2-2 Elaboración por los C/Ps de guías del cultivo de Anadaras para los pescadores.</p> <p>3-1 Definición junto con la organización ejecutora del plan de ejecución de las actividades para fomentar el uso sostenible de los recursos costeros, dirigido a los habitantes de la comunidad.</p> <p>3-2 Creación de materiales para las actividades de promoción para concientizar en el uso sostenible de recursos costeros</p>	<p>(Parte japonesa)</p> <p>1. Personal</p> <p>(1) Expertos de largo plazo</p> <p>1) Líder del Proyecto/ Desarrollo Pesquero/organización de pescadores Artesanales</p> <p>2) Coordinador administrativo/ manejo de recursos costeros</p> <p>3) Experto en el cultivo de ostra</p> <p>(2) Expertos de corto plazo</p> <p>Envíos según necesidades.</p> <p>2. Donación de equipos</p> <p>3. Aceptación de becarios</p> <p>2-3 personas al año</p> <p>4. Gastos de operación local</p> <p>Gastos de actividades del Proyecto</p>	<p>(Parte salvadoreña)</p> <p>1. Personal</p> <p>(1) Director del Proyecto</p> <p>(2) Gerente del Proyecto</p> <p>(3) Coordinador del Proyecto</p> <p>(4) C/Ps técnicos</p> <p>(5) Otro personal necesario</p> <p>2. Equipos incluyendo vehículos</p> <p>3. Instalaciones</p> <p>Instalaciones incluyendo las oficinas para expertos japoneses.</p> <p>4. Gastos de operación local</p> <p>Presupuesto necesario para las actividades del Proyecto</p>
<p>• No empeora la situación financiera del gobierno.</p> <p>• No hay rotación ni cambio de los C/Ps.</p>		<p>• Las autoridades relacionadas facilitan permisos ambientales relacionados con el cultivo de ostra del Pacífico, el cultivo de Anadaras y la construcción de arrecifes artificiales para ostra local.</p> <p>• GENDEPESCA facilita permisos relacionados con el cultivo de ostra del Pacífico, el cultivo de Anadaras y la construcción de arrecifes artificiales para ostra local.</p> <p>• Las autoridades relacionadas colaboran con la educación sobre el uso sostenible de recursos costeros y el medio ambiente.</p> <p>• Brindan colaboración las organizaciones relacionadas con proyectos para generar ingresos alternativos que no sean por medio de la acuicultura de moluscos</p>

<p>3-3 Ejercen actividades de promoción en el uso sostenible de recursos costeros con la participación de habitantes locales..</p> <p>3-4 Elaboración con participación de los C/Ps, de manuales para la difusión de metodologías y herramientas para el uso sostenible de recursos costeros.</p> <p>4-1 Ejecución del estudio para seleccionar los grupos modelo.</p> <p>4-2 Ejecución, junto con los grupos modelo, de proyectos modelo de acuicultura de Anadaras.</p> <p>4-3 Ejecución, junto con los grupos modelo, proyectos modelo de acuicultura de ostra del Pacífico.</p> <p>4-4 Construcción, junto con los grupos modelo, de arrecifes artificiales para ostra local.</p> <p>5-1 Selección de grupos modelo entre los grupos modelo de acuicultura de moluscos.</p> <p>5-2 Ejecución del estudio sobre las actividades productivas que no sean acuicultura de moluscos.</p> <p>5- 3 Apoyan la elaboración del plan de un proyecto modelo para estabilizar y mejorar el ingreso incluyendo la acuicultura de moluscos.</p>		
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Nota 1: En este documento, los moluscos significan: Ostra del Pacífico (*Crassostrea gigas*), ostra local (*Crassostrea iridescens*) y Anadaras (curiles *Anadara tuberculosa*, casco de burro *Anadara grandis*)

Nota 2: En el caso de grupos de cultivo de Anadaras, si logran trabajar 5 grupos continuamente, la calificación de este rubro es "excelente". Si son 4 grupos, es "muy buena". Si son 3 grupos, es "buena". Si son 2 grupos, es "mala". Si es un grupo, es "bastante mala". En caso del grupo de cultivo de ostra del Pacífico, también es lo mismo. En cuanto al grupo de ostra local, si logra un grupo trabajar continuamente, se considera que ha logrado la meta.

Nota 3: Los técnicos contrapartes no son asignados según la especie de moluscos sino todos los técnicos contrapartes participan en todas las actividades de acuicultura. Se hace la evaluación hacia todo el grupo de técnicos contrapartes como un grupo entero. Pero, CENDEPESCA hará la evaluación individual de trabajo de cada técnico.

Nota 4: La tasa de fijación en el proyecto anterior fue el 11.8%, por lo tanto en este proyecto la meta es el 20%.

Nota 5: La tasa de sobrevivencia en el proyecto anterior fue el 1.8%, por lo tanto en este proyecto la meta es el 5%. El volumen de producción no se utilizará como indicador.

Nota 6: Actualmente están colocados 35 arrecifes artificiales. En cuanto al número meta para aumentar los arrecifes artificiales, se definirá una vez que se haga el estudio de medio ambiente de la posible zona para colocarlos, el cual se realizará por el experto de corto plazo, una vez que inicie el Proyecto.

Anexo III

Administración del Proyecto

Para la efectiva y exitosa implementación del Proyecto, el Proyecto será administrado con el establecimiento de las posiciones y comités mencionados a continuación;

(1) Director del Proyecto

El Vice-Ministro de Agricultura y Ganadería, será el Director del Proyecto y asumirá responsabilidades globales de su administración e implementación.

(2) Gerente del Proyecto

El Director General del CENDEPESCA, será el Gerente del Proyecto y asumirá la responsabilidad en aspectos gerenciales y técnicos del Proyecto.

(3) Sub-gerente del Proyecto

El Coordinador Zonal del CPT será el Sub-gerente del Proyecto y asumirá responsabilidades en aspectos gerenciales y técnicos de las actividades relacionadas al Proyecto.

(4) Coordinador General

El Coordinador General será un funcionario de CENDEPESCA y asumirá responsabilidades de la coordinación administrativa y la relación con las organizaciones involucradas en el Proyecto.

(5) Comité Conjunto de Coordinación

El Comité Conjunto de Coordinación (en adelante denominado "CCC") será establecido para la implementación efectiva y exitosa del Proyecto. El CCC tendrá reuniones por lo menos una vez al año o cuando sea necesario, para cumplir con las siguientes funciones.

1) Funciones

- a. Elaborar el plan anual de trabajo del Proyecto.
- b. Revisar el avance global del Proyecto así como el logro del plan anual de trabajo antes mencionado.
- c. Revisar e intercambiar puntos de vista sobre los temas importantes que se presenten en el Proyecto o relacionados con el Proyecto.
- d. Examinar el borrador del presupuesto local y las necesidades del personal del Proyecto.
- e. Coordinar el Proyecto con las organizaciones colaboradoras; y
- f. Otros.

2) Miembros del Comité

- Presidente del Comité: Director del Proyecto
- Vice-presidente: Gerente del Proyecto
- Miembros:

(Parte salvadoreña)

- a. Representantes de CENDEPESCA (2 personas)
- b. Coordinadores Zonales de CPT y CLU
- c. Contrapartes de los expertos japoneses
- d. Representantes de las organizaciones colaboradoras ※1)

e. Otras personas relacionadas con el Proyecto, asignadas por el Presidente del Comité, en caso de ser necesario.

(Parte japonesa)

- a. Asesor en jefe
- b. Expertos japoneses
- c. Representante Residente de la oficina de JICA/JOCV en El Salvador
- d. Otras personas relacionadas con el Proyecto designadas por JICA, en caso de ser necesario. ※2)

Nota:

※1) La categoría de la participación de las organizaciones colaboradoras mencionadas en el inciso III 1 (2) será esclarecida en R/D después de las reuniones entre las organizaciones y CENDEPESCA.

※2) El (Los) funcionario(s) de la Embajada de Japón en El Salvador podrá(n) asistir a la reunión del Comité Conjunto de Coordinación como observador(es).

(6) Comité Ejecutivo del Proyecto

El Comité Ejecutivo del Proyecto (en adelante denominado “CEP”) será establecido para la efectiva gestión, implementación, monitoreo y evaluación del Proyecto. El CEP tendrá reunión trimestral con la participación de los siguientes miembros.

1) Miembros del Comité

- Presidente: Director del Proyecto
- Vice-presidente: Gerente del Proyecto
- Miembros:

(Parte salvadoreña)

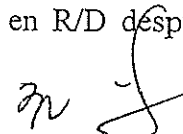
- a. Representantes del CENDEPESCA (incluyendo Coordinador general, Jefes de Unidades de: desarrollo social, capacitación, planificación, finanzas y adquisiciones de bienes y servicios.
- b. Coordinadores Zonales de CPT y CLU
- c. Contrapartes de los expertos japoneses
- d. Representantes de las organizaciones colaboradoras ※3)
- e. Otras personas relacionadas con el Proyecto, asignadas por el Presidente del Comité, en caso de ser necesario.

(Parte japonesa)

- a. Asesor en jefe
- b. Expertos japoneses
- c. Representante Residente de la oficina de JICA/JOCV en El Salvador
- d. Otras personas relacionadas con el Proyecto designadas por JICA, en caso de ser necesario.

Nota:

※3) La categoría de la participación de las organizaciones colaboradoras mencionadas en el inciso III 1 (2) será esclarecida en R/D después de las reuniones entre las organizaciones y CENDEPESCA.



(7) Comité Técnico del Proyecto.

El Comité Técnico será establecido para tratar los aspectos técnicos del Proyecto. Se reunirá trimestralmente antes de que el CEP celebre su reunión.

1) Miembros

- a. Comité Consultivo Científico Nacional de Pesca y Acuicultura (CCCNPESCA)
- b. Contrapartes de los expertos japoneses
- c. Coordinador General.
- d. Expertos japoneses

(8) Reunión mensual

Se lleva a cabo la reunión mensual con el fin de monitorear avances del Proyecto, elaborar plan mensual de trabajo y hablar de los problemas y soluciones del Proyecto.

1) Miembros

- a. Contrapartes de los expertos japoneses
- b. Personal de CPT y CLU
- c. Coordinador general
- d. Expertos japoneses
- e. Otras personas, si es necesario.

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Anexo IV

Números Tentativos y Términos de Referencia para el Personal Contraparte y otras personas

1. Contraparte para el Asesor en Jefe japonés en CENDEPESCA

(1) Número

Una persona

(2) Términos de Referencia

El Gerente del Proyecto es responsable de aspectos gerenciales y técnicos del Proyecto como Contraparte del Asesor en Jefe japonés.

2. Contraparte para la coordinación administrativa del Proyecto en CENDEPESCA

(1) Número

Una persona

(2) Términos de Referencia

El Coordinador General es responsable de la coordinación administrativa relacionada con el Proyecto como Contraparte del Coordinador administrativo japonés.

3. Contrapartes de CENDEPESCA, Puerto El Triunfo

(1) Número

Mínimo 5 personas.

(2) Términos de Referencia

- a. Se requiere que los Contrapartes tengan antecedentes técnicos y académicos de acuicultura de moluscos. Por lo menos deben tener antecedentes de estudios biológicos a nivel universitario.
- b. Se requiere que los Contrapartes estén principalmente asignados al Proyecto como parte principal de sus obligaciones.
- c. Se requiere que los Contrapartes participen en comités y reuniones, los cuales serán celebrados durante el Proyecto de acuerdo con el R/D.
- d. Se requiere que los Contrapartes estén fuertemente comprometidos con el Proyecto durante el tiempo de su vigencia. En el caso de que necesiten dejar el Proyecto por razones inevitables, CENDEPESCA deberá asignar otras personas como Contraparte.
- e. Uno de los Contrapartes será nombrado como el jefe de Contrapartes, que tenga la facultad de dirigir a sus compañeros y tenga la responsabilidad de las actividades de los mismos.

4. Contrapartes de CENDEPESCA, La Unión

(1) Número

Mínimo una persona.

(2) Términos de Referencia

- a. Se requiere que el Contraparte tenga antecedentes técnicos y académicos de acuicultura de moluscos. Preferentemente debe tener antecedentes de estudios biológicos a nivel universitario.
- b. Se requiere que el Contraparte participe en comités y reuniones, los cuales serán celebrados durante el Proyecto de acuerdo con el R/D.
- c. Se requiere que los Contrapartes estén fuertemente comprometidos con el Proyecto durante el tiempo de su vigencia. En el caso de que necesite dejar el Proyecto por razones inevitables, CENDEPESCA deberá asignar otra persona como Contraparte.

Anexo IV

Números Tentativos y Términos de Referencia para el Personal Contraparte y otras personas

1. Contraparte para el Asesor en Jefe japonés en CENDEPESCA

(1) Número

Una persona

(2) Términos de Referencia

El Gerente del Proyecto es responsable de aspectos gerenciales y técnicos del Proyecto como Contraparte del Asesor en Jefe japonés.

2. Contraparte para la coordinación administrativa del Proyecto en CENDEPESCA

(1) Número

Una persona

(2) Términos de Referencia

El Coordinador General es responsable de la coordinación administrativa relacionada con el Proyecto como Contraparte del Coordinador administrativo japonés.

3. Contrapartes de CENDEPESCA, Puerto El Triunfo

(1) Número

Mínimo 5 personas.

(2) Términos de Referencia

- a. Se requiere que los Contrapartes tengan antecedentes técnicos y académicos de acuicultura de moluscos. Por lo menos deben tener antecedentes de estudios biológicos a nivel universitario.
- b. Se requiere que los Contrapartes estén principalmente asignados al Proyecto como parte principal de sus obligaciones.
- c. Se requiere que los Contrapartes participen en comités y reuniones, los cuales serán celebrados durante el Proyecto de acuerdo con el R/D.
- d. Se requiere que los Contrapartes estén fuertemente comprometidos con el Proyecto durante el tiempo de su vigencia. En el caso de que necesiten dejar el Proyecto por razones inevitables, CENDEPESCA deberá asignar otras personas como Contraparte.
- e. Uno de los Contrapartes será nombrado como el jefe de Contrapartes, que tenga la facultad de dirigir a sus compañeros y tenga la responsabilidad de las actividades de los mismos.

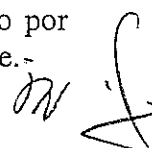
4. Contrapartes de CENDEPESCA, La Unión

(1) Número

Mínimo una persona.

(2) Términos de Referencia

- a. Se requiere que el Contraparte tenga antecedentes técnicos y académicos de acuicultura de moluscos. Preferentemente debe tener antecedentes de estudios biológicos a nivel universitario.
- b. Se requiere que el Contraparte participe en comités y reuniones, los cuales serán celebrados durante el Proyecto de acuerdo con el R/D.
- c. Se requiere que los Contrapartes estén fuertemente comprometidos con el Proyecto durante el tiempo de su vigencia. En el caso de que necesite dejar el Proyecto por razones inevitables, CENDEPESCA deberá asignar otra persona como Contraparte. -



5. Contraparte de la Unidad de Desarrollo Social, CENDEPESCA

(1) Número

Mínimo una persona.

(2) Términos de Referencia

- a. Se requiere que el Contraparte esté comprometido en las actividades del Proyecto, relacionadas con el desarrollo social de las comunidades, el manejo de recursos costeros y la educación ambiental.
- b. Se requiere que el Contraparte coordine el Proyecto con las organizaciones colaboradoras para llevar a cabo las actividades del Proyecto.
- c. Se requiere que el Contraparte esté fuertemente comprometido con el Proyecto durante el tiempo de su vigencia. En el caso de que necesite dejar el Proyecto por razones inevitables, CENDEPESCA deberá asignar otra persona como Contraparte.

6. Trabajadores para apoyar el Proyecto

(1) Número

Por lo menos 2 personas

(2) Funciones

- a. Se requiere que los trabajadores sean contratados y pagados en una etapa lo más temprana posible del Proyecto por CENDEPESCA para apoyar en trabajos que no requieren de habilidades técnicas.
- b. Se requiere que los trabajadores trabajen a tiempo completo.

7. Conductor de vehículos

(1) Número

Una persona

(2) Funciones

- a. El conductor de vehículo será contratado por CENDEPESCA para conducir vehículos cuando sea necesario para las actividades del Proyecto.
- b. Se requiere que el conductor trabaje a tiempo completo para el Proyecto.

8. Capitán del barco

(1) Número

Una persona

(2) Funciones

- a. El capitán del barco será contratado por CENDEPESCA para navegar embarcaciones cuando sea necesario para las actividades del Proyecto.
- b. Se requiere que el capitán del barco trabaje a tiempo completo para el Proyecto.



Anexo V. Criterio Tentativo para la selección de grupos del Proyecto Modelo

Los grupos del proyecto modelo serán seleccionados con base en el siguiente criterio:

1. Comunidades en las que la mayoría de las personas vive de la pesca y acuicultura artesanal.
2. Comunidades en las que los pescadores locales están organizados.
3. Comunidades cuya gente ha trabajado conjuntamente en cualquier tipo de actividad.
4. Comunidades que están ubicadas en ambiente adecuado para el cultivo de moluscos.
5. Comunidades con líderes apropiados y capacidad de coordinación.
6. Comunidades con grupos de gente con iniciativa e interés de participación en el Proyecto.



[添付資料]

- 3 要員配置の予算措置に関する
メモランダム（英語）（事前評価時）

Memorandum
FOR
THE PROJECT FOR SHELLFISH AQUACULTURE DEVELOPMENT
IN THE REPUBLIC OF EL SALVADOR

Mr. Manuel Fermin Oliva, Executive Director of CENDEPESCA as a representative of the Republic of El Salvador and Mr. Takashi Saito as a representative of the Japanese Preparatory Study Team organized by Japan International Cooperation Agency agreed upon the below-mentioned item, concerned the Minutes of Meetings signed on 6th of October on “the Project for Shellfish Aquaculture Development in the Republic of El Salvador”.

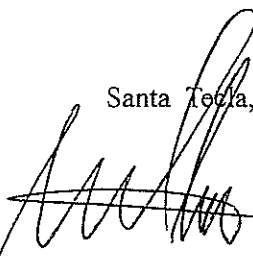
Agreed item;

CENDEPESCA will hire minimally 2 fulltime workers to support works which does not require technical skills of the Project. During the 1st year of the Project, the Government of Japan will finance the cost. During the second and third year of the Project, CENDEPESCA will finance the cost.

Santa Tecla, October 6th, 2004



Mr. Takashi Saito
Leader
Preparatory Study Team
Japan International Cooperation Agency
Japan



Mr. Manuel Fermin Oliva,
Executive Director
Fisheries and Aquaculture Development Center(CENDEPESCA)
Ministry of Agriculture and livestock
The Republic of El Salvador

[添付資料]

4 事前評価調査団 主要面談者リスト

別添4 主要面談者リスト

エルサルバドル「貝類増養殖開発計画」事前評価調査団 主要面談者リスト

1. 農牧省 (MAG)

- (1) Mr. Mario Ernesto Salaverria/大臣
- (2) Mr.Dário Zambrana/企画・プロジェクト部プロジェクト担当
- (3) Ms.Luisa Angélica de Mejía/企画・プロジェクト部技術国際協力担当

2. 水産開発局 (CENDEPESCA)

- (1) Mr.Manuel Fermin Oliva/局長
- (2) Ms.Reina Pacheco/沿岸湖沼域養殖開発計画ジェネラル・コーディネーター
- (3) Ms.Ana Marlene Galdámez/CENDEPESCA トゥリウンフォ支局
- (4) Mr.Manuel Antonio Hernandez Degua/CENDEPESCA トゥリウンフォ支局
- (5) Mr.Federico Ascencio/CENDEPESCA トゥリウンフォ支局
- (6) Ms.Ana Martha Zetino/CCCNPESCA 委員
- (7) Mr. Franklin López/CENDEPESCA トゥリウンフォ支局及び CCCNPESCA 委員
- (8) Mr.Carlos Fonseca Esenshi/CCCNPESCA 委員
- (9) Mr.Jorge López/CCCNPESCA コーディネーター
- (10) Mr.Wilfred B. Cañas Corea/CENDEPESCA トゥリウンフォ支局長

3. 教育省

- (1) Dr.Ernesto Richter/教育局長顧問

4. 環境天然資源省

- (1) Mr.Ernesto López Zepada/国有資産局長
- (2) Mr.Enrique Barraga

5. 女性開発庁 (ISDEMU)

- (1) Ms.Zoila de Innocenti/長官
- (2) Ms.Zolia Haydeé Silva/訓練・モニター部長
- (3) Mr.José Roberto Aguilar Alvarez/市場・社会経済調査部コンサルタント

6. 内務省

- (1) Mr.Jesús Gabriel Contreras/市民安全局長
- (2) Mr.Nelson Saúl Palomo/東部地域支局長
- (3) Mr.Oscar Saúl Pacheco/首都圏支局長

7. Las Gaviotas 女性漁業組合 (Isla de Mendez)

- (1) Ms.María Terreza Martínez de Argeta/監事委員会秘書
- (2) Ms.Rosa Estera Cruz/監事委員会委員長
- (3) Ms.Ana Girma Hernandez Argueta/監事委員会広報部長
- (4) Ms. Berta Alicia de Argueta/Marta Elena Argueta/組合員
- (5) Ms.Marta Elena de Argueta/組合員

[添付資料]

5 R/D (英語)

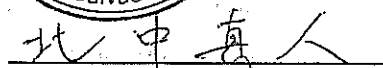
RECORD OF DISCUSSIONS BETWEEN JAPANESE
IMPLEMENTATION STUDY TEAM AND
AUTHORITIES CONCERNED OF THE GOVERNMENT OF
THE REPUBLIC OF EL SALVADOR
ON JAPANESE TECHNICAL COOPERATION
FOR THE PROJECT FOR SHELLFISH AQUACULTURE DEVELOPMENT
IN THE REPUBLIC OF EL SALVADOR

The Japanese Implementation Study Team (hereinafter referred to as "the Team") organized by Japan International Cooperation Agency (hereinafter referred to as "JICA") and headed by Mr. Makoto Kitanaka, exchanged views and had a series of discussions with the Salvadorian authorities concerned with respect to desirable measures to be taken by JICA and the Government of the Republic of El Salvador for the successful implementation of the Project for Shellfish Aquaculture Development in the Republic of El Salvador.

As a result of the discussions, the Team and the Salvadorian authorities concerned agreed on the matters referred to in the document attached hereto.

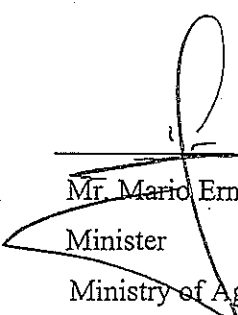
These texts were done in both English and Spanish, each text being equally authentic. In case of any divergence of interpretation, the English text shall prevail.




Mr. Makoto Kitanaka
Resident Representative in El Salvador
Japan International Cooperation Agency
Japan

Santa Tecla, December 20th, 2004




Mr. Mario Ernesto Salaverria
Minister
Ministry of Agriculture and Livestock
The Republic of El Salvador

THE ATTACHED DOCUMENT

I. COOPERATION BETWEEN JICA and THE SALVADORIAN GOVERNMENT

1. The Government of the Republic of El Salvador will implement the Project for Shellfish Aquaculture Development in the republic of El Salvador (hereinafter referred to as "the Project") in cooperation with JICA.
2. The Project will be implemented in accordance with the Master Plan which is given in Annex I.

II. MEASURES TO BE TAKEN BY JICA

In accordance with the laws and regulations in force in Japan, JICA will take, at its own expense, the following measures according to the normal procedures under the Technical Cooperation Scheme of Japan.

1. DISPATCH OF JAPANESE EXPERTS

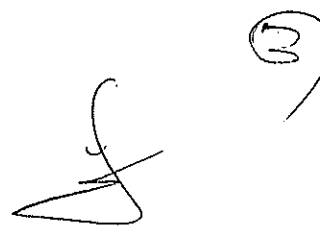
JICA will provide the services of the Japanese experts as listed in Annex II.

2. PROVISION OF MACHINERY AND EQUIPMENT

JICA will provide such machinery, equipment and other materials (hereinafter referred to as "the Equipment") necessary for the implementation of the Project as listed in Annex III. The Equipment will become the property of the Government of the Republic of El Salvador upon being delivered C.I.F. (cost, insurance and freight) to the Salvadorian authorities concerned at the ports and/or airports of disembarkation.

3. TRAINING OF SALVADORIAN PERSONNEL IN JAPAN AND THIRD COUNTRIES

JICA will receive the Salvadorian personnel connected with the Project for technical training in Japan and third countries.



III. MEASURES TO BE TAKEN BY THE GOVERNMENT OF THE REPUBLIC OF EL SALVADOR

1. The Government of the Republic of El Salvador will take necessary measures to ensure that the self-reliant operation of the Project will be sustained during and after the period of Japanese technical cooperation, through full and active involvement in the Project by all related authorities, beneficiary groups and institutions.
2. The Government of the Republic of El Salvador will ensure that the technologies and knowledge acquired by the Salvadorian nationals as a result of Japanese technical cooperation will contribute to the economic and social development of the Republic of El Salvador.
3. The Government of the Republic of El Salvador will grant in the Republic of El Salvador privileges, exemptions and benefits as listed in Annex IV and will grant privileges, exemptions and benefits no less favorable than those granted to experts of third countries or international organizations performing similar missions to the Japanese experts referred to in II-1 above and their families.
4. The Government of the Republic of El Salvador will ensure that the Equipment referred to in II-2 above will be utilized effectively for the implementation of the Project in consultation with the Japanese experts referred to in Annex II.
5. The Government of the Republic of El Salvador will take necessary measures to ensure that the knowledge and experience acquired by the Salvadorian personnel from technical training in Japan and third countries will be utilized effectively in the implementation of the Project.
6. In accordance with the laws and regulations in force in the Republic of El Salvador, the Government of the Republic of El Salvador will take necessary measures to provide at its own expense :
 - (1) Services of the Salvadorian counterpart personnel and administrative personnel as

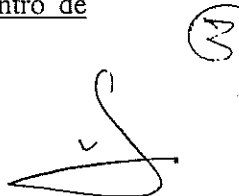
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listed in Annex V ;

- (2) Land, buildings and facilities as listed in Annex VI;
 - (3) Supply or replacement of machinery, equipment, instruments, vehicles, tools, spare parts and any other materials necessary for the implementation of the Project other than the Equipment provided by JICA under II-2 above ;
 - (4) Means of transport and travel allowances for the Japanese experts for official travel within the Republic of El Salvador; and
 - (5) Suitably furnished accommodation for the Japanese experts and their families.
7. In accordance with the laws and regulations in force in the Republic of El Salvador, the Government of the Republic of El Salvador will take necessary measures to meet :
- (1) Expenses necessary for transportation within the Republic of El Salvador of the Equipment referred to in II-2 above as well as for the installation, operation and maintenance thereof ;
 - (2) Customs duties, internal taxes and any other charges, imposed in the Republic of El Salvador on the Equipment referred to in II-2 above ; and
 - (3) Running expenses necessary for the implementation of the Project.

IV. ADMINISTRATION OF THE PROJECT

1. The Vice-Minister of Agriculture and Livestock, as the Project Director, will bear overall responsibility for the administration and implementation of the Project.
2. The Director General of Fisheries and Aquaculture Development Center (Centro de

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Desarrollo de la Pesca y la Acuicultura), Ministry of Agriculture and Livestock (hereinafter referred to as "CENDEPESCA"), as the Project Manager, will be responsible for the managerial and technical matters of the Project.

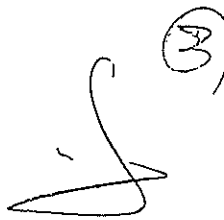
3. The Japanese Team Leader will provide necessary recommendations and advice to the Project Director and the Project Manager on any matters pertaining to the implementation of the Project.
4. The Japanese experts will give necessary technical guidance and advice to the Salvadorian counterpart personnel on technical matters pertaining to the implementation of the Project.
5. For the effective and successful implementation of technical cooperation for the Project, a Joint Coordinating Committee will be established whose functions and composition are described in Annex VII.

V. JOINT EVALUATION

Evaluation of the Project will be conducted jointly by JICA and the Salvadorian authorities concerned, at the middle and during the last six months of the cooperation term in order to examine the level of achievement.

VI. CLAIMS AGAINST JAPANESE EXPERTS

The Government of the Republic of El Salvador undertakes to bear claims, if any arises, against the Japanese experts engaged in technical cooperation for the Project resulting from, occurring in the course of, or otherwise connected with the discharge of their official functions in the Republic of El Salvador except for those arising from the willful misconduct or gross negligence of the Japanese experts.

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VII. MUTUAL CONSULTATION

There will be mutual consultation between JICA and the Government of the Republic of El Salvador on any major issues arising from, or in connection with this Attached Document.

VIII. MEASURES TO PROMOTE UNDERSTANDING OF AND SUPPORT FOR THE PROJECT

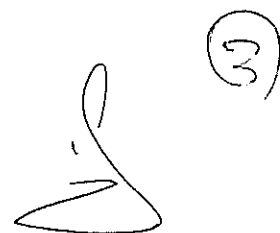
For the purpose of promoting support for the Project among the people of the Republic of El Salvador, the Government of the Republic of El Salvador will take appropriate measures to make the Project widely known to the people of the Republic of El Salvador.

IX. TERM OF COOPERATION

The duration of the technical cooperation for the Project under this Attached Document will be three (3) years from January 11th, 2005 to January 10th, 2008.

- ANNEX I MASTER PLAN
- ANNEX II LIST OF JAPANESE EXPERTS
- ANNEX III LIST OF MACHINERY AND EQUIPMENT
- ANNEX IV PRIVILEGES, EXEMPTIONS AND BENEFITS FOR JAPANESE EXPERTS

- ANNEX V LIST OF SALVADORIAN COUNTERPARTS AND ADMINISTRATIVE PERSONNEL
- ANNEX VI LIST OF LAND, BUILDINGS AND FACILITIES
- ANNEX VII JOINT COORDINATING COMMITTEE

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ANNEX I MASTER PLAN

1 Name of the Project

“Project for Shellfish Aquaculture Development in the Republic of El Salvador”

2. Overall Goal

The model for upgrading livelihood mainly by introducing shellfish culture is disseminated in the Jiquilisco Bay and the coastal area of the Department of La Union.

(Note: Department means Prefecture in Japan.)

3. Project Purpose

The model for upgrading livelihood mainly by introducing shellfish culture is proposed with appropriate coastal resources management. (Note i)

4. Target group

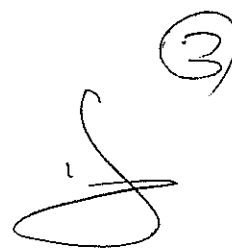
- (1) Artisanal fishers who live around the Jiquilisco Bay and the coastal area of the Department of La Union,
- (2) CPT(CENDEPESCA Puerto El Triunfo) and CLU(CENDEPESCA La Union)

5. Target areas

The Jiquilisco Bay at the department of Usulután and the coastal area of the Department of La Union

6. Outputs

- 1) The shellfish seeds production techniques are established in the hatchery of CPT(CENDEPESCA Puerto El Triunfo)
- 2) Acceptable shellfish culture techniques to local artisanal fishers are established in the experimental sea areas.
- 3) Awareness on sustainable use of coastal resources and conservation of coastal environment is increased with inhabitants of the model project sites.
- 4) Measures for upgrading livelihood for artisanal fishers mainly by introducing shellfish culture are extracted at model project sites.

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7. Activities

- 1-1: Carry out experiments of anadara seed production and make up technical report.
- 1-2: Carry out experiments of Pacific oyster seeds production and make up technical report.
- 1-3: Carry out experiments of local oyster spats fixation on artificial reefs in the Model Project area and make up technical report.

- 2-1: Carry out experimental culture of Pacific oyster and make up technical report.
- 2-2: Carry out experimental culture of anadara and make up technical report.
- 2-3: Carry out experimental culture of local oyster and make up technical report.

- 3-1: Create plans for awareness promotion activities for sustainable use of coastal resources for inhabitants with concerned organizations.
- 3-2: Create teaching tools for promoting awareness for sustainable use of coastal resources .
- 3-3: Conduct awareness promotion activities for sustainable use of coastal resources with participation of inhabitants of the model project sites.
- 3-4: Make up an extension manual to promote sustainable use of coastal resources for local inhabitants with counterparts.

- 4-1: Carry out Model Projects on shellfish culture.
(Model Projects activities include organizing fishers' groups, technical extension from CENDEPESCA technicians to fishers' groups and planning and implementation of shellfish culture projects by fishers' groups.)
- 4-2: More than 3 Model Groups out of shellfish culture Model Groups implement income generation activities besides shellfish culture.(Note ii)
- 4-3: Make up reports on Model Projects.(Reports include the most suitable shellfish culture method, biological data, cost and benefit, organizing method of fishers' groups and so on.)
- 4-4: Network among fishers' groups, and between technical staffs of CENDEPESCA and fishers' groups are developed for further dissemination of the model.

8. Important Assumption

- CENDEPESCA's policies on Fideicomiso PESCAR Fund is not drastically changed.
- Shellfish consumption does not extremely decrease.
- The shellfish price does not extremely decline.
- Natural environment is not heavily deteriorated.

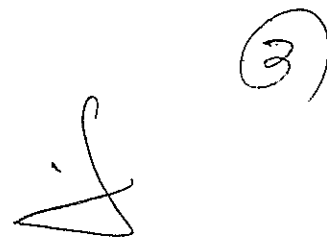
9. Duration of the Project

Three (3) years.

Note i: In this document, shellfish means Pacific oyster (*Crassostrea gigas*), local oyster (*Crassostrea iridescens*) and anadaras (*Curiles tuberculosa*, *casco de burro*).

Note ii: Income generation activities besides shellfish culture are selected according to the features and needs of Model Groups. (e.g. Chicken farming, processing and distribution of shellfish, running of small-sized restaurant, etc.)

The master plan may be modified from time to time within the framework of the R/D according to the progress of the Project by signing of the minutes of meetings between Salvadorian Government and Japanese Government.

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ANNEX II LIST OF JAPANESE EXPERTS

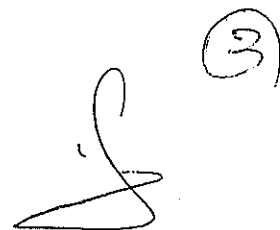
The Japanese sides will dispatch, at its own expense, Japanese expert(s) concerned the following expertise through JICA.

(1) Long-term expert(s)

- 1) Chief Advisor/ Fishery Development and Organization of Artisanal Fishers
- 2) Oyster Culture
- 3) Project Coordinator

(2) Short-term experts

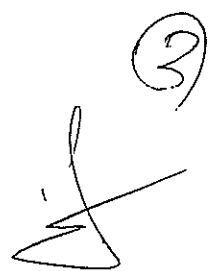
Short-term experts will be dispatched when the Salvadorian sides and the Japanese sides find it necessary for the Project within the framework of the Project. The terms of reference will be elaborated through mutual consultation between both sides. Expected cooperation fields are such as Environmental Study of Oyster Reefs, Investigation of Planktonic Larvas of Anadaras, Social Development and so on.

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ANNEX III LIST OF MACHINERY AND EQUIPMENT

1. Machinery, equipment and materials necessary for study and development of shellfish seed production techniques and shellfish culture will be provided, by the Government of Japan within budgetary limitations.

2. Other machinery, equipment and materials necessary for the effective implementation of the Project will be provided by the Government of Japan within budgetary limitations.

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ANNEX IV.

PRIVILEGES, EXEMPTIONS AND BENEFITS FOR JAPANESE EXPERTS

1. The Government of the Republic of El Salvador will grant exemptions from income tax and other charges of any kind imposed on or in connection with allowances remitted from abroad.

2. The Government of the Republic of El Salvador will grant exemptions from customs duties with respect to importation of personal effects by the Japanese experts and their families, as well as importation of machinery and equipment for their activities.

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ANNEX V

LIST OF SALVADORIAN COUNTERPARTS AND ADMINISTRATIVE PERSONNEL

1. Counterpart personnel at management level

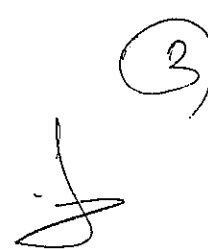
- (1) The Vice-Minister of Agriculture and Livestock, as Project Director
- (2) The Director General of CENDEPESCA, as Project Manager
- (3) Zone 3 Coordinator of CENDEPESCA at Puerto Triunfo (CPT), as Project Sub-Manager
- (4) General Coordinator

2. Technical Counterparts of CENDEPESCA

- (1) Technical counterparts of CENDEPESCA Puerto El Triunfo (CPT)
At least 5 persons
- (2) Technical counterparts of CENDEPESCA La Union (CLU)
At least 1 person
- (3) Technical counterparts of Division of Social Development, CENDEPESCA
At least 1 person

3. Other persons to support the Project

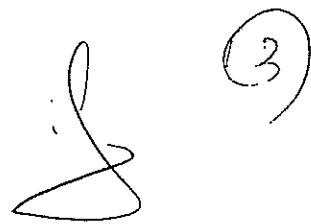
- (1) Caretakers to maintain the hatchery in pillajita while seeds production is carried out.
- (2) Workers to mainly support the implementation of shellfish aquaculture experiments and aquaculture model projects.
- (3) Driver
- (4) Captain of the work boats

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ANNEX VI LIST OF LAND, BUILDINGS AND FACILITIES

The Salvadorian side will provide the buildings and facilities as the same scale as the previous project (Project on Aquaculture Development in Estuarine Areas). The buildings and facilities include the followings:

- (1) Land, buildings and facilities necessary for the Project
- (2) Rooms and space necessary for installation and storage of the equipment
- (3) Office space and necessary facilities for the Japanese experts
- (4) Electricity, water supply, air-conditioning and necessary telecommunication facilities
- (5) Other facilities mutually agreed upon, if necessary

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VII JOINT COORDINATING COMMITTEE

The Joint Coordinating Committee (hereinafter referred to as "JCC") will be established for the effective and successful implementation of the Project. The JCC will meet at least once a year or whenever necessity arises, in order to fulfill the following functions.

(1) Functions

- a. To formulate annual work plan for the Project.
- b. To review the overall progress of the Project as well as the achievement of the above-mentioned annual work plan.
- c. To review and exchange of views on major issues in connection with the Project.
- d. To examine of the local budget-draft and staffing necessary for the Project.
- e. To coordinate the Project with collaborating organizations.
- f. Others

(2) Committee members

- a) Chairperson: Project Director
- b) Vice Chairperson: Project Manager
- c) Members:

(El Salvadorian Sides)

- a. Representatives of CENDEPESCA
- b. Zone Coordinators of CPT and CLU
- c. Counterparts of Japanese Experts
- d. Representatives of collaborating organizations
- e. Other personnel concerned with the Project appointed by the Chairperson, if necessary

(Japanese Sides)

- a. Chief Advisor
- b. Japanese Experts
- c. Resident Representative of JICA/JOCV El Salvador Office
- d. Other personnel concerned with the Project decided by JICA, if necessary.

Note: Official(s) of the Embassy of Japan in El Salvador may attend the Joint Coordinating Committee as observer(s).

水産開発局が教育省、環境省、自治省、女性開発庁の委員としての参加について調整中であるため、調整の結果如何で省庁名を明記する可能性もある。
協力機関として水産開発局が調整中の機関名：
環境天然資源 Ministry of Environment and Natural Resources
教育省 Ministry of Education
自治省 Ministry of Governance
女性開発機構 ISUDEMU (Institute for Development for Women)

3



[添付資料]

6 実施協議時ミニッツ（英語）

MINUTES OF MEETINGS
BETWEEN
THE JAPANESE IMPLEMENTATION STUDY TEAM AND
THE AUTHORITIES CONCERNED OF THE REPUBLIC OF EL SALVADOR
ON JAPANESE TECHNICAL COOPERATION
FOR
THE PROJECT FOR SHELLFISH AQUACULTURE DEVELOPMENT
IN THE REPUBLIC OF EL SALVADOR

The Japanese Implementation Study Team (hereinafter referred to as “the Team”), organized by Japan International Cooperation Agency (hereinafter referred to as “JICA”), headed by Mr. Makoto Kitanaka, exchanged views and had a series of discussions with the authorities concerned of the Government of the Republic of El Salvador (hereinafter referred to as “the Salvadorian Side”) with respect to desirable measures to be taken by JICA and the Government of the Republic of El Salvador for the successful implementation of the Project for Shellfish Aquaculture Development in the Republic of El Salvador (hereinafter referred to as “the Project”).

As a result of the discussions, the Team and the Salvadorian Side agreed upon the matters referred to in the document attached hereto. This Minutes of Meetings are considered as a supplement document of the Record of Discussions (hereinafter referred to as “the R/D”) which is signed at the same time.

These texts were done in both English and Spanish, each text being equally authentic. In case of any divergence of interpretation, the English text shall prevail.

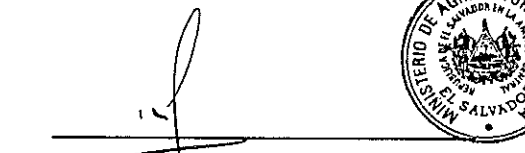




Mr. Makoto Kitanaka
Resident Representative
Japan International Cooperation Agency
Japan in El Salvador

Santa Tecla, December 20th, 2004




Mr. Mario Ernesto Salaverria
Minister
Ministry of Agriculture and Livestock
The Republic of El Salvador

ATTACHED DOCUMENTS

The Salvadorian Side and the Team agreed upon the following articles.

I . The Outline of the Project

1. Detail outline of the Project

The detail outline of the Project and Project activities are shown in the Project Design Matrix (hereinafter referred to as "PDM"), Plan of Operations (hereinafter referred to as "PO") as ANNEX I and II , respectively.

PDM and PO may be modified from time to time within the framework of the R/D with an approval of the Joint Coordinating Committee (hereinafter referred to as "JCC"), in order to make various inputs that are available from both sides, according to the progress of the Project.

The JCC will be held at least once a year to discuss on the results and situations of the Project activities as well as the activity plans for the next fiscal year.

2. Definition of Project Purpose

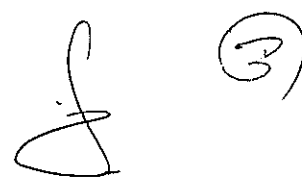
The Project Purpose is described as "The model for upgrading livelihood mainly by introducing shellfish culture is proposed with appropriate coastal resources management". The "model" means a package of techniques and methods which enable artisanal fishers' groups to upgrade their livelihood, mainly by introducing shellfish culture. The "model" will be demonstrated as good practices in Model Projects and as manuals to be disseminated among fishers' groups.

These techniques and methods include shellfish culture techniques, methods for sustainable use of coastal resources, measures to diversify their income source, organizational management method of fishers' groups, know-how of utilize accessible fund such as Fideicomiso PESCAR Fund, and so on.

Artisanal fishers' groups will utilize the whole or some techniques and methods included in the "model" according to their needs.

3. Tentative Selection Criteria of Model Project Groups

Selection criteria of Model Project Groups will be set and agreed during the Project. The tentative selection criteria is shown in Annex V .

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II. Administration of the Project

1. Implementing organization

(1) Executing Institute

Fisheries and Aquaculture Development Center (Centro de Desarrollo de la Pesca y la Acuicultura), Ministry of Agriculture and Livestock (hereinafter referred to as "CENDEPESCA") will bear overall responsibilities for the implementation of the Project. Activities referred in the PDM will be conducted with CENDEPESCA Puerto El Triunfo (hereinafter referred to as "CPT"), CENDEPESCA La Union (hereinafter referred to as "CLU"), Division of Social Development (Desarrollo Social) and Division of Education and Training (Capacitacion).

(2) Collaborating organizations

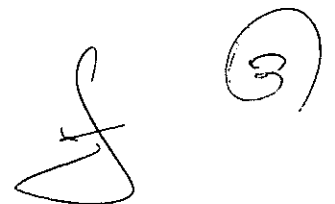
The Project will be implemented with the collaboration of concerned organizations in the fields referred below:

- a. Social development of communities
- b. Coastal environment and resources management
- c. Environmental education
- d. Women in development (WID)

2. Management of the Project

For effective and successful management of the Project, the Project will establish the committees listed below. The functions and members of the followings are showed in Annex III.

- (1) Project Director
- (2) Project Manager
- (3) Project Sub-Manager
- (4) General Coordinator
- (5) Joint Coordinating Committee
- (6) Project Steering Committee
- (7) The Technical Committee
- (8) Monthly meetings

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III. Measures to be taken by both sides

1. Measures to be taken by Japanese Government

The Japanese side will take, at its own expense, the following measures through JICA.

(1) Dispatch of Japanese expert(s) concerned the following expertise:

A. Long-term experts

- 1) Chief Advisor/ Fishery Development and Organization of Artisanal Fishers
- 2) Project Coordinator
- 3) Oyster Culture

B. Short-term experts

Short-term experts will be dispatched when the Salvadorian side and the Japanese side find it necessary for the Project within the framework of the Project. The terms of reference will be elaborated through mutual consultation between both sides. Expected cooperation fields are such as Environmental Study of Oyster Reefs, Investigation of Planktonic Larvas of Anadaras, Social Development and so on.

Short-term expert may possibly be recruited from third countries which have expertise in related field.

(2) Provision of machinery and equipment

The Government of Japan will provide such equipment, machinery and materials (hereinafter referred to as "the Equipment") necessary for the implementation of the Project, as clarified in the R/D.

(3) Training of Salvadorian personnel

The Government of Japan will accept Salvadorian personnel involved in the Project to participate in technical training in Japan and third countries, through mutual consultation between both sides.

(4) Local Cost

The Japanese side will budget local cost which is necessary to implement the Project except the local cost which the Salvadorian side will be required to pay, through mutual consultation between both sides.

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2. Measures to be taken by the Salvadorian Government

The Government of the Republic of El Salvador will take necessary measures to ensure the self-reliant operation of the Project.

(1) Assignment of the necessary number of counterparts and other persons

For the successful implementation of the Project, the Salvadorian side will provide counterparts and other persons to work with the Japanese experts. The required number of personnel and their roles are shown in Annex IV.

(9) Budget Security

For the successful implementation of the Project, the Salvadorian side will secure the necessary budget. The budget is expected to be as same scale as that of the previous project (Project on Aquaculture Development in Estuarine Areas).

(3) Local Cost

The Salvadorian side will budget necessary local cost during the validity the Project. Local cost includes the followings:

- a. Operational cost of the hatchery.
- b. Personnel cost of caretakers of the hatchery.
- c. Insurance fee for the workboat.

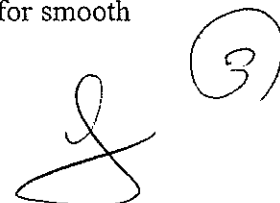
※Note: Insurance for the work boat is subject to the availability of nautical insurance in local market.

- d. Fuels for vehicles and work boats provided for the Project
- e. Others

The Salvadorian side will look for the alternative source to achieve the sustainability of the Project after the completion.

(4) Maintenance of the Equipment

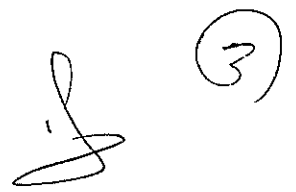
The Salvadorian side will budget and take necessary action to maintain the Equipment provided in the Project and in the previous Project (Project on Aquaculture Development in Estuarine Areas). Before the commencement of the Project, the Salvadorian side is required to prepare the condition of work boats, outboard motors and vehicles for smooth operation.

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IV. Ratification of the Project Document

The Salvadorian side and the Japanese side will make up the Project Document and ratify it in the first Joint Coordinating Committee (JCC) after the commencement of the Project in order to clarify the detail plan and approach of the Project.

- Annex I Project Design Matrix (PDM)
- Annex II Plan of Operation (PO)
- Annex III Administration of the Project
- Annex IV Numbers and Terms of Reference of the counterparts
- Annex V Tentative Selection Criteria of Model Project Groups

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ANNEX I Project Design Matrix (PDM)

Project Name: Project for Shellfish Aquaculture Development in the Republic of El Salvador
 Target Area: The Jiquilisco Bay of the Department of Usulután and the coastal area of the Department of La Unión
 Implementing Agency: CENDEPESCA
 Target Group: Artisanal fishers who live around the Jiquilisco Bay and the coastal area of the Department of La Unión, CPT(CENDEPESCA Puerto El Triunfo) and CLU(CENDEPESCA La Unión) (※Note: Department refers to Prefecture in Japan.)
 Duration of the Project: 3 years

Narrative Summary	Objectively Verifiable Indicators	Means of Verification	Important Assumption
<p>Overall Goal: The model for upgrading livelihood mainly by introducing shellfish culture is disseminated in the Jiquilisco Bay of the Department of Usulután and the coastal area of the Department of La Unión. (Note i)</p> <p>Project Purpose: The model for upgrading livelihood mainly by introducing shellfish culture is proposed with appropriate coastal resources management.</p>	<p>The number of artisanal fisher's groups that utilize the whole or some techniques included in the model is doubled in the Jiquilisco Bay of the Department of Usulután and the coastal area of the Department of La Unión.</p> <p>1) Model groups can continuously engage in the activities on shellfish culture by technical instructions of CENDEPESCA. (5 groups for anadara culture, 5 groups for Pacific oyster culture, and 1 group for constructing artificial reef for local oyster)(Note ii)</p> <p>2) Economical profitability of the model for upgrading livelihood is demonstrated in the Model Projects.</p> <p>3) The model for upgrading livelihood is prepared for artisanal fishers, and is approved by CENDEPESCA and artisanal fishers in the target area.</p> <p>4) CENDEPESCA counterparts are able to conduct shellfish seeds production, develop shellfish culture techniques, and instruct artisanal fishers in shellfish culture without any support of Japanese experts. (Note iii)</p>	<p>• Post Project Evaluation Report</p> <p>• Project Report</p> <p>• Interviews with Shellfish pickers</p> <p>• Interview with Model Groups</p>	<p>• CENDEPESCA's policies on Fideicomiso PESCAR Fund is not drastically changed.</p> <p>• Shellfish consumption does not extremely decrease.</p> <p>• The shellfish price does not extremely decline.</p>
<p>Outputs:</p> <p>1) The shellfish seeds production techniques are established in the hatchery of CPT(CENDEPESCA Puerto El Triunfo)</p> <p>2) Acceptable shellfish culture techniques to local artisanal fishers are established in the experimental sea areas.</p> <p>3) Awareness on sustainable use of coastal resources and conservation of coastal environment is increased with inhabitants of the model project sites.</p> <p>4) Measures for upgrading livelihood for artisanal fishers mainly by introducing shellfish culture are extracted at model project sites.</p>	<p>1-1 Anadara seeds production method and production capacity are proved.</p> <p>1-2 Survival rate of Pacific oyster in seed size goes beyond 5%, and also annual production goes beyond 100 thousands seeds. (Note iv).</p> <p>1-3 The most suitable design of artificial reefs for local oyster and environmental conditions to install the reefs are proved.</p> <p>1-4 Technical manuals for CENDEPESCA on seeds production of anadara, local oyster and Pacific oyster are launched.</p> <p>2-1 At least one model project reaches survival rate of 60% for Pacific oyster from intermediate stage to final stage of culture.</p> <p>2-2 Anadara culture method and production capacity are proved.</p> <p>2-3 Monitoring method and production capacity of local oyster are proved.</p> <p>2-4 Technical manual for CENDEPESCA and artisanal fishers on culture of anadara, local oyster and Pacific oyster are launched.</p> <p>3-1 Appropriate teaching tools and promotion materials are developed.</p> <p>3-2 The level of understanding of the participants of project activities concerning sustainable use of coastal resources is elevated. (Note v)</p> <p>4-1 Measures for upgrading livelihood of the artisanal fishers mainly living on shellfish culture, are written down in the manuals for artisanal fishers. (Measures includes techniques for shellfish culture and other income generation activities, measures for sustainable use of natural resources, management method of fishers' groups, fund raising and management method and so on.)</p>	<p>• Project Report (Experimental data)</p> <p>• Interview</p> <p>• Questionnaire</p> <p>• Project Report</p>	<p>• Natural environment is not heavily deteriorated.</p>

Activities:	Inputs: (Japanese side)	(Salvadorian side)	Preconditions:
<p>1-1: Carry out experiments of anadara seed production and make up technical report.</p> <p>1-2: Carry out experiments of Pacific oyster seeds production and make up technical report.</p> <p>1-3: Carry out experiments of local oyster spais fixation on artificial reefs in the Model Project area and make up technical report.</p> <p>2-1: Carry out experimental culture of Pacific oyster and make up technical report.</p> <p>2-2: Carry out experimental culture of anadara and make up technical report.</p> <p>2-3: Carry out experimental culture of local oyster and make up technical report.</p> <p>3-1: Create plans for awareness promotion activities for sustainable use of coastal resources for inhabitants with concerned organizations.</p> <p>3-2: Create teaching tools for promoting awareness for sustainable use of coastal resources.</p> <p>3-3: Conduct awareness promotion activities for sustainable use of coastal resources with participation of inhabitants of the model project sites.</p> <p>3-4: Make up an extension manual to promote sustainable use of coastal resources for local inhabitants with counterparts.</p> <p>4-1: Carry out Model Projects on shellfish culture. (Model Projects activities include organizing fishers' groups, technical extension from CENDEPESCA technicians to fishers' groups and planning and implementation of shellfish culture projects by fishers' groups.)</p> <p>4-2: More than 3 Model Groups out of shellfish culture Model Groups implement income generation activities besides shellfish culture.(Note vi)</p> <p>4-3: Make up reports on Model Projects.(Reports include the most suitable shellfish culture method, biological data, cost and benefit, organizing method of fishers' groups and so on.)</p> <p>4-4: Network among fishers' groups, and between technical staffs of CENDEPESCA and fishers' groups are developed for further dissemination of the model.</p>	<p>1. Personnel (1) Long-term experts 1) Chief Advisor/ Fishery Development and Organization of Artisanal Fishers 2) Coordinator 3) Oyster culture (2) Short-term experts To be dispatched when necessary.</p> <p>2. Equipment necessary for the implementation of the Project</p> <p>3. Counterparts' Overseas Training 2 ~3 persons / year</p> <p>4. Local cost Necessary budget for project activities</p>	<p>1. Personnel (1) Project Director (2) Project Manager (3) Project coordinator (4) Technical Counterparts of CENDEPESCA (5) Other necessary staff</p> <p>2. Equipment necessary for the implementation of the Project</p> <p>3. Land, Buildings and Facilities including office for Japanese experts</p> <p>4. Local cost Necessary budget for project activities</p>	<p>-Organizations concerned with the Project will cooperate for culture of Pacific oyster, local oyster and Anadara. -CENDEPESCA will cooperate to obtain permission to culture Pacific oyster, local oyster and Anadara.</p> <p>-Organizations concerned will cooperate on promotion activities for coastal resources management and environmental education. -Organizations concerned will cooperate on improvement of household income generating activities along with shellfish culture.</p>

Note i: In this document, shellfish means Pacific oyster (*Crassostrea gigas*), local oyster (*Crassostrea iridescens*) and anadaras (*Curulis tuberculosa*, casco de burro).

Note ii: In case of anadara culture groups, evaluation level will be as the following: "Excellent" when 5 groups accomplish to work continuously, "Very Good" when 4 groups accomplish, "Good" when 3 groups accomplish, "poor" when 2 groups accomplish, and "very poor" when none of the group accomplish. The evaluation level will be the same for the Pacific oyster culture group. For local oyster culture group, it will be considered as achievement when one group works continuously.

Note iii: CENDEPESCA counterparts are not assigned by types of shellfish, everyone will participate in all aquacultural activities. Counterparts are evaluated as a group. Japanese experts will evaluate technical level of counterparts by 5- "excellent", 4- "very good", 3- "good", 2- "poor", and 1- "very poor". However, CENDEPESCA will individually evaluate each Counterpart's job performance.

Note iv: Survival rate was 1.3% in the previous project, therefore the goal in this project is set to 5%. Production volume is not used as an indicator.

Note v: The level of understanding is measured by the outcome of interview and questionnaire to fishers in comparison with the outcome of baseline survey.

Note vi: Income generation activities besides shellfish culture are selected according to the features and needs of Model Groups (e.g. Chicken farming, processing and distribution of shellfish, running of small-sized restaurant, etc.)

Plan of Operation

Output /Activities	Month/Year		
	1	2	3
	01/05-12/05	01/06-12/06	01/07-01/08
1. The shellfish seeds production techniques are established in the hatchery of CPT(CENDEPESCA Puerto El Triunfo) .			
1-1.Carry out experiments of anadara seed production and make up technical report.			
1-1-1.Investigate planktonic larvae of anadara and carry out experiment for natural anadara seeds collection in the Jiquilisco Bay.			
1-1-2.Carry out experiment for anadara artificial seeds production.			
1-1-3.Create technical manual on seed production of anadara for biologists and technical staffs at CENDEPESCA.			
1-2.Carry out experiments of Pacific oyster seeds production and make up technical report.			
1-2-1. Carry out experiment for Pacific oyster artificial seeds production.			
1-2-2.Create technical manual on seed production of Pacific oyster for biologists and technical staffs at CENDEPESCA.			
1-3.Carry out experiments of local oyster spats fixation on artificial reefs in the Model Project area and make up technical report.			
1-3-1.Investigate marine environment for insflation of the artificial reefs of local oyster.			
1-3-2.Design and construct appropriate form of artificial reefs for local oyster.			
1-3-3. Monitor the fixation of spats.			
1-3-4. Create technical manual on seeds production of local oyster for biologists and technical staffs at CENDEPESCA.			
2.Acceptable shellfish culture techniques to local artisanal fishers are established in the experimental sea areas.			
2-1.Carry out experimental culture of Pacific oyster and make up technical report.			
2-1-1.Carry out experiments of Pacific oyster culture with cooperation of model groups.			
2-1-2.Create technical manual on Pacific oyster culture for biologists and technical staffs at CENDEPESCA.			
2-1-3. Instruction manual on Pacific oyster culture for fishers is prepared by CENDEPESCA counterparts.			
2-2. Carry out experimental culture of anadara and make up technical report.			
2-2-1.Carry out experiments of anadara culture with cooperation of artisanal fishers' groups.			
2-2-2.Create technical manual on anadara culture for biologists and technical staffs at CENDEPESCA.			
2-2-3.Instruction manual on anadara culture for fishers is prepared by CENDEPESCA counterparts.			

Output /Activities	Month/Year			2/3
	1	2	3	
	01/05-12/05	01/06-12/06	01/07-01/08	
2-3. Carry out experimental culture of local oyster and make up technical report.				
2-3-1. Carry out experiments of local oyster culture with cooperation of model groups.				
2-3-2. Create technical manual on local oyster culture for biologists and technical staffs at CENDEPESCA.				
2-3-3. Instruction manual on local oyster culture for fishers is prepared by CENDEPESCA counterparts.				
3. Awareness on sustainable use of coastal resources and conservation of coastal environment is increased with inhabitants of the model project sites.				
3-1. Create plans for awareness promotion activities for sustainable use of coastal resources for inhabitants with concerned organizations.				
3-2. Create teaching tools for promoting awareness for sustainable use of coastal resources.				
3-3. Conduct awareness promotion activities for sustainable use of coastal resources with participation of inhabitants of the model project sites.				
3-4. Make up an extension manual to promote sustainable use of coastal resources for local inhabitants with counterparts.				
4. Measures for upgrading livelihood for artisanal fishers mainly by introducing shellfish culture are extracted at model project sites.				
4-1. Carry out Model Projects on shellfish culture. (Model Projects activities include organizing fishers' groups, technical extension from CENDEPESCA technicians to fishers' groups and planning and implementation of shellfish culture projects by fishers' groups.)				
4-1-1. Select shellfish culture Model Groups.				
4-1-2. Carry out Model Project for anadara culture with model groups.				
4-1-3. Carry out Model Project for Pacific oyster culture with model groups.				
4-1-4. Carry out Model Project for local oyster culture with model groups.				
4-2. More than 3 Model Groups out of shellfish culture Model Groups implement income generation activities besides shellfish culture.				
4-2-1. Select model groups out of shellfish culture Model Groups.				
4-2-2. Carry out investigation on productive activities besides shellfish culture.				
4-2-3. Carry out Model Projects on productive activities besides shellfish culture.				
4-3. Make up reports on Model Projects. (Reports include the most suitable shellfish culture method, biological data, cost and benefit, organizing method of fishers' groups and so on.)				
4-4. Network among fishers' groups, and between technical staffs of CENDEPESCA and fishers' groups are developed for further dissemination of the model.				

Annex III

Administration of the Project

For effective and successful implementation of the Project, the Project will manage with establishment of the positions and committees shown below:

(1) Project Director

The Vice-Minister of Agriculture and Livestock will be Project Director and bear overall responsibilities of the administration and implementation.

(2) Project Manager

The Director General of CENDEPESCA will be Project Manager and bear responsibilities of the managerial and technical matters of the Project.

(3) Project Sub-Manager

Zone Coordinator of CPT will be Project Sub-Manager and bear responsibilities of the managerial and technical matters of the activities concerned with the Project.

(4) General Coordinator

General Coordinator will be an official of CENDEPESCA and bear responsibilities of administrative coordination and relations with organizations involved in the Project.

(5) Joint Coordinating Committee

The Joint Coordinating Committee (hereinafter referred to as "JCC") will be established for the effective and successful implementation of the Project. The JCC will meet at least once a year or whenever necessity arises, in order to fulfill the following functions.

1) Functions

- a. To formulate annual work plan for the Project.
- b. To review the overall progress of the Project as well as the achievement of the above-mentioned annual work plan.
- c. To review and exchange of views on major issues arising from or in connection with the Project.
- d. To examine of the local budget-draft and staffing necessary for the Project.
- e. To coordinate the Project with collaborating organizations.
- f. Others



(3)

2) Committee members

-Chairperson: Project Director

-Vice Chairperson: Project Manager

-Members:

(El Salvadorian Sides)

a. Representatives of CENDEPESCA (2 persons)

b. Zone Coordinators of CPT and CLU

c. Counterparts of Japanese Experts

d. Representatives of Collaborating organizations

e. Other personnel concerned with the Project appointed by the Chairperson, if necessary

(Japanese Sides)

a. Chief Advisor

b. Japanese Experts

c. Resident Representative of JICA/JOCV El Salvador Office

d. Other personnel concerned with the Project decided by JICA, if necessary.

Note: Official(s) of the Embassy of Japan in El Salvador may attend the Joint Coordinating Committee as observer(s).

(6) Project Steering Committee

The Project Steering Committee (hereinafter referred to as "PSC") will be established for the effective management, implementation, monitoring and evaluation of the Project. The PSC will meet every three (3) months, with participation of following members.

1) Committee members

-Chairperson: Project Director

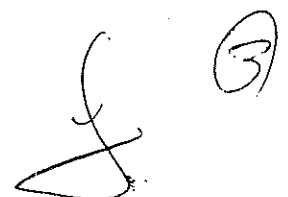
- Vice-Chairperson: Project Manager

-Members:

(El Salvadorian Sides)

a. Representative of CENDEPESCA (including General Coordinator, chief officers of divisions of Social Development, Training and Education, Planning, Finance, and Procurement of Goods and Services) .

b. Zone Coordinators of CPT and CLU.

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- c. Counterparts of Japanese Experts.
 - d. Representatives of Collaborating organizations *3)
 - e. Other personnel concerned with the Project appointed by the Chairperson, if necessary
- (Japanese Sides)
- a. Chief Advisor
 - b. Japanese Experts
 - c. Resident Representative of JICA/JOCV El Salvador Office
 - d. Other personnel concerned with the Project decided by JICA, if necessary

(7) The Technical Committee

The Technical Committee will be established to discuss the technical aspects of the Project. The Technical Committee will meet once every three (3) months before the PSC is held.

- 1) Members
 - a. CCCNPESCA (National Science Consultation Committee for Fishery and Aquaculture)
 - b. Counterparts of Japanese Experts
 - c. General Coordinator
 - d. Japanese Experts

(8) Monthly Meetings

Monthly Meetings will be held once a month to monitor the progress of the Project, to draft the monthly work plan and to discuss the problems and solutions.

- 1) Members
 - a. Counterparts of Japanese Experts
 - b. Personnel of CPT and CLU
 - c. General Coordinator
 - d. Japanese Experts
 - e. Other personnel, if necessary.

A handwritten signature, possibly 'S', is written next to a circled number '3'.

Annex IV Numbers and TOR of the counterparts and other persons

1. Counterpart of Japanese Chief Advisor in CENDEPESCA

(1) Number

1 person

(2) Terms of Reference

Project Manager is responsible for managerial and technical matters of the Project as a counterpart of Japanese Chief Advisor.

2. Counterpart for the administrative coordination in CENDEPESCA

(1) Number

1 person

(2) Terms of Reference

General Coordinator is responsible for administrative coordination concerned with the Project as a counterpart of Japanese Project Coordinator.

3. Technical Counterparts of CENDEPESCA Puerto El Triunfo

(1) Number

At least 5 persons

(2) Terms of Reference

- a. Counterparts are required to have technical and academic background of Shellfish Aquaculture. At least they must have background of Biology at university level.
- b. Counterparts are required to be mainly engaged in the Project as their duties.
- c. Counterparts are required to attend committees and meetings which are agreed to be held during the Project in R/D.
- d. Counterparts are strongly preferable to be engaged in the Project through the Project duration. In case that they need to leave the Project for unavoidable reason, CENDEPESCA must assign other personnel as Counterparts.
- e. One of the Counterparts will be assigned as Chief, who leads other Technical Counterparts and has responsibility of their activities.

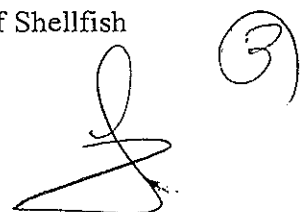
4. Counterparts of CENDEPESCA La Union

(1) Number

At least 1 person

(2) Terms of Reference

- a. Counterparts are required to have technical and academic background of Shellfish



Aquaculture. At least they must have background of Biology at preferably university level.

- b. Counterparts are required to attend committees and meetings which are agreed to be held during the Project in R/D.
- c. Counterparts are strongly preferable to be engaged in the Project through the Project duration. In case that they need to leave the Project for unavoidable reason, CENDEPESCA must assign other personnel as Counterparts.

5. Counterparts of Division of Social Development, CENDEPESCA

(1) Number

At least 1 person

(2) Terms of Reference

- a. Counterparts are required to engage in the Project activities concerning social development in communities and coastal resources management education.
- b. Counterparts are required to coordinate the Project with collaborating organizations to implement the Project activities.
- c. Counterparts are strongly preferable to be engaged in the Project through the Project duration. In case that they need to leave the Project for unavoidable reason, CENDEPESCA must assign other personnel as Counterparts.

6. Caretakers of the hatchery in Pirrayita

(1) Number

At least 2 persons

※Necessary number of caretakers to be deployed for 24 hours a day in turn).

(2) Role

- a. Caretakers are required to be hired and financed by CENDEPESCA at the earlier stage of the Project to maintain the hatchery in Pirrayita while seeds production is carried out.
- b. CENDEPESCA must continuously hire necessary number of caretakers of the hatchery to ensure the sustainability after the completion of the Project.



7. Workers to support the Project

(1) Number

At least 2 persons

(2) Role

- a. Workers are required to be hired and financed by CENDEPESCA at the early stage of the Project to support works which do not require technical skills of the Project. During the 1st year of the Project, the Government of Japan will finance the cost. During the second and third year of the Project, CENDEPESCA will finance the cost.
- b. Workers are required to work fulltime.

8. Driver

(1) Number

1 person

(2) Role

- a. Driver is provided by CENDEPESCA to drive the vehicle when it is necessary for the Project activities.
- b. Driver is required to work fulltime for the Project.

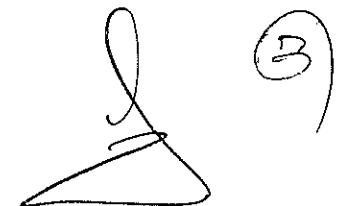
9. Captain of the work boats

(2) Number

1 person

(2) Role

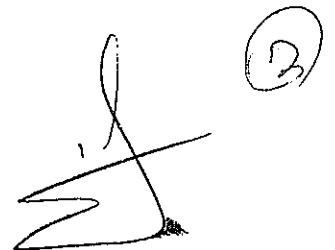
- a. A captain of the workboats is hired by CENDEPESCA to steer the work boat when it is necessary for the Project activities.
- b. A captain of the workboats is required to work fulltime for the Project.

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Tentative Selection Criteria of Model Project Groups

The Model Project Groups will be selected based upon the following criteria;

1. Communities where the majority of the people live on artisanal fishery and aquaculture.
2. Communities where the local fishers are organized.
3. Communities where the people have worked together for any type of activities.
4. Communities that locate in the suitable environment for shellfish culture.
5. Communities which have appropriate leaders with coordination capacity.
6. Communities with people or groups who have ownership and interest in participation on the Project.

A handwritten signature in black ink, consisting of a stylized 'S' shape with a vertical line extending upwards and a horizontal line extending to the right. To the right of the signature is a circled number '3'.