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**MINUTES OF MEETINGS
BETWEEN THE JAPANESE MID-TERM EVALUATION TEAM
AND THE AUTHORITIES CONCERNED OF THE GOVERNMENT
OF THE REPUBLIC OF PANAMA
ON THE JAPANESE TECHNICAL COOPERATION
ON THE PROJECT FOR
PARTICIPATORY COMMUNITY DEVELOPMENT AND
INTEGRATED MANAGEMENT OF THE ALHAJUELA LAKE SUBWATERSHED**

The Japanese Mid-term Evaluation Team (hereinafter referred to as "the Japanese Team"), organized by the Japan International Cooperation Agency (hereinafter referred to as "JICA"), headed by Mr. Kenichi Takano, Leader of Japanese Mid-term Evaluation Team, JICA, conducted the mid-term evaluation study from 8 February to 20 February, 2009, for the purpose of conducting a mid-term evaluation of the Project for participatory community development and integrated management of the Alhajuela lake subwatershed (hereinafter referred to as "the Project") and having consultations with the Project personnel and other relevant parties on the implementation of the Japanese Technical Cooperation for the Project.

The Panamanian Mid-term Evaluation Team (hereinafter referred to as "the Panamanian Team") was organized by the the government of the Republic of Panama and headed by Ms. Soledad Batista, Director of Chagres National Park, Republic of Panama.

For the mid-term evaluation of the Project, the Japanese Team and the Panamanian Team formed the Joint Evaluation Team (hereinafter referred to as "the Team"). After conducting study and analysis of the activities and achievements of the Project, the Team prepared the Joint Evaluation Report (hereinafter referred to as "the Report") and presented its results to the authorities concerned.

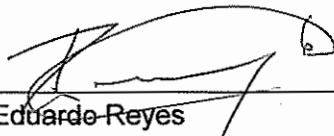
The Chairman and the members of the Joint Coordinating Committee accepted the Report and agreed to recommend to the respective authorities the matters referred to the Report attached hereto.

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

Panama City, 19 February, 2009



Mr. Kenichi TAKANO
Leader
Japanese Mid-term Evaluation Team
Japan International Cooperation Agency



Mr. Eduardo Reyes
Acting General Administrator
National Environmental Authority
Republic of Panama

**REPORT OF THE JOINT MID-TERM EVALUATION
ON THE JAPANESE TECHNICAL COOPERATION
ON THE PROJECT FOR PARTICIPATORY COMMUNITY DEVELOPMENT
AND INTEGRATED MANAGEMENT
OF THE ALHAJUELA LAKE SUBWATERSHED**

The Japanese Mid-term Evaluation Team (hereinafter referred to as "the Japanese Team"), organized by the Japan International Cooperation Agency (hereinafter referred to as "JICA"), headed by Mr. Kenichi Takano, Leader of Japanese Mid-term Evaluation Team, JICA, conducted the mid-term evaluation study from 8 February to 20 February, 2009, for the purpose of conducting a mid-term evaluation of the Project for participatory community development and integrated management of the Alhajuela lake subwatershed (hereinafter referred to as "the Project") and having consultations with the Project personnel and other relevant parties on the implementation of the Japanese Technical Cooperation for the Project.

For this purpose, the Japanese Team and the Panamanian Team formed the Joint Evaluation Team (hereinafter referred to as "the Team"). The Team evaluated performance and achievements of the Project through field visits, interviews and had a series of discussions in respect of desirable measures to be taken by both authorities for the successful implementation of the Project.

The Team agreed on the contents of the Evaluation Report attached hereto. As a result of the discussions, the Team agreed to recommend to their respective authorities the matters referred to in the attached Evaluation Report.

Panama City, 19 February, 2009

Mr. Kenichi TAKANO
Leader of Japanese Mid-term Evaluation Team
Japan International Cooperation Agency

Ms. Soledad Batista
Leader of Panamanian Mid-term Evaluation
Team
Director of Chagres National Park
Republic of Panama

1. Introduction

1.1 Objectives of the Evaluation

The evaluation activities were performed with the following objectives:

- (1) To verify the accomplishments of the Project compared to those planned;
- (2) To identify obstacles and/or facilitating factors that have affected the implementation process;
- (3) To analyze the Project in terms of the five evaluation criteria (i.e. Relevance, Effectiveness, Efficiency, Impact, and Sustainability); and
- (4) To make recommendations on the Project regarding the measures to be taken for the remaining period.

1.2 Members of the Joint Evaluation Team

(1) The Japanese Team

Title	Name	Position
Team Leader	Mr. Kenichi TAKANO	Executive Technical Advisor to the Director General, Global Environment Department, Japan International Cooperation Agency (JICA)
Participatory Rural Development	Mr. Masanobu KIYOKA	Senior Advisor, Japan International Cooperation Agency (JICA)
Cooperation Planning	Mr. Takao NAGUMO	Deputy Assistant Director, Forestry and Nature Conservation Division 2, Forestry and Nature Conservation Group, Global Environment Department, Japan International Cooperation Agency (JICA)
Evaluation/Analysis	Ms. Yasuyo HIROUCHI	Permanent Expert International Development Associates Ltd.

(2) The Panamanian Team

Title	Name	Position
Team Leader	Ms. Soledad Batista	Director of Chagres National Park, ANAM
Member	Mr. Martin E. Mitre	Technician of Natural Resources Division, ACP
Member	Ms. Iris Vargas Miller	Budget Analyst of Office for planning Environment Policy, ANAM

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1.3 Schedule of the Evaluation Study

The Evaluation Study was conducted from February 8, 2009 to February 20, 2009. The Joint Evaluation Team (hereinafter referred to as the Team) collected the information through questionnaires and a series of interviews with Panamanian project personnel and Japanese experts. The Team also conducted field visits in 3 days. Based on the results, the Team prepared a draft report and finalized it through a series of discussions on February 19, 2009.

1.4 Review of Project Design Matrix (PDM)

For evaluation of a technical cooperation of JICA, Project Design Matrix ¹(PDM) is used as one of the essential documents. Prior to the start of the evaluation, the Team reviewed the latest PDM ver2 approved by the Joint Coordination Committee (JCC) on July 3, 2008, and agreed to prepare a PDM for evaluation (PDMe) as a basis of the evaluation. The PDMe was prepared by the Team through consultation with Panamanian project personnel and Japanese experts.

2. Outline of the Project

2.1 Background of the Project

The area of the Alhajuela Lake subwatershed, located at the east of the Panama Canal Watershed, is an area of particular biological and socio-economical importance. Villagers in the area are developing economic activities based on the exploitation of the natural resources, and therefore it is necessary to introduce environment friendly and sustainable production techniques for enhancing their living-standard and restoring environment quality.

The National Environmental Authority(hereinafter referred to as 'ANAM'), in collaboration with JICA, had implemented the Panama Canal Watershed Conservation Project(PROCCAPA), in the upper-part of the western Panama Canal Watershed from October 1, 2000 to September 30, 2005, and has successful experiences on applying participatory community development for the conservation of the nature environment.

Both the conservation of the Panama Canal Watershed and the enhancement of living-standard of people in the area are important issues for the Panama Canal and human security. Therefore, the Project started in August, 2006, and Japan

¹ PDM: a summary table of a project design that describes necessary Inputs, Activities, Outputs, Project Purpose, Overall Goal, Important Assumption, Objectively Verifiable Indicators, Means of Verification, and the logical relationship between and among them

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International Cooperation Agency (hereinafter referred to as 'JICA') will cooperate with ANAM until August 2011. After two (2) years and six (6) months of the implementation, the joint Evaluation Team (hereinafter referred to as 'the Team') was formed for this mid-term evaluation.

2.2 Summary of the Project

According to the PDMe (Annex 1), the Summary of the Project is as follows:

(1) Project Purpose: Sustainable production techniques implemented using environment friendly and participatory methods are practiced by the members of the groups established through the extension system of ANAM.

(2) Overall Goal: Environment friendly and sustainable production is practiced in the middle and lower watershed of Alhajuela Lake.

(3) Outputs

- Output 1: Self-active groups are organized by the participatory methods with gender equality.
- Output 2: The group members are skilled in environment friendly production techniques.
- Output 3: Farmland-use plans that contribute to the territorial ordering of the watershed and the conservation of the Chagres National Park are elaborated and in process of implementation by the members of the groups.
- Output 4: The forest coverage for the soil restoration in critical areas and important areas in common interest of group members and related authorities, are increased by the members of the groups.
- Output 5: Extension service in line with the needs of group members and the related policies is provided by extension workers.

3. Methodology of Evaluation

3.1 Data Collection Method and Analysis

3.1.1 Data Collection Method

The Team made interviews and did questionnaires to the Panamanian personnel and the Japanese experts engaged in the Project. The team also conducted field visits in 3days.

3.1.2 Items of Analyses

(1) Accomplishment of the Project

Accomplishment of the Project was measured in terms of the Inputs, the Outputs

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and the Project Purpose in comparison with the Objectively Verifiable Indicators of the PDMe as well as the plan delineated in the Record of Discussions (R/D).

(2) Implementation Process

Implementation process of the Project was reviewed to see if the Activities have been implemented according to the plan, including schedule, delineated in the current PO (Annex 2), and to see if the Project has been managed properly as well as to identify obstacles and/or facilitating factors that have affected the implementation process.

(3) Evaluation based on the Five Evaluation Criteria

(a) Relevance

Relevance of the Project was reviewed to see the validity of the Project Purpose and the Overall Goal in connection with the needs of the beneficiaries and policies of Panama and Japan.

(b) Effectiveness

Effectiveness was analyzed by evaluating the extent to which the Project has achieved and contributed to the beneficiaries.

(c) Efficiency

Efficiency of the Project implementation was analyzed focusing on the relationship between the Outputs and Inputs in terms of timing, quality, and quantity.

(d) Impacts

Impacts of the Project were forecasted by referring to positive and negative impacts caused by the Project.

(e) Sustainability

Sustainability of the Project was forecasted in institutional, financial and technical aspects by examining the extent to which the achievement of the Project would be sustained and/or expanded after the Project is completed.

4. Summary of Accomplishment and Implementation Process of the Project

4.1 Accomplishment of the Project (Details are described in Annex 3)

(1) Inputs (Details are described in section (1) of Annex 3)

Summary of Inputs is shown in the tables below.

Table 1: Summary of Panamanian Inputs

Allocation of project personnel:	Management persons	personnel:2	Running Expenses: (as of Dec.2008)	US\$210,818
	Technical personnel:	7 persons		

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Table 2: Summary of Japanese Inputs

Dispatch Experts:	of	7 persons in total	Provision of Equipment: (as of Dec.2008)	US\$ 81,440
Project personnel Trained in Japan:	in	6 persons in total	Local Activity Cost: (as of Dec.2008)	US\$ 294,492

(2) Outputs (Details are described in section (2) of Annex 3)

- 1) Output 1: All the groups organized/reorganized by the Project (i.e. 14 groups) are active. Forty-eight percent of all the active group members are women. Almost all the groups (i.e. 13 groups) had reached the third level or third-fourth level of the five evaluation rating for facilitation set by the Project as of October 2008.
- 2) Output 2: Seven one-week seminars and twelve farmer-to-farmer exchange programs have been carried out according to the plans delineated by the Project. All of the seminar participants obtained satisfactory evaluation at the end of the seminar.
- 3) Output 3: Almost all the groups (i.e. 13 groups) have their draft group farm use plans approved by themselves. The draft plans are expected to be implemented from March 2009. Meanwhile, activities related to individual farms have not started yet.
- 4) Output 4: It was found difficult to assess its achievement level because one of the Indicators was ill-defined and the other was lack of numerical target. For reference, 83% of the groups have either temporary nursery or permanent nursery. So far, 227 trees were planted in the critical area in the group farms.
- 5) Output 5: The preliminary draft of the extension guidebook has been prepared: the draft is hoped to be ready by April-May 2009. Almost all the group members participating in the evaluation workshops on the group activities organized in the period of November 2008-January 2009 (i.e. 97% of the participants) were satisfied with the extension services they received. As for establishment of extension system, a range of relevant issues are under consideration and discussion.
- 6) Output 6: A material for environmental education has been prepared. Draft

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of "Handbook of environmental education in the Chagres National Park" is being prepared in collaboration with the Park Office. Information regarding the other two Indicators was not available.

4.2 Implementation Process (Details are described in Annex 4)

Activities of the Project are mostly on schedule as compared with the plan delineated in the tentative PO. Weekly meetings as well as a semi-annual internal workshop which discuss strategic issues have contributed to smooth implementation of the Project. The Project has been implemented in coordination with the Chagres National Park, CICH-ACP, MIDA, AMPYME, MIDES, and so on. The ANAM has closely monitored the Project, using an annual plan of operation (PAO) of ANAM as a planning and monitoring tool.

Major issues are highlighted below:

- 1) Organization/reorganization of the groups: So far, 14 groups are organized/reorganized by the Project. According to the PDM, 6 more groups are to be organized/reorganized by the end of the Project. The Project, however, considers that it is unrealistic for the following reasons: (i) The population of the remaining communities is too small to form groups; and (ii) the current Project staff, including Participatory Development and Extension Service, is occupied with existing 14 groups.
- 2) Reforestation for soil restoration: The Project see little prospect of the progress of the activities under Output 4, which is intended for tree planting in critical and important areas for soil restoration for the following reasons: (i) the group members are interested in tree planting in their group/individual farms, which would provide some economic benefits to them and in the premises of the schools, but little area that requires soil restoration exists in the farmlands and schools; (ii) the group farmers are not motivated to plant and maintain trees outside the farmlands and schools unless some incentive is provided; and (iii) some part of the Project Area is covered by the reforestation project of ACP, which provide economic incentive to the local people who plant trees.
- 3) Design of Extension system: Though discussions have been carried out in various occasions, the Project has not reached a consensus on the design of an extension system. In addition, concept and the target users of an extension guidebook under preparation has not been clarified yet.
- 4) Communication: Communication within the Components is generally sufficient for day-to-day implementation of the Project. Mutual integration of

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Participatory Development and Extension Services could be further strengthened in order to promote information sharing and common understanding for implementation of and decision making on the activities as well as a team spirit.

- 5) The PDM and the PO of the Project: Description of some of the components of the PDM is found to be vague. Most of the Objectively Verifiable Indicators are not well defined; and some of them lack criteria to judge the achievement level. As for the PO, it is still tentative and does not cover all of the Activities defined in the PDM. Sub-activities as well as necessary information such as “expected outcome(s)”, “person in charge”, “implementers”, “(required) inputs”, etc. are not identified for each Activity. The Project prepared the PAO with the matrix established of the strategic planning of ANAM, but it has not prepared PO/APO with the format established in the PDM. In the monitoring process, these issues have not been addressed. This has made it difficult for all those concerned to have clear and common understanding of the overall implementation process, progress of the Project based on the PO/APO, exact achievement level of the Outputs and the Project Purpose of the PDM.

5. Summary of Evaluation based on the Five Evaluation Criteria

5.1 Relevance

The Overall Goal is still relevant with the needs of Panama as the area of the Alhajuela Lake subwatershed is an area of particular biological, hydrological, and socio-economical importance. The Project Purpose is consistent with the organizational needs of ANAM. It is relevant with the needs of local people in the Project Area because their livelihood depends on the sustainable use of natural resources. The Overall Goal and the Project Purpose are relevant with the national policies of Panama as well as Official Development Assistance (ODA) policies of Japan. The Project is considered to be still relevant. (Details are described in Section 1 of Annex 5)

5.2 Effectiveness (Prospect)

Judging from the degree of achievement of the Objectively Verifiable Indicators, the Project Purpose has been partly achieved and is expected to be achieved by the end of the Project with continuous effort and team spirit of both Panamanian and Japanese sides. Most of the Outputs are confirmed to contribute to the achievement of the Project Purpose while contribution of Output 4 is found less.

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The Project is considered to be mostly effective. (Details are described in Section 2 of Annex 5)

5.3 Efficiency

The Inputs from both Panamanian and Japanese sides have been generally appropriate in terms of timing, quality and quantity in order to produce the Outputs with exception of followings:

- 1) Office space of the Project is rather small. There is no separate meeting room. There is not sufficient space for the equipment/materials, either. Installation of telephone line has not been possible because the service is not available in this area.
- 2) So far, 6 Panamanian staff were trained in Japan. Only 2 were the Project staff, who are actually implementing the Project.
- 3) Some of the equipment provided by JICA, especially vehicles, PCs, printers, and digital cameras, is not always readily available when needed. Coordination of the provided equipment should be reviewed and be improved.

It is noted that, through the efforts of the Project staff as well as the support provided by the Japanese Experts, the negative impacts on production of the Output have been alleviated to a minimum extent. Overall, the Inputs of the Project have contributed to production of the Outputs. The Project, therefore, is considered to have been mostly efficient. (Details are described in Section 3 of Annex 5)

5.4 Impacts

It is still early to confirm positive impacts. In the meantime, negative impacts have not been observed. They are not foreseen, either. (Details are described in Section 4 of Annex 5)

5.5 Sustainability (Forecast)

Institutional and organizational aspects: The legal and policy support for environment friendly and sustainable production techniques in the watersheds are likely to continue. The Project has been developing the exit strategy based on the provisional one shown in the attachment of M/M signed in January 2006. An idea of handing over the Project to the Chagres National Park is being discussed. There are some concerns about deployment of the Project personnel. The Project team is created as a temporary organization for implementation of the

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Project; therefore, it is not clear whether the current staff will remain in the Project Area. Some of the Project staff are contract staff of ANAM, whose employment after the Project period is uncertain.

Financial aspects: The Government of Panama has allocated necessary budget to implement the Project activities so far. In addition to the budget of ANAM, there are several financial sources to support the Chagres National Park and the Panama Canal Watershed such as the Chagres fund, FIDECO etc. , which could be considered for the continuation and development of the activities in the Project Area.

Technical aspects: The technical capacity of the Project staff has been enhanced. It is expected that ANAM would utilize and disseminate the transferred techniques through an extension system. The equipment provided by the Project is expected to be utilized fully because it is essential to carry out the activities related to community development and integrated watershed management.

(Details are described in Section 5 of Annex 5)

6. Conclusion

As described above, the Project activities have been conducted mostly as planned. As for the five evaluation criteria: 1) the relevance of the Project is endorsed by the Panamanian national policy, needs of local people, and the Japanese ODA policy; 2) the effectiveness is fairly assured; 3) the inputs are mostly efficiently provided; 4) Neither positive nor negative impacts have been observed yet; and 5) the forecasted sustainability is to be fair. On the basis of findings, the Team concludes that the Project will produce the expected outputs and achieve the Project purpose with continuous concerted efforts of the Project staff and local community.

7. Recommendations

Through the evaluation, the Team recommends the following.

(1) Modification of PDM and PO

Objectively Verifiable Indicators in PDM should be reviewed and clarified/modified as needed. The Team recommends that the Project discuss modification of PDM including Output 4 in particular, with participation of all the Project staff based on PDME and finalize it by April for review and approval of JCC.

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Based on the modification of PDM, the Project needs to finalize the tentative PO, attached to the M/M signed in January 2006, as soon as possible, and to prepare APO based on the finalized PO in order to enhance common understanding of overall implementation process.

(2) Elaboration of exit strategy of the Project

The exit strategy is very important to secure the sustainability of the project activities and achieve the overall/super goals. The Team recommends that the Project discuss and elaborate the exit strategy so as to make project activities streamlined.

To further ensure the sustainability, it is necessary to enhance coordination and collaboration with relevant organizations.

(3) Development of extension system

In order to achieve the project purpose, it is very important to establish the extension system of ANAM. For this purpose, it is recommended that the Project discuss the extension system to reach a consensus on its design with due attention to the following points;

1) Elaboration of concept of the extension guidebook

The concept of the extension guidebook should be further elaborated through clarifying purpose, contents and users as well as process of preparation.

2) Categorizing target groups

The Team is of the opinion that the targeted groups are not homogeneous from various aspects, and a uniform extension approach may not always produce expected outputs.

The Team, therefore, recommends that the Project categorize the target groups in accordance with certain criteria so that the Project has a better chance to design appropriate extension approach to each one of the categorized groups. One criterion to be considered is the year of group formation by which we can see the groups that are formed by the Project assistance and the groups that have already been in presence when the Project started. The latter can be further categorized into those active and those inactive.

3) Addressing vulnerability of farmers

Without overcoming vulnerability aspect of poverty, farmers may not be able to

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enhance their planning capacity. To address unstable nature of agricultural income is as important as the above notion for designing assistance for the resource-poor farmers.

It is therefore recommended that the Project explore effective measures to address the above-mentioned vulnerability aspect of poverty. Results of the field survey conducted by the Team suggest that: (1) group-based small-scale poultry may have a positive effect; and (2) crop diversification that spreads out the income-earning opportunity throughout a year may help farmers stabilize the living conditions in the Project Area.

(4) Formulation of farm use plan

Any plan has its own specific objective. A group farm is a space for trainings for group members, and a group farm use plan can be mostly designed by the Project after identifying training needs with the group members. On the other hand, farm use plan of a member's individual farm aims at improving his/her livelihood with due consideration to environmental conservation. In this case, the farm use plan should be based on his/her farm management plan with a specific objective(s). Therefore, a group farm use plan and an individual farm use plan are different in terms of the objective as well as the ownership of plan.

Based on the consideration above, the Team recommends the Project to identify necessary steps and formulate a plan of action with a clear and practical timeframe for assisting individual farm use plan formulation by March.

(5) Strengthening coordination and communication

The Team puts forward to the Project, various recommendations for action as presented in this section. With the limited period of project implementation remaining, the Project should be managed in such a way that decisions can be made timely and efficiently to facilitate recommended actions in general and field activities in particular.

While it is acknowledged that the Project has been holding weekly meetings regularly for administering day-to-day matters, the Team recommends that good means of communication should be considered for (1) reporting; (2) consultation; and (3) information-sharing for better coordination within the Project. Meetings should be organized with clear objectives and with appropriate participants.

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(6) Improvement of Implementation structure

The Team recommends that the Project evaluate the implementation structure in order to fit the current stage of implementation. One alternative structure to be considered is to merge the two teams mentioned above, and form 3 or 4 multidisciplinary (Extension + Participatory Development) teams.

(7) Monitoring

1) Monitoring based on PDM and PO of the Project

Achievement level of the Objectively Verifiable Indicators of the PDM and the progress of the activities of the APO/PO should be monitored periodically. The results of the monitoring should be fed back into the activities in the field. They should be reported to JCC for review.

2) Field monitoring

a. Assessment of the introduced technology

The Team appreciates that monitoring activities have been conducted to find out farmers' assessment of the technologies introduced by the Project. The monitoring information is expected to help the Project staff understand the reasons for adoption and non-adoption by the farmers. The Team is of the opinion that the Project should continue this monitoring activity for the remaining period of the Project and analyze the obtained information to consider how the farmers should be assisted to adopt the technology and/or how the technology should be modified.

b. Criteria for group assessment

A list of evaluation criteria was temporarily prepared for the 3rd Internal Workshop in October, 2008. The Team understands that the evaluation of the community-based organization (CBO) is a hard task. The Team appreciates the intellectual efforts the Project staff put into considering these criteria and indicators. The Project is encouraged to further elaborate the list of criteria and indicators to be more simple and practical for monitoring.

(8) Others

1) Improvement of office facilities

The Team recommends that office facilities should be improved such as telephone line installment and meeting room.

2) Improvement of coordination of use of the equipment

Equipment provided should be always available when needed.

3) M/M for the meetings of JCC

The M/M, stating the agenda, agreements and disagreements, actions to be taken, and their schedule and responsible parties, should be prepared and signed by both Panamanian and Japanese sides for each meeting of the JCC.

Annexes

- Annex 1 The PDMe (based on PDM ver.2)
- Annex 2 The current PO (Tentative PO)
- Annex 3 Accomplishment of the Project
- Annex 4 Implementation Process of the Project
- Annex 5 Evaluation based on the Five Evaluation Criteria

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Annex 1 PDM E for Evaluation based on the PDM ver2 approved in June 2008

Project Title: Project for the Participatory Community Development and Integrated Management of the Alhajuela Lake Subwatershed
Target Area: Middle and lower watershed of Alhajuela Lake covering 37 communities
Duration: 2006.08 ~ 2011.08 (5 years)
Target Groups Area: Community members in the Target Area and ANAM staff
Implementing Organization: ANAM

Narrative Summary	Objectively Verifiable Indicators	Means of Verification	Important Assumptions
<p>Super Goal The standard of living and environmental quality are improved in the poor communities in eastern side of the Panama Canal Watershed.</p>			<ul style="list-style-type: none"> * There is no drastic changes in Panama's socio-economic situation.
<p>Overall Goal The environment friendly and sustainable production is practiced in middle and lower watershed of Alhajuela Lake.</p>	<p>1. The numbers of the community members practicing at least two techniques promoted by the project is increased more than two times from the time of the project termination.</p>	<p>1. Survey, Farm-use plan monitoring report</p>	<ul style="list-style-type: none"> * There is no drastic change in the sustainable development and conservation policy for the eastern side of the Canal Watershed. * Funds and assistance of other organizations are continually provided in the project area. * ANAM continues the extension service.
<p>Project Purpose Sustainable production techniques implemented using environment friendly and participatory methods are practiced by the established group members through extension system of ANAM.</p>	<p>1. The members of the groups use, as a whole, at least 75% of the techniques promoted by the Project. 2. At the end of the Project 75%¹ of the groups have a vision of the group's future that incorporates environment friendly techniques.</p>	<p>1. Six-monthly evaluation reports prepared by the Project 2. Six-monthly evaluation reports final evaluation reports prepared by the Project.</p>	
<p>Output 1: Self-active groups are organized by the participatory manners with gender equality.</p>	<p>1-1: By the end of the Project, there are at least 20 groups actively working in the activities promoted by the Project. 1-2: By the end of the Project, there are at least 40% of group members of all the groups, participating actively in all the activities of the groups, are women. 1-3: By the end of the Project, all the groups become able to facilitate their monthly meetings by themselves (i.e., all the groups obtain the fifth level of the five evaluation rating set by the Project)</p>	<p>1-1 Record of the Project Extension records-Weekly and monthly reports-by each component 1-2 Record of group members and "project beneficiaries" kept by the Participatory Development team Extension-records, Weekly and monthly-reports-by each component 1-3 Results of monitoring based on "master chart of scale of levels for strengthening of organization", Monthly reports-by group, Record/Minutes-of monthly-meetings-held-by-the groups themselves</p>	<ul style="list-style-type: none"> * There is are no extreme fluctuations in the price received by farmers when selling their products. * There is are no drastic climate changes in the region.

¹ It is defined depending on the actual potential of target group, and the adequacy of this indicator must be verified after organizing groups

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Annex 1 PDM E for Evaluation based on the PDM ver2 approved in June 2008

<p>Output 2: The group members are skilled in environment friendly production techniques.</p>	<p>2-1. By the end of the Project, 80% of the group members of all the groups get obtain a satisfactory evaluation because of for the knowledge and techniques acquired during the Project. 2-2: By the end of the Project, each group has received at least 12 trainings on environment friendly production techniques are executed 2-3: By the end of the Project, the farmers carry out activities of farmer-to-farmer help exchanges</p>	<p>2.1: Self-evaluation reports--weekly--and monthly--reports--by--each--components Training report prepared by the Extension team 2.2: Training--curriculum--participant--lists, cost--details--Training report prepared by the Extension team 2.3 Monthly--meeting--records--group activity--records--Record of farmer-to-farmer exchanges kept by the Extension team</p>
<p>Output 3: Farmland-use plans that contribute to the territorial ordering of the watershed and the conservation of the Chagres National Park are elaborated and in process of implementation by the members of the groups.</p>	<p>3.1: By the end of the Project, at least X% of the groups have their group farm use plans a in agreement with the institutional policies (*) 3.2: At the end of the Project, at least X% of the groups implement the activities according to the use plans 3.4: At the end of the Project, at least 80% of the members of all the groups have their use plans in agreement with the institutional policies (*5) 3.25: At the end of the Project, at least 80% of the members of all the groups introduce activities according to the use plans</p>	<p>3.1 Record of the Project 3.2 Monitoring: 1) Visiting group farms, and 2) randomly, group farm development reports 3.44 Record of the Project 3.25 Monitoring: 1) Visiting individual farms, and 2) randomly, individual farm development reports</p>
<p>Output 4: The forest coverage for the soil restoration in critical areas and important areas in common interest of group members and related authorities, are increased by the members of the groups.</p>	<p>4-1. At the end of the Project, at least 90% of the farmers' groups each have one nursery, 4-2. At the end of the Project, the group members have planted at least _____ trees (*4) per year.</p>	<p>4.1. Extension workers' records, Group activity records 4.2. Tree planting records</p>
<p>Output 5: Extension service in line with the needs of group members and the related policies (*5) is provided by extension members (*6).</p>	<p>5-1. By halfway through the Project, the draft version of the Extension Guidebook is prepared. 5-2. At the end of the Project, the Extension Guidebook is prepared. 5-3. At the end of the Project, X % of the members of all the groups are satisfied with the extension service. 5-4. By the end of the Project, the extension system is established and functioning.</p>	<p>5.1. Document of the extension guidebook. 5.2. Document of the extension guidebook. 5.3. Extension workers' records, Monthly meeting records 5.4. Document of the Project</p>
<p>Output 6: The community members are conscious of the importance of the appropriate use of natural resources and environmental conservation in the Project area.</p>	<p>6-1. By halfway through the Project, there are materials direct to sensitizing local people on the importance of the use of natural resources and the environmental conservation in the Project area. 6-2. At the end of the Project, 80% of the participants in the environmental education activities are more conscious of the importance of the use of natural resources and the environmental conservation in the Project area. 6-3. At the end of the Project, 90% of the groups are transferring aspects of environmental education to community members by their own initiative.</p>	<p>6.1. Environmental education education materials 6.2. Self-evaluation of each environmental education activity, Questionnaire survey given to the rest of community members 6.3. Monthly and/or annual plans of the groups, Last plan of the groups</p>

2 It is defined as Law 21, Law 41, Management Plan for the Chagres National Park and so on
3 It is defined as Law 21, Law 41, Management Plan for the Chagres National Park and so on
4 It can not be defined before the area of each group is selected. After the plan areas be selected in 4-1, it must be defined soon.
5 It is defined as management plan for the Chagres National Park, Protected areas of Panama and so on.
6 It is defined as management plan for the Chagres National Park, Protected areas of Panama and so on.

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Annex 1 PDM E for Evaluation based on the PDM ver2 approved in June 2008

<p>Activities</p> <p>0-1 Hold an induction workshop on the project for ANAM staff. 0-2 Formulate the annual Plan of Operation. 0-3 Provide the necessary infrastructure. 0-4 Coordinate with other institutions and projects. 0-5 Hold the Joint Coordinating Committee meetings. 0-6 Carry out the monitoring and evaluation. 0-7 Systematize the information and disseminate the results. *****</p> <p>1-1 Identify and select the communities. 1-2 Hold promotion meetings. 1-3 Organize or reorganize the groups. 1-4 Establish the place for the development of the group's activities. 1-5 Carry out activities for the strengthening of the groups. 1-6 Assist the groups in applying for the funds and/or assistance of other organizations. *****</p> <p>2-1 Conduct field trips to demonstration plots. 2-2 Carry out training, including a week seminars, workshops, lectures, and technical guidance through extension, on topics of interest related to environment-friendly production techniques 2-3 Carry out farmer-to-farmer exchange among the groups. 2-4 Validate techniques learned in plots established with the group's work and the extension service. *****</p> <p>3-1 Carry out market research. 3-2 Carry out trainings on the elaboration of farmland-use plans. 3-3 Assist the groups in elaborating the group farmland-use plans in harmony with the effective registration. 3-4 Assist the groups in implementing the group farmland-use plans with the support of the extension service from extension team. 3-5 Monitor the implementation of the group farmland-use plans. 3-6 Assist the group members in elaborating the individual farmland-use plans in harmony with the effective registration 3-7 Assist the groups members in implementing the individual farmland-use plan with the support of the extension service from extension team. 3-8 Monitor the implementation of the individual farmland-use plan. *****</p> <p>4-1 Select critical areas of common interest areas of group members and related authorities for soil restoration. 4-2 Carry out training on silviculture. 4-3 Assist the groups in selecting species to be planted. 4-4 Assist the groups in establishing group nurseries. 4-5 Assist the groups in planting trees in the selected areas. 4-6 Assist the groups in maintaining reforested areas. *****</p> <p>5-1 Design an extension system with consideration of the role of ANAM. 5-2 Elaborate a training plan of technical transfer for extension team, which meet the group's needs. 5-3 Implement the annual theory-practice-training plan of technical transfer for the extension members. 5-4 Elaborate an action plan for the extension teams to provide the extension service. 5-5 Provide the extension service to group members. 5-6 Exchange techniques with other projects. 5-7 Compile knowledge and technique of extension service learnt through 5-2 to 5-6 into an extension guidebook for the extension members, based on the extension system designed in 5-1. 5-8 Elaborate a sustainable training plan for new extension team by utilizing the guidebook. 5-9 Provide the extension service in accordance with the extension guidebook. 5-10 Review the extension system upon the results if necessary, and established the extension system through 5-1 to *****</p> <p>6-1 Elaborate an action plan for environmental education.</p>	<p>Inputs</p> <p>Inputs by the Panamanian Side -Personnel * Project Director * Project Coordinator * Heads of Section (Participatory Development, Extension Service, and Administration) * Extensionists (4) * Administrative and supporting staff (6) * Other necessary personnel</p> <p>-Land, buildings and facilities * Project office * Office equipment and furniture * Fuel * Others</p> <p>-Running expenses, budget * Annual budget</p> <p>Inputs by the Japanese Side -Personnel * Chief advisor * Extension * Participatory development * Coordinator * Other experts in specific fields</p> <p>-Provision of the Equipment * Vehicle(s) * Boat(s) * Other necessary equipment</p> <p>-Training of Counterpart personnel</p>	<p>There is no serious unpredictable conflicts among community members in the selected communities.</p> <p>Pre-Conditions The ways to access the selected communities stay in adequate conditions.</p>
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Annex 1 PDM E for Evaluation based on the PDM ver2 approved in June 2008

6-2 Prepare and/or procure materials for environmental education.	6-3 Implement the action plan for environmental education.	6-4 Facilitate the establishment of areas for the development of environmental education activities.
6-5 Monitor the implementation of the action plan for environmental education and feed back the result.		

Annex 2 Current PO (Tentative PO)

3.4	Implement the farm-use plan with the support of the extension service.																				Extension Staff	Groups
3.5	Monitor the implementation of the farm-use plan.																				Extension Staff	Groups
4	The forest coverage in critical areas and common interest areas are increased by the members of the groups, contributing to soil restoration.																					
4.1	Select critical areas and common interest areas to the communities and the Project.																				Extension Staff	Groups
4.2	Carry out training on silviculture.																				Extension Staff	Groups
4.3	Select species to be planted.																				Extension Staff	Groups
4.4	Establish group nurseries.																				Extension Staff	Groups
4.5	Plant the trees in the selected areas.																				Extension Staff	Groups
4.6	Maintain the reforested areas.																				Extension Staff	Groups
5	Extension service in line with the needs of community members and the plans for the area is provided by ANAM staff.																					
5.1	Design an extension system with consideration of the role of ANAM.																				Participatory Development, Extension Staff	Coordination
5.2	Elaborate a training plan for ANAM staff involved, which meet the beneficiaries' needs																				Participatory Development, Extension Staff	Extension Staff
5.3	Implement the theory-practice training plan.																				Participatory Development, Extension Staff	Groups
5.4	Elaborate an action plan for the extension service.																				Participatory Development, Extension Staff	Extension Staff
5.5	Provide the extension service to community members.																				Participatory Development, Extension Staff	Groups
5.6	Exchange techniques with other projects.																				Participatory Development, Extension Staff	Groups, Extension Staff
5.7	Elaborate an extension guidebook.																				Participatory Development, Extension Staff	Participatory Development, Extension Staff
5.8	Establish the extension system.																				Participatory Development, Extension Staff	Environment Culture Promotion
6	The community members are conscious of the importance of the appropriate use of natural resources and environmental conservation in the project area.																					
6.1	Elaborate an action plan for environmental education.																				Participatory Development	
6.2	Prepare and/or procure materials for environmental education.																				Participatory Development	
6.3	Implement the action plan for environmental education.																				Participatory Development	
6.4	Facilitate the establishment of areas for the development of environmental education activities.																				Participatory Development	
6.5	Monitor the implementation of the action plan for environmental education and feed back the result.																				Participatory Development	

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Annex 3 Accomplishment of the Project

I Accomplishment of Inputs

Plan as per PDM	Source/ Method	Results (as of 16 February unless otherwise mentioned)																																																								
1 Panamanian side																																																										
1.1 Personnel - Project Director - Project Coordinator - Heads of Section (Participatory Development, Extension Service, and Administration) - Extensionists (4) - Administrative and supporting staff (6) - Other necessary personnel	Review of record of Inputs	At present, 13 staff members of ANAM are assigned as the Project personnel as shown in the tables below. Table (I)-1.1a: Project management staff <table border="1"> <thead> <tr> <th>Position in the Project</th> <th>#</th> <th>Remarks</th> </tr> </thead> <tbody> <tr> <td>1 Project Director</td> <td>1</td> <td>Director of Integrated Watershed Management of ANAM</td> </tr> <tr> <td>2 Project Coordinator</td> <td>1</td> <td>Full-time assignment</td> </tr> <tr> <td>Total</td> <td>2</td> <td></td> </tr> </tbody> </table> Table(I) -1.1b: Technical staff <table border="1"> <thead> <tr> <th>Position in the Project</th> <th>#</th> <th>Relevant Outputs of PDM</th> <th>Remarks</th> </tr> </thead> <tbody> <tr> <td>1 Chief of Participatory Development</td> <td>1</td> <td>Output 1</td> <td>Full-time assignment</td> </tr> <tr> <td>2 Chief of Extension</td> <td>1</td> <td>Output 2-5</td> <td>-ditto-</td> </tr> <tr> <td>3 Chief of Administration</td> <td>1</td> <td>-</td> <td>-ditto-</td> </tr> <tr> <td>4 Staff of Participatory Development</td> <td>1</td> <td>Output 1</td> <td>-ditto-</td> </tr> <tr> <td>5 Staff of Extension</td> <td>4</td> <td>Output 2-5</td> <td>-ditto-</td> </tr> <tr> <td>6 Staff of Environmental Education</td> <td>1</td> <td>Output 6</td> <td>Part-time assignment</td> </tr> <tr> <td>Total</td> <td>9</td> <td></td> <td></td> </tr> </tbody> </table> Table(I)-1.1c: Administrative and supporting staff <table border="1"> <thead> <tr> <th>Position in the Project</th> <th>#</th> <th>Remarks</th> </tr> </thead> <tbody> <tr> <td>1 Secretary</td> <td>1</td> <td>Full-time assignment</td> </tr> <tr> <td>2 Boat operator</td> <td>1</td> <td>Full-time assignment</td> </tr> <tr> <td>Total</td> <td>2</td> <td></td> </tr> </tbody> </table> For details, please see RM A-1	Position in the Project	#	Remarks	1 Project Director	1	Director of Integrated Watershed Management of ANAM	2 Project Coordinator	1	Full-time assignment	Total	2		Position in the Project	#	Relevant Outputs of PDM	Remarks	1 Chief of Participatory Development	1	Output 1	Full-time assignment	2 Chief of Extension	1	Output 2-5	-ditto-	3 Chief of Administration	1	-	-ditto-	4 Staff of Participatory Development	1	Output 1	-ditto-	5 Staff of Extension	4	Output 2-5	-ditto-	6 Staff of Environmental Education	1	Output 6	Part-time assignment	Total	9			Position in the Project	#	Remarks	1 Secretary	1	Full-time assignment	2 Boat operator	1	Full-time assignment	Total	2	
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2 Chief of Extension	1	Output 2-5	-ditto-																																																							
3 Chief of Administration	1	-	-ditto-																																																							
4 Staff of Participatory Development	1	Output 1	-ditto-																																																							
5 Staff of Extension	4	Output 2-5	-ditto-																																																							
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1 Secretary	1	Full-time assignment																																																								
2 Boat operator	1	Full-time assignment																																																								
Total	2																																																									
1.2 Land, building and facilities - Project office - Office equipment and furniture - Fuel - Others	-ditto	In the beginning, an office room in the building of ANAM in Panama City was made available for the Project. The Project Office was provided in June 2007 in the Community of the 20, Borough of Nuevo San Juan, District and Province of Colon. The office equipment and furniture have been provided.																																																								
1.3 Running expenses	-ditto-	So far, US\$ 210,818 has been allocated as running expenses for the implementation of the Project. Major items include rent for the Project Office, fuel costs, daily allowances of official trips, computer equipment, boats, and vehicles. Table (I)-1.3: Provision of running expenses by the Panamanian fiscal year (Jan-Dec) Unit=US\$ <table border="1"> <thead> <tr> <th>2006</th> <th>2007</th> <th>2008</th> <th>2009</th> <th>Total</th> </tr> </thead> <tbody> <tr> <td>46,318</td> <td>74,200</td> <td>43,200</td> <td>47,100</td> <td>210,818</td> </tr> </tbody> </table> For details, please see RM A-2	2006	2007	2008	2009	Total	46,318	74,200	43,200	47,100	210,818																																														
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2 Japanese side																																																										
2.1 Personnel * Chief advisor * Extension * Participatory development * Coordinator * Other experts in specific fields	Review of record of Inputs	So far, a total of seven Japanese Experts have been dispatched in the following six fields: (i) Chief Advisor, (ii) Participatory Development/Extension, (iii) Environmental Education, (iv) Marketing of Agricultural and Forest Products, (v) Agricultural Land Use Plan, and (vi) Coordinator. For details, please see RM B-1																																																								
2.2 Provision of equipment * Vehicle(s)	ditto	So far, approximately \$81,440, which is equivalent to 7,331,229 Japanese yen, has been disbursed for procurement of the equipment. Major items																																																								

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Annex 3 Accomplishment of the Project

Plan as per PDM	Source/ Method	Results (as of 16 February unless otherwise mentioned)								
* Boat(s) * Other necessary equipment		include 2 vehicles, 4 personal computers, one boat, and one tractor. Table (I)-2.2: Disbursement related to the equipment and machinery by the Japanese fiscal year (April-March) Unit=US\$ <table border="1"> <tr> <th>2006(Aug-)</th> <th>2007</th> <th>2008</th> <th>Total</th> </tr> <tr> <td>67,332</td> <td>3,653</td> <td>10,455</td> <td>81,440</td> </tr> </table> <p style="text-align: right;">For details, please see RM B-2</p>	2006(Aug-)	2007	2008	Total	67,332	3,653	10,455	81,440
2006(Aug-)	2007	2008	Total							
67,332	3,653	10,455	81,440							
2.3 Training of Panamanian personnel	ditto	So far, 7 persons in total have been sent for training. Table (1)-2.3: Number of Panamanian staff trained in Japan by the Japanese fiscal year (April-March) <table border="1"> <tr> <th>2006(Aug-)</th> <th>2007</th> <th>2008</th> <th>Total</th> </tr> <tr> <td>3</td> <td>1</td> <td>2</td> <td>6</td> </tr> </table> <p style="text-align: right;">For details, please see RM B-3</p>	2006(Aug-)	2007	2008	Total	3	1	2	6
2006(Aug-)	2007	2008	Total							
3	1	2	6							
2.4 Local activity cost	ditto	So far, approximately US\$ 294,492, which is equivalent to approximately 26,510,000 Japanese yen, has been disbursed as local activity costs. Major expense items include employment cost of local staff, local training costs, and consumables. Table (I)-2.4: Provision of local activity costs by the Japanese fiscal year (April-March) Unit=US\$ <table border="1"> <tr> <th>2006 (Aug-)</th> <th>2007</th> <th>2008</th> <th>Total</th> </tr> <tr> <td>61,067</td> <td>92,368</td> <td>141,057</td> <td>294,492</td> </tr> </table> <p style="text-align: right;">For details, please see RM B-4</p>	2006 (Aug-)	2007	2008	Total	61,067	92,368	141,057	294,492
2006 (Aug-)	2007	2008	Total							
61,067	92,368	141,057	294,492							

II Accomplishment of Outputs

Narrative Summary (PDM)	Objectively Verifiable Indicators (PDME)	Source/ Method (PDM)	Results (as of 16 February unless otherwise mentioned)																						
Output 1 Self-active groups are organized by the participatory manners with gender equality.	1-1. By the end of the Project, there are at least 20 groups actively working in the activities promoted by the Project.	Record of the Project	In total, 14 groups are organized/reorganized by the Project as shown in the table below. All of the groups have been actively working with the Project. It would be, however, difficult to achieve the numerical target of the Indicator (i.e. 20 groups) by the end of the Project for the following reasons: <ul style="list-style-type: none"> (i) The population of the remaining communities is too small to form groups; and (ii) The current Project staff, including Participatory Development and Extension, is occupied with existing fourteen groups. Actually, group activities have been conducted with assistance of an administrator and an interpreter/technical assistant of the Project. <p style="text-align: center;">Table (II)-1.1: Number of the groups organized/reorganized by the Project</p> <table border="1"> <thead> <tr> <th rowspan="2">Location</th> <th colspan="2">Within the park</th> <th rowspan="2">Buffer Zone</th> <th rowspan="2"></th> </tr> <tr> <th>Around the lake</th> <th>Around the river</th> </tr> </thead> <tbody> <tr> <td>Groups organized by the Project</td> <td>1 (Victoria Lorenzo)</td> <td>1 (Boqueron Arriba)</td> <td>2 (Salamanquita, Santa Cruz)</td> <td>4</td> </tr> <tr> <td>Existing groups reorganized by the Project</td> <td>3 (Penas Blancas, Quebrada Ancha, San Vicented de la Tranquilla)</td> <td>3 (Boqueron Abajo, San Juan de Pequeni, Santa Librata)</td> <td>4 (Chilibrillo, Salamanca, Nuevo Vigia, Madronal)</td> <td>10</td> </tr> <tr> <td></td> <td>4</td> <td>4</td> <td>6</td> <td>14</td> </tr> </tbody> </table>	Location	Within the park		Buffer Zone		Around the lake	Around the river	Groups organized by the Project	1 (Victoria Lorenzo)	1 (Boqueron Arriba)	2 (Salamanquita, Santa Cruz)	4	Existing groups reorganized by the Project	3 (Penas Blancas, Quebrada Ancha, San Vicented de la Tranquilla)	3 (Boqueron Abajo, San Juan de Pequeni, Santa Librata)	4 (Chilibrillo, Salamanca, Nuevo Vigia, Madronal)	10		4	4	6	14
Location	Within the park		Buffer Zone																						
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Annex 3 Accomplishment of the Project

Narrative Summary (PDM)	Objectively Verifiable Indicators (PDME)	Source/ Method (PDM)	Results (as of 16 February unless otherwise mentioned)																																																								
	1-2: By the end of the Project, there are at least 40% of members of all the groups, participating actively in the activities of the groups, are women	Record of group members and "project beneficiaries" kept by the Participatory Development team	<p>Note: At present, the Project defines "active" group as the groups working regularly with the activities promoted by the Project.</p> <p>According to the record kept by the Participatory Development team, 48% of the members of all the groups, participating actively in the activities of the groups, are women as shown in the table below</p> <p style="text-align: center;">Table (II)-1.2: Ratio of the active female members</p> <table border="1" style="margin-left: auto; margin-right: auto;"> <thead> <tr> <th></th> <th>Female</th> <th>Male</th> <th>Total</th> <th>% of female members</th> </tr> </thead> <tbody> <tr> <td>Total</td> <td>67</td> <td>74</td> <td>141</td> <td>48%</td> </tr> </tbody> </table> <p style="text-align: right;">(For details, please see RM-C)</p> <p>Note: The Project defines "members" of the groups as the members who are identified active by the group members themselves.</p>		Female	Male	Total	% of female members	Total	67	74	141	48%																																														
	Female	Male	Total	% of female members																																																							
Total	67	74	141	48%																																																							
	1-3: By the end of the Project, all the groups become able to facilitate their monthly meetings by themselves (i.e.: all the groups obtain the fifth level of the five evaluation rating set by the Project)	Results of monitoring based on "master chart of scale of levels for strengthening of organization"	<p>According to the results of the Internal Workshop of the Project conducted in October 2008, almost all the groups organized/reorganized in 2007 had reached the third level or the third-fourth level of the five evaluation rating set by the Project; whereas most of the groups organized/reorganized in 2008 have reached the second level.</p> <p style="text-align: center;">Table(II)-1.3: Achievement level of the facilitation</p> <table border="1" style="margin-left: auto; margin-right: auto;"> <thead> <tr> <th>Level</th> <th># of groups formed in 2007(=A)</th> <th>Ratio</th> <th># of groups formed in 2008(=B)</th> <th>Ratio</th> <th>Total (A+B)</th> <th>Ratio</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>0</td> <td>0%</td> <td>0</td> <td>0%</td> <td>0</td> <td>0%</td> </tr> <tr> <td>1-2</td> <td>0</td> <td>0%</td> <td>2</td> <td>29%</td> <td>2</td> <td>14%</td> </tr> <tr> <td>2</td> <td>1</td> <td>14%</td> <td>5</td> <td>71%</td> <td>6</td> <td>43%</td> </tr> <tr> <td>3</td> <td>5</td> <td>71%</td> <td>0</td> <td>0%</td> <td>5</td> <td>36%</td> </tr> <tr> <td>3-4</td> <td>1</td> <td>14%</td> <td>0</td> <td>0%</td> <td>1</td> <td>7%</td> </tr> <tr> <td>4</td> <td>0</td> <td>0%</td> <td>0</td> <td>0%</td> <td>0</td> <td>0%</td> </tr> <tr> <td>5</td> <td>0</td> <td>0%</td> <td>0</td> <td>0%</td> <td>0</td> <td>0%</td> </tr> </tbody> </table> <p style="text-align: right;">(For details, please see RM-C)</p>	Level	# of groups formed in 2007(=A)	Ratio	# of groups formed in 2008(=B)	Ratio	Total (A+B)	Ratio	1	0	0%	0	0%	0	0%	1-2	0	0%	2	29%	2	14%	2	1	14%	5	71%	6	43%	3	5	71%	0	0%	5	36%	3-4	1	14%	0	0%	1	7%	4	0	0%	0	0%	0	0%	5	0	0%	0	0%	0	0%
Level	# of groups formed in 2007(=A)	Ratio	# of groups formed in 2008(=B)	Ratio	Total (A+B)	Ratio																																																					
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2	1	14%	5	71%	6	43%																																																					
3	5	71%	0	0%	5	36%																																																					
3-4	1	14%	0	0%	1	7%																																																					
4	0	0%	0	0%	0	0%																																																					
5	0	0%	0	0%	0	0%																																																					
<p>Output 2 The group members are skilled in environment friendly production techniques.</p>	2-1: By the end of the Project, 80% of the members of all the groups obtain a satisfactory evaluation for the knowledge and techniques acquired during the Project.	Training report prepared by the Extension team	<p>Under Output 2, the transfer of techniques and knowledge to the group members is conducted through (i) one-week seminars, (ii) workshops, short seminars, and lectures, and (iii) on-the-job training through extension services.</p> <p style="text-align: center;">Table(II)-2.1 : Ratio of the group members who obtained satisfactory evaluation</p> <table border="1" style="margin-left: auto; margin-right: auto;"> <thead> <tr> <th></th> <th>Type of technical transfer</th> <th># of group members targeted</th> <th># of members who obtained satisfactory evaluation</th> <th>Ratio</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>One-week seminars</td> <td>81</td> <td>81</td> <td>100%</td> </tr> <tr> <td>2</td> <td>Workshops, lectures</td> <td>102 (F:38, M:64)</td> <td>n/a</td> <td>n/a</td> </tr> <tr> <td>3</td> <td>OJT through extension</td> <td>141 (F:67, M:74)</td> <td>n/a</td> <td>n/a</td> </tr> </tbody> </table> <p>(i) <u>One-week seminars</u>: One-hundred (100) per cent of those who participated in the seminars scored 80 or above of 100 points on their final evaluation, which is considered as "satisfactory" by the Project. (For details, please see RM-C)</p>		Type of technical transfer	# of group members targeted	# of members who obtained satisfactory evaluation	Ratio	1	One-week seminars	81	81	100%	2	Workshops, lectures	102 (F:38, M:64)	n/a	n/a	3	OJT through extension	141 (F:67, M:74)	n/a	n/a																																				
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Annex 3 Accomplishment of the Project

Narrative Summary (PDM)	Objectively Verifiable Indicators (PDME)	Source/ Method (PDM)	Results (as of 16 February unless otherwise mentioned)																												
			<p>(ii) <u>Workshops/lectures</u>: In total, 102 members have participated in the workshops/lectures organized by the Project. Information related to the Indicator, however, was not available because follow-ups have not been conducted in a systematic manner.</p> <p>(ii) <u>On-the-job training</u>: Extension services have been carried out regularly. Information related to the Indicator, however, was not available because follow-ups have not been conducted in a systematic manner.</p>																												
	2-2: By the end of the Project, at least 12 trainings on environment friendly production techniques are executed	Training report prepared by the Extension team	<p>As mentioned above, seven one-week seminars have been conducted already. Three more are scheduled in 2009. It is a plan to implement at least two more by the end of the Project. It is likely that this Indicator would be achieved by the end of the Project.</p> <p>Note: In this indicator, definition of "training" here is limited to one-week seminar.</p>																												
	2-3: By the end of the Project, the farmers carry out activities of farmer-to-farmer exchanges	Record of farmer-to-farmer exchanges kept by the Extension team	<p>So far, twelve farmer-to-farmer exchange programs have been carried out according to the plan of the Project, in which a total of 316 members participated. (For details, please see RM-C)</p> <p>Note: The exact level of achievement could not be assessed since criteria to determine the achievement level is not defined in this Indicator. Furthermore, the current Indicator is virtually the same as the Activity 2.3, which is a means to produce Output 2; therefore is not considered appropriate as an Indicator to assess the achievement the Output 2. The Indicator should be reviewed and modified as appropriate</p>																												
<p>Output 3 Farmland-use plans that contribute to the territorial ordering of the watershed and the conservation of the Chagres National Park are elaborated and in process of implementation by the members of the groups.</p>	3-1: By the end of the Project, at least X% of the groups have their group farm use plans in agreement with the institutional policies (* ⁷)	Record of the Project	<p>At present, 93% of the groups (i.e. 13 groups) have their draft group farm use plans validated by their respective annual planning workshops in October 2008 -January 2009. For the remaining (i.e. one group), preparation of its actual map has been completed: the draft is expected to be elaborated in April 2009 (For details, see RM- C)</p> <p align="center">Table (III)-3.1: Status of elaboration of group farm use plans</p> <table border="1"> <thead> <tr> <th></th> <th>Key stage for group farm use plan</th> <th># of groups</th> <th>Ratio</th> </tr> </thead> <tbody> <tr> <td>A</td> <td>Actual map developed</td> <td>0</td> <td>0%</td> </tr> <tr> <td>B</td> <td>Future map developed</td> <td>1</td> <td>7%</td> </tr> <tr> <td>C</td> <td>Draft plan under preparation</td> <td>0</td> <td>0%</td> </tr> <tr> <td>D</td> <td>Draft plan prepared and validated by the group</td> <td>13</td> <td>93%</td> </tr> <tr> <td>E</td> <td>Draft plan submitted to the relevant institution(s) for review</td> <td>0</td> <td>0%</td> </tr> <tr> <td>F</td> <td>Final plan</td> <td>0</td> <td>0%</td> </tr> </tbody> </table> <p>Note: This is an indicator added for the purpose of the Evaluation after a series of discussions with the personnel concerned with the Project. The numerical target (X%) will be specified after the review process of the relevant institutions becomes clear.</p>		Key stage for group farm use plan	# of groups	Ratio	A	Actual map developed	0	0%	B	Future map developed	1	7%	C	Draft plan under preparation	0	0%	D	Draft plan prepared and validated by the group	13	93%	E	Draft plan submitted to the relevant institution(s) for review	0	0%	F	Final plan	0	0%
	Key stage for group farm use plan	# of groups	Ratio																												
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F	Final plan	0	0%																												

⁷ It is defined as Law 21, Law 41, Management Plan for the Chagres National Park and so on

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Annex 3 Accomplishment of the Project

Narrative Summary (PDM)	Objectively Verifiable Indicators (PDME)	Source/ Method (PDM)	Results (as of 16 February unless otherwise mentioned)
	3-2: At the end of the Project, at least X% of the groups implement the activities according to the use plans	Monitoring: 1) Visiting group farms, and 2) randomly, group farm development reports	So far, there is no achievement for this Indicator because the relevant activity has not started yet. It is a plan to start implementing the draft plans in March 2009. Note: This is an Indicator added for the purpose of the Evaluation after a series of discussions with the personnel concerned with the Project. The numerical target (X%) will be specified after the review process of the relevant institutions becomes clear.
	3.3: By the end of the Project, at least 80% of the members of all the groups have their use plans in agreement with the institutional policies (* ³)	Record of the Project	So far, there is no achievement for this Indicator because the relevant activities have not started yet. Since the schedule for individual farm use plans is not clearly delineated in the available documents, including the current PO, it is difficult to say whether this achievement level is as planned or behind the schedule. Approval of the structure of the individual farm use plans are required by the Park because the Project assists the group members in preparation and implementation of the farm use plans.
	3.4: At the end of the Project, at least 80% of the members of all the groups introduce activities according to the use plans	Monitoring: 1) Visiting individual farms, and 2) randomly, individual farm development reports	Same as 3.3
Output 4 The forest coverage for the soil restoration in critical areas and important areas in common interest of group members and related authorities, are increased by the members of the groups.	4-1. At the end of the Project, at least 90% of the farmers' groups have one nursery.	Extension workers' records, Group activity records	The Evaluation Team found it difficult to assess the achievement level of the Indicator because the definition of "one nursery" is not clear. If it means "a temporary nursery" for any purposes, 75% of the present groups have experienced the raising of seedlings: the degree of the achievement would be 83%. If it means "a permanent nursery", one group has one: the degree of achievement would be 7%.
	4-2. At the end of the Project, the group members have planted at least _____ trees (* ³) per year.	Tree planting records	The Evaluation Team found it difficult to assess the achievement level of the Indicator because the number of the trees to be planted has not specified yet. The Project team are not sure when the number can be specified, either. For reference, a total of 227 trees have been planted by the members of two groups in the selected critical and important areas identified in their group farms. (Additional 462 trees have been planted in the premises of elementary schools but this is considered as part of the environmental education activities). (For details, please see RM-C)
Output 5 Extension service in line with the needs of group members and the related policies (* ⁴) is provided	5-1. By halfway through the Project, the draft version of the Extension Guidebook is prepared.	Document of the extension guidebook.	The preliminary draft of the Extension Guidebook was prepared in December 2008 after some points had been discussed in the third Internal Workshop in October 2008. It is hoped that the draft would be ready by April or May 2009 after full discussion within the Project team.
	5-2. At the end of the Project, the Extension Guidebook is prepared.	Document of the extension guidebook.	

³ It is defined as Law 21, Law 41, Management Plan for the Chagres National Park and so on

Annex 3 Accomplishment of the Project

Narrative Summary (PDM)	Objectively Verifiable Indicators (PDME)	Source/ Method (PDM)	Results (as of 16 February unless otherwise mentioned)															
by extension members (*5).	5-3. At the end of the Project, X% of the members of all the groups are satisfied with the extension service.	Extension workers' records, Monthly meeting records	<p>According to the results of the evaluation workshops on the group activities conducted in the period between November 2008 and January 2009, ninety-seven (97) % of the group members, who participated in the workshop, are satisfied with the extension services they received.</p> <p>Table (III)-5.3: Satisfaction of the group members about the extension services they received.</p> <table border="1"> <thead> <tr> <th></th> <th>Overall satisfaction</th> <th>Ratio</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>Good</td> <td>81%</td> </tr> <tr> <td>2</td> <td>Regular</td> <td>16%</td> </tr> <tr> <td>3</td> <td>Bad</td> <td>3%</td> </tr> <tr> <td></td> <td>Total</td> <td>100%</td> </tr> </tbody> </table> <p align="right">(For details, please see RM-C)</p> <p>Note: The Project defines the members who are "satisfied" with the extension services as those who answered "good" or "regular".</p>		Overall satisfaction	Ratio	1	Good	81%	2	Regular	16%	3	Bad	3%		Total	100%
		Overall satisfaction	Ratio															
1	Good	81%																
2	Regular	16%																
3	Bad	3%																
	Total	100%																
5-4. By the end of the Project, the extension system is established and functioning.	Document of the Project	The Evaluation Team found it difficult to assess the achievement level of the Indicator because the definition of the "extension system" is not clear among the personnel concerned with the Project.																
Output 6 The community members are conscious of the importance of the appropriate use of natural resources and environmental conservation in the Project area.	6-1. By halfway through the Project, there are materials directed to sensitizing local people on the importance of the use of natural resources and the environmental conservation in the Project area.	Environmental education materials	A material for environmental education has been prepared. Draft of "Handbook of environmental education in the Chagres National Park" is being prepared in collaboration with the Park Office.															
	6-2. At the end of the Project, 80% of the participants in the environmental education activities are more conscious of the importance of the use of natural resources and the environmental conservation in the Project area.	Self-evaluation of each environmental education activity,	No information was available for this Indicator. So far, 26 environmental education activities have been conducted, in which more than 1,294 local people participated. Surveys on the change of awareness have not been conducted, however.															
	6-3. At the end of the Project, 90% of the groups are transferring aspects of environmental education to community members by their own initiative.	Monthly and/or annual plans of the groups, Last plan of the groups	No information was available for this Indicator. Note: The current Indicator refers to an action which is expected to happen after Output 6 is achieved. Though it could be considered as an impact of the activities conducted under Output 6, it is found irrelevant as an Indicator to measure the achievement of Output 6.															

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Annex 3 Accomplishment of the Project

III Accomplishment of Project Purpose

Narrative Summary (PDM)	Objectively Verifiable Indicators (PDM)	Source/ Method (PDM)	Results (as of 16 February unless otherwise mentioned)
<p>Project Purpose Sustainable production techniques implemented using environment friendly and participatory methods are practiced by the established group members through extension system of ANAM.</p>	<p>1. The members of the groups use, as a whole, at least 75% of the technique promoted by the Project.</p>	<p>1.Six-monthly evaluation reports</p>	<p>According to the results of the third Internal Workshop of the Project in October 2008, fifty-nine (59)% of the techniques promoted by the Project had been utilized by the groups. (For details, please see RM-C)</p>
	<p>2. At the end of the Project, 75% of the groups have a vision of the group's future that incorporate environment friendly techniques</p>	<p>2.Six-monthly evaluation reports, final evaluation report</p>	<p>No information was available for this Indicator. Note: Definition of "vision of the groups' future" is not clear among the personnel concerned with the project. It would be advisable helpful to review and modify the Indicator as appropriate.</p>

IV Likelihood of accomplishment of Overall Goal

Narrative Summary (PDM)	Objectively Verifiable Indicators (PDM)	Source/ Method (PDM)	Results (as of 16 February unless otherwise mentioned)
<p>Overall Goal The environment friendly and sustainable production is practiced in middle and lower watershed of Alhajuela Lake.</p>	<p>1. The number of the community members practicing at least two techniques promoted by the project is increased more than two times from the time of the project termination.</p>	<p>1.Survey, Farm-use plan monitoring report</p>	<p>Likelihood of accomplishment of the Overall Goal was not assessed because it was found preliminary.</p>

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Annex 4 Implementation Process of the Project

Item	Source/ Methods	Results (as of 16 February unless otherwise mentioned)
1 Progress of Activities		Overall: The PDM of the Project has been modified once. The modification was made to the initial PDM (PDM ver.1) in the second year of the Project (February 2008)". In the meantime, the tentative PO has not been finalized yet. It is still general and lack of necessary information, including expected result(s) for each Activity. Lack of the expected results has made it difficult to assess likelihood of completion of the planned Activities before the end of the Project.
(1) Activities under Output 1	Review of PO, progress reports, questionnaire & interview with relevant P/P (Project personnel) and J/E (Japanese experts)	So far, Activities under Output 1 are mostly on schedule as compared with the plan delineated in the tentative PO. (For details, please see RM-D) <u>Issues:</u> 1) <u>Activity 1.2 (promotion meetings) & 1.3 (organization/reorganization of groups):</u> Fourteen groups have been organized/reorganized by the Project so far. According to the current PDM, four more groups are to be organized/reorganized by the end of the Project. The Project considers it a little unrealistic to organize/reorganize any more groups in the Project Area for the reasons shown in the Annex 3. 2) <u>Activity 1.5 (strengthening of the groups):</u> According to the tentative PO, the Activity 1.5 is to be completed in the middle of 2009. The Project feel more time is needed to achieve the Output 1, but its timeframe is not clear at the moment.
(2) Activities under Output 2	-ditto-	So far, activities under Output 2 are mostly on schedule as compared with the plan delineated in the tentative PO. (For details, please see RM-D) <u>Issues:</u> 1) Overall: Some of the group activities identified by the groups themselves, including some environmental businesses, may not be categorized as environment friendly" production techniques".
(3) Activities under Output 3	-ditto-	So far, activities under Output 3 are mostly on schedule as compared with the plan delineated in the tentative PO. (For details, please see RM-D) <u>Issues:</u> 1) <u>Overall:</u> The Project takes a two-stage approach to achieve this Output: (i) elaboration and implementation of group farm use plans; and (ii) elaboration and implementation of individual farm use plans. This approach, however, is not well reflected in the current PDM/PO, which makes it difficult to monitor the overall progress of Output 3 based on the PDM/PO. 2) <u>Activity 3.3~3.5 as per the PDME (activities related to group farms):</u> The first stage, assistance for group farm use plans, is halfway through. Almost all the present groups have the draft plans approved by the groups themselves. According to the Extension Team, further steps are necessary to meet the requirement of the Management Plan of the Chagres National Park, which states "In the Special Use Zone, all farmers registered in the protected area must have a Farm Management Use Plan (PMF) authorized by the administration of Chagres National Park". The details of the additional steps are still sketchy, however. In the meantime, the activities based on the draft are planned to be introduced in March 2009. 3) <u>Activity 3.6~3.8 as per the PDME (activities related to individual farms):</u> The second stage, assistance for individual farm use plans, shall be started with the members of the groups which are evaluated as sufficiently matured by the Project. As yet, detailed implementation plan, including the steps, target beneficiaries, timeframe, scope and the quantity of financial inputs for development of individual farms, etc, have not been discussed fully. In the next Internal Workshop of the Project scheduled in March 2009, the Project plans to evaluate the maturity of the groups. Timeframe for the elaboration of the implementation plan is not clear at the moment.

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Annex 4 Implementation Process of the Project

Item	Source/ Methods	Results (as of 16 February unless otherwise mentioned)
(4) Activities under Output 4	-ditto-	<p>So far, activities under Output 4 are behind the schedule as compared with the plan delineated in the tentative PO. (For details, please see RM-D)</p> <p><u>Issues:</u></p> <p>1) <u>Overall:</u> The Project team see little prospect of the progress of the activities under Output 4, which is intended for tree planting in critical and important areas for soil restoration. The group members are interested in integrating trees which would provide some economic benefits to them in their group farms/individual farms. They are also interested in planting trees in the premises of the schools where their children go. But there is little area that requires soil restoration in the farmlands and schools. So far, only 227 trees have been planted in the critical areas that requires soil restoration, which are located in two of the group famrs. As many as 462 trees have been planted in the schools but the purpose was rather environmental education than soil restoration. As for tree planting of the critical and important areas outside the farmlands and schools, the group members are not motivated to plant trees unless some incentive is provided, not to speak of maitenance of the planted areas without incentive. Meanwhile, some part of the Project Area is covered by the reforestation project of ACP, which provides economic incentive to the local people who plant trees.</p>
(5) Activities under Output 5	-ditto-	<p>So far, activities under Output 5 are mostly on schedule. (For details, please see RM-D)</p> <p><u>Issues:</u></p> <p>1) <u>Activity 5.1 (design of extension system):</u> The Project has not yet reached a consensus on the design of the extension system to be developed under the Output though discussions have been carried out in various occasions. According to the M/M signed in January 2006, an "extension system" of ANAM in the context of the Project is "for both achievement of the overall/super goals, and securing sustainability of the Project". The definition of the "system" itself is not clear in the document, however. It has not been clarified, either.</p> <p>2) <u>Activity 5.7 (elaboration of extension guide book):</u> A preliminary draft of the Extension Guidebook was prepared in December 2008. It is expected that the draft would be ready by April or May 2009 after full discussions within the Project. The concept and the target users of the guidebook, which are not specified in the PDM, have not been made clear.</p>
(6)Activities under Output 6	-ditto-	<p>So far, activities under Output 6 are mostly on schedule. (For details, please see RM-D)</p>
2Implementation System	Review of progress reports	<p>ANAM, the Implementing Organization, has assigned a Panamanian project team under the National Directorate of Integrated Watershed Management. This team is the main body to implement the Project with support of the Japanese Experts team dispatched by JICA. The team consists of three Sections (i.e. Participatory Development, Extension Services, and Administration) in accordance with the implementation system defined in the PDM. The current system was well considered and structured to start the activities of the Project, allocating the Project staffs in accordance with the specializations. Having 14 groups targeted now in the middle of the implementation period, enormous efforts are being called for to coordinate activities of different Sections, particularly between Extension Section and Participatory Development Section.</p>
3 Project Management	Review of progress reports, questionnaire &interview with relevant	<p>1) <u>Joint Coordinating Committee (JCC):</u> According to the Record of Discussions (R/D) of the Project, functions of the JCC are: (i) to examine and approve the Annual Plan of Operation (APO) formulated by the Project in accordance with the R/D; (ii) to review the overall</p>

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Annex 4 Implementation Process of the Project

Item	Source/ Methods	Results (as of 16 February unless otherwise mentioned)
	P/P,J/E, review PDM/PO of	<p>progress of the Project and activities carried out under the above mentioned APO in particular; and (iii) to review and exchange views on major issues arising from or in concerning the Project and recommend corrective measures; and (iv) to facilitate coordination with other relevant authorities. The JCC is to meet at least once a year or whenever necessity arises. So far, JCC meetings were held three times in December 2006, June 2007, and October 2008. The official minutes of the meetings (M/M) of the JCC have not been prepared. Notes of discussions have been prepared by the Panamanian side but the status of this paper is unofficial. It is difficult to keep track of the decision making process of the Project with these documents. It would have been useful if the M/M, stating the agenda, agreements and disagreements, actions to be taken and their schedule and responsible parties had been prepared and signed for each meeting of the JCC.</p> <p>2) <u>Internal monitoring system</u>: Overall progress of the Activities of PDM/PO (APO) as well as achievement of the Indicators of the PDM has not been monitored by the Project. Day-to-day activities are monitored through weekly meetings, consisting of all of the Panamanian staff and the Japanese Experts who are on-site. In general, progress of the previous week and the plan for the week are discussed. Substantial issues often remain unaddressed for lack of time. Smaller meetings to discuss these issues, consisting of the Project Manager, representatives of components, and the Japanese Experts, for example, have been held but not on regular basis.</p> <p>3) <u>Project monitoring by ANAM</u>: The ANAM has closely monitored the Project, using an annual plan of operation (PAO) of ANAM as a planning and monitoring tool.</p> <p>4) <u>Project Management through the PDM and the PO of the Project</u>: The PDM as well as the PO is an essential tool for the project management for the projects supported by JICA. The PDM and the PO of the present Project, however, has not been used effectively.</p> <p>a. For the PDM/PO of the Project, two language versions (English and Spanish) exist. There were discrepancies among their text in the initial PDM (PDM1). Some were editorial but others were more significant. Many of the discrepancies were corrected in the PDM 2 but some were not paid attention to. The discrepancies still exist. While the Spanish side uses the Spanish version, the Japanese side uses English version as a basis for discussion. This has led to difference in understanding of some descriptions of the PDM/PO.</p> <p>b. In addition, some of the Objectively Verifiable Indicators of the present PDM (PDM2) are not well defined and some of them lack criteria for measuring the achievement levels. Some of the "Means of Verification" are not relevant with the Indicators and other requires specific activities by the Project, which are not included in the PDM. The tentative PO has not been finalized. Though "person in charge" is shown in the tentative PO, it is not specific enough and may be outdated. The schedule of the tentative PO may not coincide with the actual plan. Moreover, sub-activities of each of the Activity have not been identified. Information necessary for planning and monitoring, such as "expected result(s)" "implementers (Panamanian side)", "major inputs (Japanese and Panamanian sides)", "remarks", including necessary conditions, are not identified for each Activity (or sub-activity). An Annual PO has not been formulated for review by the JCC, either.</p> <p>In the reviewing process, these issues have not been addressed. This has made it difficult for all those concerned to have common understanding of the overall implementation process and progress of</p>

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Annex 4 Implementation Process of the Project

Item	Source/ Methods	Results (as of 16 February unless otherwise mentioned)
		the Project based on the PO as well as achievement level of the Output and the Project Purpose of the PDM.
4 Communic ation	Questionnaire and interview with P/P and J/E	<p>Some of the Project members think that the communication within the Project has been sufficient in order to implement the Activities of the Project. Others feel it needs some improvement. The issues pointed out by them are as follows:</p> <ol style="list-style-type: none"> 1) Within each component, communication is generally sufficient for day-to-day implementation of the Project. 2) Communication across the different components is not as smooth as the one within the technical fields. There seems little linkage and integration across the technical fields in the course of the implementation of the Activities. The division of the work in the components, coupled with limited human resource and the workload of the staff, is considered to be one of the reasons. <p>It is noted that a semi-annual or an annual strategic meeting of the Project called "Internal Workshop of the Project", consisting of all the Panamanian project staff and the Japanese experts, has been organized to discuss the substantial issues and to promote common understanding within the Project.</p>
5. Coordination with relevant organizations	-ditto-	The Project has coordinated with various institutions such as ACP-CICH, MIDA, AMPYME, and MIDES; and, internally, has coordinated with the Chagres National Park, Directory of Promotion, Environment and Culture, Unit of Clean Production and Unit of Environmental Economy
6. Other factors that have affected the implementation process	-ditto-	<u>Other contributing factors:</u> The Project has been carried out based on the effective approach developed by PROCAPPA, including group organization strategy, establishing trust between community members and project personnel, and (iii) focusing on the learning processes.

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Annex 5 Evaluation based on Five Evaluation Criteria

I. RELEVANCE:

Item	Source/ Method	Evaluation (as of 16 February unless otherwise mentioned)
1.1 Necessity		
(1) Relevance with the needs of Panama	Review of the relevant document	The Overall Goal ("The environment friendly and sustainable production is practiced in middle and lower watershed of Alhauela lake") is relevant with the needs of Panama. The area of the Alahuela Lake sub-watershed is an area of particular biological, hydrological and socio-economic importance of the country. It is located at the east of the Panama Canal, among the provinces of Panama and Colon and includes the Chagres National Park and its buffer zone. The majority of forests of the watershed are situated in the Chagres Highlands where they are important part of the hydrologic cycle that provides 40% of the water required for the operation of the Panama Canal and 80% of the water provision for domestic, industrial and hydroelectric generation in the metropolitan zones of Panama and Colon and the Transisthnic Corridor that connects them.
(2) Relevance with the needs of target group.	Review of the reports, questionnaire and interview with the relevant P/P and J/E, interview with farmers' groups	The Project Purpose ("Sustainable production techniques using environment friendly methods are practiced by the established group members through extension system of ANAM") is relevant with the needs of community members in the Project Area, which is middle and lower watershed of Alhajuela Lake. The presence of human settlement with levels of poverty that develop economic activities based on the exploitation of the natural resources of the area that include the Chagres National Park, makes it necessary to propose actions that permit the settlers of the communities to adopt sustainable activities to improve their quality of life.
(3) Relevance with the needs of Implementing Organization	Review of the relevant document (organizational law, etc), questionnaire and interview with the relevant P/P	Most of the Alhajuela lake watershed is in the Chagres National Park and ANAM ranks the area as an important watershed. Therefore, ANAM assigns a project team under the National Directorate of Integrated Watershed Management.
1.2 Priority		
(1) Relevance with national plan and policies of Panama	Review of the documents	The Overall Goal and the Project Purpose are consistent with the policies of Panama. The Project also contributes to the conservation of the Panama Canal Watershed.
(2) Relevance with ODA policies of Japan	ditto	The Overall Goal and the Project Purpose are consistent with ODA policies of Japan. According to the ODA Charter, published by the Government of Japan, "consideration to global warming and environmental problems," is one of the four priority issues. In addition, the Japan's Medium-Term Policy of ODA, 2005, also states that the environmental sector is one of the most important sectors of international cooperation.
1.3 Adequacy as means		
(1) Technological Advantage of Japan	Questionnaire, Interviews with P/P and J/E	Prior to the current Project, JICA assisted the Panama Canal Watershed Conservation Project (PROCCAPA), which was implemented by ANAM from October 2000 to September 2005. The technical assistance of Japan is justified because the experiences and know-how accumulated through PROCCAPA and other projects of JICA have been applied in the Project.

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Annex 5 Evaluation based on Five Evaluation Criteria

II. EFFECTIVENESS (Prospect) :

Items	Source/ Methods	Evaluation (as of 16 February unless otherwise mentioned)
2.1 Achievement level of the Outputs	Review of "Accomplishment of the Project"	<p>Judging from the achievement level of the Indicators, progress has been made mostly as expected in most of the Outputs (i.e. Output1, 2, 3, and 5) while achievement level of the other Outputs (i.e. Output 4 and 6) is not very clear. (For details, please see Annex 3).</p> <ul style="list-style-type: none"> ➤ <u>Output 1</u>: Progress has been made mostly as expected. All the groups organized/reorganized by the Project (i.e. 14 groups) are active. Forty-eight percent of all the active group members are women. Almost all the groups (i.e. 13 groups) had reached the third level or third-fourth level of the five evaluation rating for facilitation set by the Project as of October 2008. ➤ <u>Output 2</u>: Progress has been made mostly as expected. Seven one-week seminars and twelve farmer-to-farmer exchange programs have been carried out according to the plans delineated by the Project. All of the seminar participants obtained satisfactory evaluation at the end of the seminar. ➤ <u>Output 3</u>: Progress has been made mostly as expected. Almost all the groups (i.e. 13 groups) have their draft group farm use plans approved by themselves. The draft plans are expected to be implemented from March 2009. Meanwhile, activities related to individual farms have not started yet. ➤ <u>Output 4</u>: Achievement level is not clear. It was found difficult to assess its achievement level because one of the Indicators was ill-defined and the other was lack of numerical target. ➤ <u>Output 5</u>: Progress has been made mostly as expected. The preliminary draft of the extension guidebook has been prepared: the draft is expected to be ready by April-May 2009. Almost all the group members participating in the evaluation workshops on the group activities organized in the period of November 2008-January 2009 (i.e. 97% of the participants) were satisfied with the extension services they received. As for establishment of extension system, a range of relevant issues are under consideration and discussion. ➤ <u>Output 6</u>: Achievement level is unclear. It was found difficult to assess its achievement level because information regarding two of three Indicators was not available.
2.2 Achievement level of the Project Purposes	ditto	<p>Two Indicators are identified for the Project Purpose: The former has been mostly achieved while the other one is too early to be assessed.</p> <p>Progress is being made mostly as expected in achieving the Project Purpose. It is expected that the Project Purpose would be achieved by the end of the Project with continuous effort of the Panamanian and Japanese sides.</p>
2.3 Contribution of the Outputs to the Project Purpose	Review of progress reports, PDM	<p>The Outputs 1, 2, 3, 5, and 6 directly contribute to the achievement of the Project Purpose. The contribution of the Output 4 is found to be less, however.</p>
2.4 Important Assumptions	Review of progress reports	<p>Two important assumptions for the Project Purposes are identified in the PDM: (i) "There are no extreme fluctuations in the price received by farmers when selling their products"; and (ii) "There are no drastic climate changes in the region". The assumptions have been satisfied so far.</p>
2.5 Other promoting /hampering factors	ditto	<p>Specific factors have not been identified.</p>

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Annex 5 Evaluation based on Five Evaluation Criteria

III EFFICIENCY:

Items	Source/ Methods	Evaluation (as of 16 February unless otherwise mentioned)																														
3.1 Production level of Outputs	Review of the results of "accomplishment of the Project", and "Implementation Process"	Progress has been made mostly as expected in producing Outputs, judging from the achievement level of its Indicators as well as the progress of the Activities.																														
3.2 Important Assumptions	Review of progress reports	The important assumption for the Outputs ("There are no serious conflicts among community members in the selected communities") has been satisfied so far.																														
3.3 Inputs																																
(1) Panamanian side																																
(a) Project personnel	Questionnaire & interview with the relevant P/P and J/E	<p>➤ Timing & quantity: In the beginning, only the Project Manager and two technical persons (one for Participatory Development Section and the other for Extension Service Section) were assigned. The number of technical staffs has increased over time. At present, a total of eight technical persons (two for Participatory Development, five for Extension, and the other one for Environmental Education) are assigned. In addition, most of the staff engage in the Project on full-time basis (Please see Annex 3). Although the number of the technical persons is more than the plan mentioned in the PDM, the Project feels that the number is still insufficient. To make up for the deficiency, Chief of the Administrative Section concurrently serve as a staff of Extension. In addition, a sociologist and an interpreter/technical assistant hired by the Japanese local costs have been assisting the Participatory Development. As for the administrative personnel, six persons are supposed to be assigned according to the PDM. As per the M/M signed in January 2006, they are an administrator (Chief of Administration), a computer secretary, and other supporting staff necessary for the project implementation is planned to be provided. At present only three are assigned. Through the effort of the Panamanian staff and the support of the Japanese Expert team, the adverse effects of the above mentioned problems on the production of the Outputs have been minimized. It would be more efficient, however, if the above mentioned problems are addressed.</p> <table border="1"> <thead> <tr> <th rowspan="2">Type of staff</th> <th rowspan="2">Assignment plan as per PDM</th> <th colspan="2">Actual assignment</th> </tr> <tr> <th>Staff assigned by ANAM</th> <th>Staff hired by JICA</th> </tr> </thead> <tbody> <tr> <td>Project Manager</td> <td>1</td> <td>1</td> <td>0</td> </tr> <tr> <td>Chief of Section</td> <td>3</td> <td>3</td> <td>0</td> </tr> <tr> <td>Environmental education staff</td> <td></td> <td>1</td> <td>0</td> </tr> <tr> <td>Administrative and support staff</td> <td>6</td> <td>2</td> <td>3</td> </tr> <tr> <td>Sociologist</td> <td></td> <td>1</td> <td>1</td> </tr> <tr> <td>Extension staff</td> <td>4</td> <td>4</td> <td>0</td> </tr> </tbody> </table> <p>➤ Quality: Technical and support staffs with the relevant background, experiences, and technical level have been assigned. It should be noted that most of the current technical staffs have worked with PROCAPPA previously.</p>	Type of staff	Assignment plan as per PDM	Actual assignment		Staff assigned by ANAM	Staff hired by JICA	Project Manager	1	1	0	Chief of Section	3	3	0	Environmental education staff		1	0	Administrative and support staff	6	2	3	Sociologist		1	1	Extension staff	4	4	0
Type of staff	Assignment plan as per PDM	Actual assignment																														
		Staff assigned by ANAM	Staff hired by JICA																													
Project Manager	1	1	0																													
Chief of Section	3	3	0																													
Environmental education staff		1	0																													
Administrative and support staff	6	2	3																													
Sociologist		1	1																													
Extension staff	4	4	0																													
(b) Building, and facilities	-ditto-	<p>➤ Timing: According to the M/M signed in January 2005, a Project office provided by ANAM "will be located along the Panama-Colon road, where it is convenient for the project activities". In the beginning, however, an office space was provided in the building of ANAM Panama City, which is a few hours away far from the Project</p>																														

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Annex 5 Evaluation based on Five Evaluation Criteria

Items	Source/Methods	Evaluation (as of 16 February unless otherwise mentioned)
		<p>Area. Though the Project office was moved to Colon in June 2007, it would have been more efficient if the office space close to the Project Area had been provided from the beginning as planned. Installation of telephone line has not been possible because the service is not available in this area. The way to solve the problem or alternatives means should be examined for smooth implementation of the project activities.</p> <ul style="list-style-type: none"> ➤ <u>Quantity</u>: The space of the Project Office is rather small. At the peak time, the number of desks and chairs is not enough. Moreover, there is no separate meeting room. It would be more efficient if at least another room which can be used as a meeting room and a depot would be provided. ➤ <u>Quality</u>: Generally appropriate.
(c) Financial inputs	-ditto-	<ul style="list-style-type: none"> ➤ <u>Timing&Quantity</u>: In general, the amount necessary for implementation of the activities have been allocated. But improvement is needed.
(2) Japanese side		
(a) Expert	Questionnaire & interview with P/P and J/E	<ul style="list-style-type: none"> ➤ <u>Timing</u>: The Experts have been dispatched according to the schedule. The initial dispatch of the Japanese Expert team was delayed until November 2006 due to administrative procedures of JICA. ➤ <u>Quantity</u>: Appropriate number of the Experts, covering 6 technical fields, including a coordinator, has been dispatched. Duration of the dispatch is also considered appropriate. ➤ <u>Quality</u>: Judging from the achievement levels of the Outputs as well as the results of questionnaires and interviews, the Experts with the relevant background, experiences, and technical level have been assigned to the Project.
(b) Training in Japan	-ditto-	<ul style="list-style-type: none"> ➤ <u>Timing</u>: Training in Japan was implemented as scheduled ➤ <u>Quantity</u>: So far, 6 persons have been sent for training in Japan. An extension staff and a staff for environmental education are the only project staff who got trained in Japan. The others are the officials of ANAM Headquarters, who were regarded as candidates for managerial staff of the Project at the time of the training. It would have been more efficient if those who are actually implementing the Project had been trained more in Japan. ➤ <u>Quality, field, contents</u>: They are relevant with the needs and level of the trainees. ➤ <u>Utilization</u>: As described in "Quantity", two Project staff have been sent to Japan for training. The extension staff trained in Japan has deepened his understandings on the topics covered by the Project. He has utilized acquired techniques and knowledge in his work. The other staff is right in the middle of the training in Japan.
(C) Equipment	-ditto-	<ul style="list-style-type: none"> ➤ <u>Timing</u>: Timing of procurement and delivery of the equipment is generally appropriate but coordination should be improved. ➤ <u>Quantity</u>: Appropriate number of equipment has been provided. ➤ <u>Quality, items, and specifications</u>: Quality and items of the provided equipment are considered appropriate. Specifications are also generally appropriate. ➤ <u>Operation and maintenance (O/M)</u>: O/M of most of the equipment has been adequate. As for GPS, extension staff feel further training on its use is needed. ➤ <u>Utilization</u>: Most of the equipment is utilized for the project implementation. A fax machine, provided in 2007, has not been utilized because the telephone service is not available in this area. A satellite phone, purchased in November 2006, is not utilized because the service of the company was terminated. ➤ <u>Others</u>: Although sufficient number of the equipment has been provided, some feel that some of the equipment, especially vehicles,

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Annex 5 Evaluation based on Five Evaluation Criteria

Items	Source/ Methods	Evaluation (as of 16 February unless otherwise mentioned)
		PCs, digital cameras, printers, is not always readily available when needed. Coordination of the provided equipment should be reviewed and be improved.
(d) Local activity cost	-ditto-	➤ <u>Timing & Quantity</u> : Necessary amount has been disbursed without delay in general.
3.5 Preconditions	Progress reports	The precondition of the Project ("The ways to access the selected communities stay in adequate conditions") had been satisfied prior to the commencement of the Project. Note: It could be also considered an important assumption for the Outputs.
3.6 Coordination with other relevant projects	Progress reports, J/E	➤ <u>With other Japanese projects</u> : In 2008, the members of 9 target groups visited El Cacao County to exchange opinions and experiences with the members of farmers' association (APPRODECA) supported by PROCCAPA to learn advanced techniques. ➤ <u>With other donors</u> : Taking an opportunity of a quarterly meeting organized by the Chagres National Park, the Project has exchanged ideas and views with the Nature Conservancy, an international NGO which has assist preparation and implementation of the Management Plan of the Park with financial support from USAID.
3.7 Other promoting /hampering factors	Accomplishment grid, progress reports	Specific factors have not been identified.

IV. IMPACT:

Items	Source/ Methods	Evaluation (as of 16 February unless otherwise mentioned)
4.1 Impact at the Overall Goal level		
(1) Likelihood of achievement of the Overall Goal	Results of "Accomplishment of the Project"	Likelihood of achievement of the Overall Goal was not assessed because it was found preliminary.
(2) Important Assumption	Questionnaire & interview with the relevant P/P and J/E	The important assumption for the Overall Goal (" ANAM continues the extension service") is likely to be satisfied judging from the ongoing discussions regarding exist strategy.
4.2 Other impacts	Questionnaire & interview with the relevant P/P and J/E, interview with farmers' groups	<u>Positive Impacts</u> The Project encourages community members to increase their awareness of the importance of watershed conservation. <u>Negative Impacts</u> Negative impacts have not been observed. They are not foreseen either.

V. SUSTAINABILITY (Forecast):

Items	Source/ Methods	Evaluation (as of 16 February unless otherwise mentioned)
5.1 Institutional & Organizational Aspects		
(1) Policy and legal supports	Review of the relevant document, questionnaire to P/P	Policy and legal supports regarding promotion of environment friendly and sustainable production techniques in the watersheds are likely to continue.
(2) Organizational strategy (Exit	Questionnaire and	The Project has discussed the exist strategy based on the provisional

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Annex 5 Evaluation based on Five Evaluation Criteria

Items	Source/ Methods	Evaluation (as of 16 February unless otherwise mentioned)
strategy)	discussion with managerial P/P, J/E	<p>one shown in the attachment of the M/M signed in January 2006. An idea being discussed is that Chagres National Park office would take over the function of extension service for community members. Along with this line, in January 2009, one extension staff of the Project was hired as a permanent staff in the Chagres National Park, who currently works with the Project for three days (Monday-Wednesday) and with the Park for the other two days. At the same time, he is in charge of sub-program of community development of the Park. More than half of the current park staff work as rangers but could implement activities as extension staff with appropriate training. It is necessary to clarify how to incorporate extension service into management of the Chagres National Park. In addition, extension system and guidebook to implement extension service is still under discussion and consideration.</p> <p>Regarding environmental education, the Chagres National Park office has environmental education program. Through coordination with the Park office, activities of the Project could be transferred to the Park office. However the number of environmental education staff is limited. It is necessary to collaborate with other relevant organizations which conduct environmental education programs such as the ACP and the Ministry of Education.</p>
(3) Deployment of Project Personnel	Questionnaire and discussion with managerial P/P	<p>Most of the project staff are permanent employees of ANAM. They are likely to be posted in appropriate positions. They will be able to fully utilize their knowledge and skills to continue their task and sustain the Project effect. The others are contract staff. It is uncertain if they will stay with ANAM in future.</p> <p>The Project team is created under the National Directorate of Integrate Watershed Management of ANAM as a temporary organization for implementation of the project. It is not clear that the Project staff will remain in the Project Area.</p> <p>To insure sustainability, the following are recommended: 1) that part of the Project Staff participate in the elaboration of Chagres National Park's Annual Plan of Operation (APO) in order to include activities for strengthening community projects; 2) that Panamanian ANAM-JICA personnel (of the Project) work concurrently as Park Staff before Project termination; 3) that the ANAM personnel assigned to the Project, as well as those contracted by JICA, be incorporated as staff of Chagres National Park.</p>
(4) Management capacity	Review of the progress reports, questionnaire and discussion with managerial P/P, J/E	<p>So far, the Panamanian side has managed the Project without serious problems. It should be noted that the management structure of the Project is not a permanent one: it may be dissolved at the end of the Project. The management capacity of the current Project team, therefore, does not necessarily ensure the appropriate management of the relevant activities in future.</p>
(5) Coordination with relevant organizations	Review of implementation process, questionnaire and discussion with managerial P/P, J/E, Park Office	<p>The Project has been coordinating with relevant organizations such as the Chagres National Park, CICH, etc. The current coordination is likely to continue after the end of the Project</p> <p>For example, the role of CICH is to coordinate with relevant organizations related to the Panama Canal Watershed. ANAM is one of the board members of CICH committee. ANAM will continue to coordinate and collaborate with relevant organizations through CICH. The Chagres National Park has the POA (Annual Operative Plan) for coordinating with relevant organizations. This coordination will continue based on the POA.</p> <p>Towards the end of the Project, coordination mechanism with Natura</p>

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Annex 5 Evaluation based on Five Evaluation Criteria

Items	Source/Methods	Evaluation (as of 16 February unless otherwise mentioned)
		Foudation and Chagres Foudation are expected to be developed
5.2 Financial Aspects	Questionnaire and discussion with the managerial P/P	<p>There are several financial sources to support the Chagres National Park and the Panama Canal Watershed such as the Chagres fund, FIDECO etc.</p> <p>The Chagres Fund is a big source of finance to support the Chagres National Park. The amount of fund is US\$10million, and can be used until 2014. The Fund is administrated by the Fundacion Chagres and the Fundacion Natura. The Fundacion Chagres manages the Fund for implementing activities of the Chagres National Park, ANAM. The Natura Foundation manages the Fund for supporting small projects by the community. The Fund disbursed US\$490,000 in 2008, and will disburse US\$380,000 in 2009.</p> <p>FIDECO is one of the funds to support environmental activities in watershed areas. 45% of annual fund allocate into Panama Canal Watershed area. In 2008, 45% of US\$2 million was allocated to the area. However, it is not sure that FIDECO can allocate the fund in 2009 because of the current economic crisis.</p> <p>ACP is main institution responsible to manage Panama Canal Watershed. ACP has the plan of Sustainable Development and Integrated Management of Hydrology Resource of Panama Canal Watershed (DSGIRH) from 2008 to 2033. Based on the plan, ACP carry out many projects and activities to manage the watershed continuously.</p>
5.3 Technical Aspects		
(1) Technical capacity of P/P	Review of progress reports on technical transfer, questionnaire and interview with the relevant P/P,J/E	Technical capacity of the C/Ps has been enhanced steadily. It is likely that they would be able to plan, implement, monitor and evaluate the relevant activities by themselves by the end of the Project.
(2) Utilization and dissemination of the transferred techniques and project deliverables	Questionnaire and interview with the relevant P/P,J/E	<p>It is expected that ANAM would utilize and disseminate the transferred techniques after the end of the Project through an extension system to be established by the Project, using such deliverables as an extension guidebook, materials for environmental education, etc.</p> <p>So far, the techniques transferred through the Project are considered to be adaptable and relevant with the needs with the local people, judging from degree of their utilization and satisfaction of the group members on the extension services they have received.</p> <p>Farmers group can access to the funds and the institutions such as the Chagres Fund, FIDECO and ACP to implement projects with techniques which are learned by the Project.</p>
(3) Utilization of the provided machinery and equipment	Questionnaire and interview with the relevant P/P,J/E	<p>➤ <u>Utilization</u>: Equipment provided by the Project is essential for ANAM to implement their activities related to community development and integrated watershed management. The equipment is expected to be utilized fully. Since most of the equipments provided are general items such as vehicles, tractors, GPS, and office supplies (computer, copy machine), technical capacity to utilize the equipments after the termination of the Project is likely to be ensured.</p> <p>➤ <u>Maintenance</u>: Since most of the equipments are locally procured, spare parts and consumables are available in Panama.</p>

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List of Reference Materials (RM)

- RM-A Record of Panamanian Inputs
 - A-1 List of project personnel
 - A-2 Local cost for the Project
- RM- B Record of Japanese Inputs
 - B-1 List of Japanese experts
 - B-2 List of Panamanian personnel trained in Japan
 - B-3 List of equipment
 - B-4 Local activity cost for the Project
- RM- C Data for the Indicators
- RM- D Activity Chart
- RM- E List of Abbreviation

RM A: Record of Panamanian Inputs

A-1 List of Panamanian personnel

(1) Project staff

No.	Name	Position in the Project	Period of Assignment	Relevant Outputs	F/P (*)	Remarks
1	Hilda Candanedo	Director of the Project	Nov.2006 - May 2008	—	P	
2	Carlos Melgarejo	Director of the Project	May 2008 - Present	—	P	
3	Eric Rodríguez	Coordinator of the Project	Nov.2006 - Present	Overall & Output 5	F	-Permanent staff of ANAM
4	Victoria Hurtado	Chief of participatory development	Nov.2006 - Present	Output 1	F	-Permanent staff of ANAM
5	Juvencio Díaz Kantule	Staff of participatory development	Jun.2008 - Present	Output 1	F	-Contract staff of ANAM
7	Luis Vega	Chief of extension	Oct.2007 - Present	Output 2-4	F	-Permanent staff of ANAM
8	Carlos Vásques	Extension worker	Nov.2007 - Present	Output 2,3 (4)	F	-Contract staff of ANAM
9	Aris Escobar	Extension worker	Nov.2006 - Present	ditto	F	-Permanent staff of ANAM
10	Héctor A. Rodríguez	Extension worker	May 2008 - Present	ditto	F	-Contract staff of ANAM
11	José Carrión	Extension worker	Jan.2009 - Present	ditto	P	-Permanent staff of Chagres National Park, ANAM (Contract staff of the Project from Aug.2008-Jan.2009)
12	Héctor Vega	Extension worker	Apr. 2007 - Apr. 2008	Output 2	F	n/a
13	Ednadeliz Flores	Staff of Environmental Education	Apr.2007 - Present	Output 6	P	-Permanent staff of ANAM

(*) F: Full time, P: Part time

(2) Administrative/support staff

No.	Name	Title/Organization	Period of Assignment	Remarks
1	Alexander Pimentel	Administrator	May 2008 - Present	-Contract staff of ANAM
2	Angélica Rojas	Secretary	Nov.2006 - Present	-Permanent staff of ANAM
3	Luis Hernández	Boat operator	Jan.2008 - Present	-Contract staff of ANAM

RM A: Record of Panamanian Inputs

A-2 Local cost borne by Panamanian side

1 US\$=90.02yen

No.	DESCRIPTION	BUDGET (US\$)				Total	
		2006	2007	2008	2009	US\$	Yen
1	Building and office	0	5,400	4,800	4,800	15,000	1,350,300
2	Printing and binding	0	600	1,500	900	3,000	270,060
3	Daily expense inside the country	0	5,600	5,960	5,590	17,150	1,543,843
4	Daily expense outside the country	0	4,000	600	2,100	6,700	603,134
5	Transportation inside the country	0	240	300	300	840	75,617
6	Transportation to/outside the country	0	3,200	1,550	1,700	6,450	580,629
7	Maintenance and repair of buildings	0		200	200	400	36,008
8	Maintenance and repair of machinery	0	3,000	2,800	3,000	8,800	792,176
9	Maintenance and repair of furniture	0	600	200	250	1,050	94,521
10	Other maintenance and repairs	0		1,000	600	1,600	144,032
11	Food for human consumption	0	1,000	1,750	2,000	4,750	427,595
12	Drinks	0	400	300	200	900	81,018
13	Diesel	0	4,360	3,800	9,300	17,460	1,571,749
14	Gasoline	0	1,200	500	1,400	3,100	279,062
15	Oil and grease	0	800	450	1,200	2,450	220,549
16	Paper supplies	0	1,900	2,740	2,760	7,400	666,148
17	Textbooks	0	600	250	0	850	76,517
18	Other paper products	0	200	300	400	900	81,018
19	Fertilizers	0		1,000	1,200	2,200	198,044
20	Paint, coloring, ink	0	0	300	0	300	27,006
21	Medicine products	0		300	300	600	54,012
22	Tools and instruments	0	600	600	300	1,500	135,030
23	Other miscellaneous products	0	3,000	500	500	4,000	360,080
24	Cleaning supplies	0	300	200	200	700	63,014
25	Office supplies and material	0	600	450	450	1,500	135,030
26	Parts	0	5,000	5,000	5,000	15,000	1,350,300
27	Office furniture	0	0	3,000	500	3,500	315,070
28	Maintenance of computer equipment	0	0	250	250	500	45,010
29	Other cloth and clothing	0	0	1,600	0	1,600	144,032
30	Pipes and accessories	0	0	1,000	0	1,000	90,020
31	Other expenses for information and binding	0	2,000	0	0	2,000	180,040
32	Other commercial and financial services	0	0	0	0	0	0
33	Other maintenance and repairs	0	2,000	0	0	2,000	180,040
34	Cloth, rope products	0	2,500	0	0	2,500	225,050
35	Uniforms	0	0	0	0	0	0
36	Computer material and supplies	2,955	500	0	1,700	5,155	464,053
37	Other utensils and material	0	600	0	0	600	54,012
38	Land	0	24,000	0	0	24,000	2,160,480
39	Vehicle	35,881	0	0	0	35,881	3,230,008
40	Outboard motor and boat	7,482	0	0	0	7,482	673,530
TOTAL BY ACTIVITY		46,318	74,200	43,200	47,100	210,818	18,977,836

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RM B: Record of Japanese Inputs

B-1 List of Japanese Experts

	Field	Name	Assignment Period	M/M	Responsible outputs/Activities
1	Chief Advisor	SAKAI Isao	2006.11.03 - 2007.03.12	4.33	All Outputs (Mainly 2,4,5, Especially 5) Activity2-1~2-4, 4-1~4-6 5-1~5-10
			2007.04.25 - 2007.06.30	2.23	
			2007.08.22 - 2007.12.17	3.93	
			2008.02.10 - 2008.08.02	5.83	
			2008.09.17 - 2008.12.18	3.10	
2	Participatory development/Extension (1)	HITSUDA Kiyoko	2006.11.3 - 2007.02.10	3.33	Activity1-1
3	Participatory development/Extension (2)	KAJIFUSA Hiroki	2007.02.01 - 2007.03.12	1.33	Output 1,5 Activity1-2~1-6, 5-1 Activity5-1, 5-7
			2007.04.23 - 2007.08.10	3.67	
			2008.11.11 - 2008.12.10	1.00	
			2008.01.22 - 2008.04.30	3.33	
			2008.09.17 - 2008.11.27	3.50	
4	Environmental Education(1)	KAWAI Tsunehiro	2006.12.03 - 2007.01.22	0.67	Output 6
			2007.02.21 - 2007.03.12	0.67	Activity 6-1
5	Environmental Education(2)	MORI Taku	2007.06.18 - 2007.09.09	2.80	Output 6
			2008.08.31 - 2008.12.18	3.67	Activity 6-1~6-5
6	Marketing of agricultural and forest products	TAKAGI Shigeru	2007.08.22 - 2007.10.10	1.67	Output 3, Activity3-1
7	Agricultural land use plan	MORI Taku	2008.06.04 - 2008.07.23	1.67	Output 3, Activity3-2~ 3-5,5-1,5-7
8	Coordinator(1)	KAWAI Tsunehiro	2006.11.03 - 2006.12.02	1.00	-
			2007.01.22 - 2007.02.20	1.00	
9	Coordinator(2)	MORI Taku	2007.05.29 - 2007.06.17	0.67	-
			2007.11.04 - 2007.12.17	1.46	
10	Coordinator(3)	SAITO	2008.03.17 - 2008.09.12	6.00	-
		Yuka	2008.10.15 - 2008.12.13	2.00	

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RM B: Record of Japanese Inputs

B-2 List of Panamanian personnel Trained in Japan

No.	name	Position at the time of training	Title of training course	Training Period
1	BETHANCOURT JAEN Jose Eric	Staff of Department of Watershed Management?	Joint Counterpart Training Course for JICA Forestry and Nature Conservation Projects in JFY2006	2006.10.3-2006.11.18
2	Jose Isaac Rincon Calvo	Engineer of Department of Watershed Management	Joint Counterpart Seminar on Management of Forest and Nature Conservation Projects containing income increasing approaches based on Community Participation	2007.2.26-2007.3.13
3	Roberto Galan Garcia	Chief of Department of Watershed Management		
4	MELGAREJO VILLALOBOS Gilberto Carlos	Chief of Department of Natural Forest, ANAM	Joint Counterpart Training Course for JICA Forestry and Nature Conservation Projects "Seminar on Forest Management Policy - Sustainable Forest Management with Collaboration of Local Government and Community-"	2007.10.21-2007.11.11
5	Héctor Aníbal Rodríguez Cisneros	Extension worker of the Project	Agricultural and Forest Extension and Rural Development	2008.9.07-2008.10.05
6	FLORES DE URRIOLOA Ednadeliz	Project staff for Environmental Education	Environmental Education Officer / National Directorate of Environmental Culture Promotion	2009.1.19-2009.2.28

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RM B: Record of Japanese Inputs

B-3 List of Equipment

(* As of December, 2008)

No.	JFY	Item (in English)	Specification	Qty.	Unit Price(\$)	Sub-Total (\$)(without tax)	Location	Responsible person	Date of delivery	# of disposed equipment	# of available equipment	Use (a)	Use (b)	Relevant activity of POM	Remarks
1	2006	Laminator	Laminador del bolsillo DS320P	2	251.2	502.3	Office	Japanese (Saito)	Nov 06	2	2	C	A	8-2,6-3	
2	2006	Digital Video camera	SONY Handycam HDR-UR1	1	1,318.0	1,318.0	Office	Japanese (Saito)	Nov 06	1	1	C	A	1-5,6-3	
3	2006	Digital camera	RICOH Caplio 500G Wide	2	876.9	1,353.8	Office	DP/Ext	Nov 06	2	2	A	A	1-5, 2-2, 6-2	
4	2006	Scanner	Canon CanoScan LIDE25	1	55.8	55.8	Office	Japanese (Saito)	Nov 06	1	1	A	A	1-5, 3-3,6-3	
5	2006	Color printer	Canon PIXMA iP4300	1	117.6	117.6	Office	Japanese (Saito)	Nov 06	1	1	A	A	1-5, 3-3,6-3	
6	2006	Life jackets	Selvaídas para viajar en bote	10	20.5	204.8	Office	Mr.Luis H	Nov 06	10	10	A	A	2-2	
7	2006	Cellular phone	SAMUSUNG SGH-X156	3	83.0	189.0	Office	Japanese (Saito)	Nov 06	3	3	A	A	1-3,1-5,2-1,2-2	For Japanese Experts
8	2006	Satelite telephone	Globelstar SATELLITE PHONE GSP-1600	2	288.2	576.5	Office	Japanese (Saito)	Nov 06	2	2	E	A	2-2	Out of Service
9	2006	Laptop computer	COMPAQ Presario V3215LA	2	1,112.9	2,225.8	Office	DP/Ext	Nov 06	2	2	A	A	1-1,1-5,2-4,3-3,5-7	For participatory development team and Extension staff
10	2006	GPS	GPS Navigator Garmin Etrex Vista C	1	787.5	787.5	Office	Japanese (Saito)	Nov 06	1	1	B	A	3-2,3-3	Kilometrage traveled ①66,913Km,②70,013Km
11	2006	Vehicle	TOYOTA HI-LUX (Silver, Brown)	2	20,892.5	41,985.8	Parked at experts' lodging	Japanese (Saito)	Nov 06	2	2	A	A	All	
12	2006	computer	MP L1706	2	1,811.7	3,223.4	Office	Japanese (Saito)	Nov 06	2	2	A	A	All	For participatory development team and Extension staff
13	2006	Software of PC	Windows Office	2	349.0	698.0	Office	Mr.Alex ander	Dec 06	2	2	C	A	All	
14	2006	frame for vehicle		1	600.0	600.0	Office	Japanese (Saito)	Mar 07	1	1	A	A	All	
15	2006	winch	ROLLER M8000,12V,100	2	1,548.7	3,097.5	Office	Japanese (Saito)	Mar 07	2	2	C	A	All	
16	2006	motor for boat	SUZUKI	1	2,050.0	2,050.0	Stationed at Chagres Park Office	Mr.Eric	Mar 07	1	1	C	A	All	
17	2006	boat for 10 passengers(with motor)	Lancha de madera	1	2,700.0	2,700.0	Kept at the operator's community ward	Mr.Eric	Mar 07	1	1	A	A	All	
18	2006	Projector and Screen	Benq FB2250 Digital Projector	1	1,389.9	1,389.9	Office	Japanese (Saito)	Mar 07	1	1	A	A	5-2,1-5	
19	2006	Copy machine	Cannon Image RUNNER 2230	1	4,258.5	4,258.5	Office	Japanese (Saito)	Mar 07	1	1	D	A	All	
20	2007	Chain saw	STIHL Espada 16" con casco y desmalezadora	2	814.2	1,628.5	Office	Mr.Luis V	Aug 07	2	2	B	A	2-2, 3-4	
21	2007	portable generator	ELEMAX SHX2000 1.5KVA	1	950.0	950.0	Office	Japanese (Saito)	Aug 07	1	1	B	A	1-5, 6-3	
22	2007	air conditioner	MUB-60CR	1	950.0	950.0	Office	Japanese (Saito)	Jun 07	1	1	A	A	3-3, 5-7, 6-1	
23	2007	telephone with faxmille	Panasonic KC-FHD332	1	124.1	124.1	Office	Mr.Eric	Jul 07	1	1	E	A		Not available
24	2008	toractor	CF161E-15HP 706130138	1	2,427.3	2,427.3	Stationed at Chagres Park Office	Mr.Luis	Jul 08	1	1	B	A	2-2, 3-4	
25	2008	Laptop computer	COMPAQ50-102LA	1	714.0	714.0	Office	Mr.Eric	Nov 08	1	1	A	A	1-1,1-5,2-4,3-3,5-7,6-1	
26	2008	Desktop computer	COMPAQ SG3313LA	1	616.0	616.0	Office	Mr.Eric	Nov 08	1	1	A	A	1-1,1-5,2-4,3-3,5-7,6-1	for administrative/support staffs
27	2008	Software of PC	Microsoft Office Hogar y Estudiantes 2007	1	120.0	120.0	Office	Mr.Alex ander	Nov 08	1	1	A	A	1-1,1-5,2-4,3-3,5-7,6-1	
28	2008	Satelite telephone	Kit lithium 9505A (incluyendo batería, cargador, extensión de antena, cojín)	1	1,887.5	1,887.5	Office	Japanese (Saito)	Dec 08	1	1	A	A	2-2	
29	2008	Digital camera	Panasonic LUMIX 8.0Mpix	1	190.0	190.0	Office	Mr.Luis V	Nov 08	1	1	A	A	1-5, 2-2, 6-2	
30	2008	Digital Camera	SONY Cyber-shot7.2Mpix	1	210.0	210.0	Office	Mr.Luis V	Nov 08	1	1	A	A	1-5, 2-2, 6-2	
31	2008	Winch	Winch Tabor 12K	1	1,171.0	1,171.0	Installed on car	Ext	Oct 08	1	1	C	A	2-2	
32	2008	Hood and chairs of vehicle	Desarmable	2	592.5	1,185.0	Installed on car	Ext/Jap ones	Oct 08	2	2	A	A	1-5, 2-2,2-3	
33	2008	Equipment of grafting	Juegos de cuchillos, cinta, lima, etc.	14	131.0	1,833.8	Each community	Mr.Luis V	Sep 08	14	14	C	A	2-2, 4-2	

	US\$	Yen (*US\$=90.02yenes)
Año fiscal japonés (JFY) 2006	67,332	6,061,227
Año fiscal japonés (JFY) 2007	3,653	328,843
Año fiscal japonés (JFY) 2008	10,455	941,159
Total US\$	81,440	7,331,229

(*)Use
A: Frequently (almost every day)
B: Sometimes (1-3 a week)
C: Use concentrated on particular period
D: Rarely (1-3 times a year)
E: No use due to particular reasons

(***)Management
A: Always possible to use with sufficient maintenance
B: Almost no problem in use
C: Possible to use if repaired
D: Difficult to use

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RM B: Record of Japanese Inputs

B-4 Local Cost by Japanese side

As of December, 2008
1US\$=90.02Yen

No.	Item	1st Year		2nd Year		3rd Year		Total	
		Nov.2006-Mar.2007		Apr.2007-Dec.2007		Jan.2008-Dec.2008		US\$	Yen
		US\$	Yen	US\$	Yen	US\$	Yen		
1	Expense for equipment	67,332	6,061,227	3,653	328,843	10,455	941,159	81,440	7,331,229
2	Expense for employment	24,061	2,165,971	33,433	3,009,639	46,301	4,168,016	103,795	9,343,626
3	Local Activities Cost	37,006	3,331,280	58,935	5,305,329	94,756	8,529,935	190,697	17,166,544
4	Expense for Training in Japan	21,540	1,939,004	23,595	2,124,004	39,902	3,591,996	85,037	7,655,004
	Total	149,939	13,497,482	119,616	10,767,814	191,414	17,231,106	460,969	41,496,402

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(1) Data for the Indicators of Output 1

Grupos de Agricultores/Village/Farmers' groups	Year of establishment	Year of organization/reorganization by the Project	1.1		1.2												1.2 (Reference)			1.3				
			Groups actively working in the activities promoted by the Project (as of Feb 2009)	Number of active members & % of active women to the active members	(Ref. Apr.08)						(Ref. Sep-08)						Feb-09						Official group members (registered members)	Achievement level of "the facilitation of meetings and workshops" identified in the master chart (as of Oct 2008)
					Total		F		M		Total		F		M		Total		F		M			
						%		%		%		%		%		%		%		%		%		
1	Boqueron Arriba	2006	2007	Yes	11	2	9	18%	6	1	5	17%	7	2	5	29%	7	2	5	29%	3			
2	San Juan de Pequeñi	2001	2007	Yes	12	4	8	33%	10	5	5	50%	8	4	4	50%	12	6	6	50%	3			
3	Victoriano Lorenzo	2006	2007	Yes	15	7	8	47%	12	4	8	33%	9	6	3	67%	9	6	3	67%	3			
4	Boqueron Abajo	2006	2007	Yes	8	7	1	88%	7	4	3	57%	6	4	2	67%	15	7	8	47%	2			
5	Chilibrillo	1997 (2000)	2007	Yes	20	2	18	10%	18	2	16	11%	16	2	14	13%	23	21	2	91%	3 to 4			
6	Salamanca	1997	2007	Yes	12	12	0	100%	13	12	1	92%	10	8	2	80%	19	19	0	100%	3			
7	Salamanquita	2007	2007	Yes	8	7	1	88%	7	6	1	86%	8	6	2	75%	8	6	2	75%	3			
8	Santa Librada	1990	2008	Yes	23	8	15	35%	15	6	9	40%	12	5	7	42%	15	6	9	40%	2			
9	Nuevo Vigia	2000	2008	Yes	14				12	6	6	50%	11	6	5	55%	13	7	6	54%	2			
10	Penas Blancas	2003	2008	Yes	12	6	6	50%	12	5	7	42%	9	4	5	44%	12	5	7	42%	1 to 2			
11	San Vicentedela Tranquilla	1990	2008	Yes					13	5	8	38%	8	2	6	25%	15	8	7	53%	2			
12	Quebrada Ancha	2003	2008	Yes					10	5	5	50%	9	4	5	44%	13	6	7	46%	1 to 2			
13	Madronal	2000	2008	Yes					18	10	8	56%	15	7	8	47%	12	6	6	50%	2			
14	Santa Cruz	2008	2008	Yes					16	10	6	63%	13	7	6	54%	13	7	6	54%	2			
Total/Average					135	55	66	41%	169	81	88	48%	141	67	74	48%	186	112	74	60%				

Note:

Indicator 1.1: Definition of "actively" working in the activities=Group that participated in the activities regularly

Indicator 1.2 (Reference 1): Official members are defined as the members registered with MIDA

Indicator 1.2: Definition of "active" members is those who are determined "active" by the group by themselves

Indicator 1.3: Level 1

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(7)

(2) Data for Indicators of Output 2

Village/Farmers' groups	Year of establishment	2.1				2.2			2.2 (Reference)			2.3(1)	2.3(2)
		% of trainees who obtained a satisfactory evaluation for techniques transferred in "capacitacion"				Number of a week seminar received	Number of a week seminar scheduled for 2009	Total number of a week seminar expected till the end of 2009	Number of other training (workshop, lecture) received	Number of other training (workshop, lecture) scheduled for 2009	Total number of other training expected till the end of 2009	Number of exchange program carried out in the community (as of Feb.2009)	Number of farmers who participate in farmer to farmer exchange programs
		Number of members	Number of trainees	Number of trainees who obtained a satisfactory evaluation	% of trainees who obtained a satisfactory evaluation								
1 Boqueron Arriba	2006	7	8	8	100%	4	3	7	3	3	6		
2 San Juan de Pequeni	2001	8	5	5	100%	4	3	7	2	3	5		
3 Victoriano Lorenzo	2006	9	13	13	100%	4	3	7	2	3	5	2	45
4 Boqueron Abajo	2006	6	8	8	100%	4	3	7	3	3	6		
5 Chilbrillo	1997 (2000)	16	10	10	100%	4	3	7	3	3	6	1	32
6 Salamanca	1997	10	4	4	100%	3	3	6	3	3	6	1	14
7 Salamanquita	2007	8	6	6	100%	4	3	7	3	3	6		
8 Santa Librada	1990	12	4	4	100%	3	3	6	2	3	5		
9 Nuevo Vigia	2000	11	3	3	100%	3	3	6	2	3	5	1	30
10 Penas Blancas	2003	9	5	5	100%	3	3	6	1	3	4	1	38
11 San Vicented dela Tranquilla	1990	8	3	3	100%	3	3	6	1	3	4	2	64
12 Quebrada Ancha	2003	9	3	3	100%	3	3	6	1	3	4	1	11
13 Madronal	2000	15	3	3	100%	3	3	6	2	3	5	2	49
14 Santa Cruz	2008	13	6	6	100%	3	3	6	2	3	5	1	33
Total/Average			81	81	100%				30	42	72	12	316

Note:

Indicator 2.1: Definition of "satisfactory evaluation"= those who scored 80 points or above on the tests given at the end of each training

Indicator 2.2: Definition of " training" here is limited to llong seminars

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(9)

RM C: Data for the Indicators

(3) Data for Indicators of Output 3

Village/Farmers' groups	Year of establishment	Location A=inside the park B=Buffer zone	Land issues with the BDA	Relevant land authorities for group famir (eg. NP, MIDA, BDA, etc.)	Relevant land authorities for individual farm (eg. NP, MIDA, BDA, etc.)	3.1		3.2		3.3 (Reference)		
						Status of preparation of group land use plan	Expected timing of commencement of implementation of group land use plans	Number of total members (Feb.2009)	Number of active members (Feb.2009)	Number of active members who have individual farmland (Feb.2009)	% of qctive members who have individual farmland	
1 Boqueron Arriba	2006	A		NP		D	March, 2009	7	7	7	100%	
2 San Juan de Pequeni	2001	A		NP		B	March, 2009	8	8	8	100%	
3 Victoriano Lorenzo	2006	A	Yes	NP BDA	BDA	D	March, 2009	6	9	6	67%	
4 Boqueron Abajo	2006	A		NP		D	March, 2009	6	6	8	133%	
5 Chilibrillo	1997 (2000)	B		NP	MEF - MIDA	D	March, 2009	16	16	16	100%	
6 Salamanca	1997	B		NP		D	March, 2009	10	10	1	10%	
7 Salamancaquita	2007	B		NP		D	March, 2009	8	8	8	100%	
8 Santa Librada	1990	A		NP		D	March, 2009	12	12	12	100%	
9 Nuevo Vigia	2000	A		NP		D	March, 2009	11	11	8	73%	
10 Penas Blancas	2003	A	Yes	NP BDA	NP	D	March, 2009	9	9	9	100%	
11 San Vicentef dela Tranquilla	1990	A	Yes	NP BDA	BDA	D	March, 2009	8	8	8	100%	
12 Quebrada Ancha	2003	A		NP	BDA	D	March, 2009	9	9	9	100%	
13 Madronal	2000	B		NP		D	March, 2009	15	15	14	93%	
14 Santa Cruz	2008	B		NP	MIDA	D	March, 2009	13	13	12	92%	
Total/Average								141	141	126	89%	

RM C: Data for the Indicators

(4) Data for Indicators of Output 4

Village/Farmers' groups	Year of establishment	4.1	4.2	4.2 (Reference)
		Groups that have a nursery, and month/year of establishment	Number of trees that were planted in the selected critical areas for soil restoration	Number of trees planted by the groups in other important areas (school yard, etc.)
1 Boqueron Arriba	2006	August/2008	0	0
2 San Juan de Pequeni	2001	Jan/2008	0	25
3 Victoriano Lorenzo	2006		0	36
4 Boqueron Abajo	2006	2007	0	50
5 Chilibrillo	1997 (2000)	June/2008	0	0
6 Salamanca	1997	Jan/2008	0	50
7 Salamanquita	2007	Jan/2009	0	0
8 Santa Librada	1990	Jan/2008	0	37
9 Nuevo Vigia	2000	Jan/2009	0	50
10 Penas Blancas	2003	2008	0	50
11 San Vicented dela Tranquilla	1990	Jan/2009	0	50
12 Quebrada Ancha	2003	Jan/2009	0	50
13 Madronal	2000		47	23
14 Santa Cruz	2008		180	41
Total/Average			227	462

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RM C: Data for the Indicators

(5) Data for Indicators of Output 5

Village/Farmers' groups	Year of establishment	Evaluation made by the group members for each activity					Indicator 5.3			
		Good (=A)	Regular (=B)	Bad (=C)	Did not participate in the activity (=D)	Grand Total (A+B+C+D)	Total of A+B	Total of A+B+C	% of members who are satisfied with each of the extension activities	
1 Boqueron Arriba	2006	70	1	17	51	139	71	88	81%	
2 San Juan de Pequeñi	2001	35	25	0	10	70	60	60	100%	
3 Victoriano Lorenzo	2006	172	22	0	59	253	194	194	100%	
4 Boqueron Abajo	2006	110	4	1	7	122	114	115	99%	
5 Chilibrillo	1997 (2000)	193	51	12	32	288	244	256	95%	
6 Salamanca	1997	138	15	0	81	234	153	153	100%	
7 Salamanquita	2007	66	17	0	12	95	83	83	100%	
8 Santa Librada	1990	109	8	0	43	160	117	117	100%	
9 Nuevo Vigía	2000	202	22	0	38	262	224	224	100%	
10 Penas Blancas	2003	93	21	12	6	132	114	126	90%	
11 San Vicented dela Tranquilla	1990	132	21	9	36	198	153	162	94%	
12 Quebrada Ancha	2003	64	10	2	78	154	74	76	97%	
13 Madronal	2000	132	38	0	17	187	170	170	100%	
14 Santa Cruz	2008	105	72	3	0	180	177	180	98%	
Total/Average		1,621	327	56	470	2,474	1,948	2,004	97%	

Note:

Indicator 5.3: Definition of "The members who are satisfied with the extension services" is those who answered "Good" or "Regular" for each extension activity

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RM C: Data for the Indicators

(6) Data for Indicator 1 of Project Purpose

Village/Farmers' groups	Year of establishment	Indicator 1		
		Number of techniques promoted by the Project	Number of techniques used by the Group	% of techniques used by the group members
1 Boqueron Arriba	2006	6	6	100%
2 San Juan de Pequeni	2001	7	1	14%
3 Victoriano Lorenzo	2006	8	5	63%
4 Boqueron Abajo	2006	8	5	63%
5 Chilibrillo	1997 (2000)	9	5	56%
6 Salamanca	1997	8	5	63%
7 Salamanquita	2007	11	9	82%
8 Santa Librada	1990	5	4	80%
9 Nuevo Vigia	2000	8	1	13%
10 Penas Blancas	2003	8	4	50%
11 San Vicented de la Tranquilla	1990	6	3	50%
12 Quebrada Ancha	2003	5	2	40%
13 Madronal	2000	8	7	88%
14 Santa Cruz	2008	0	0	
Total/Average		97	57	59%

Source: The results of the third Internal Workshop of the Project in October 2008

RM D: Activity Chart

Activities as per PDM E	Expected results	Planned schedule (Calendar Year) as per the tentative PO and actual progress						Persons in charge	Implementors	Coordination	Other Major Inputs			Necessary conditions	
		2005	2006	2007	2008	2009	2010				2011	Japanese sides			Panamanian sides
		Personnel(Expert)		Others		Panamanian sides									
Cooperation period															
0.1	Hold an induction workshop on the project for ANAM staff.	n/a	Plan	Actual					Project Manager (PM)	Administrative staff	In charge of Section	CA (Nov 06-Mar.07, Apr-Jun 07, Aug-Dec. 07, Feb-Aug.08, Sep-Dec.08)			
0.2	Formulate the annual Plan of Operation.	n/a	Plan	Actual					ditto	All technical personnel, administrative staff	In charge of Section	ditto			
0.3	Provide the necessary infrastructure.	n/a	Plan	Actual					ditto	Administrative staff					
0.4	Coordinate with other institutions and projects.	n/a	Plan	Actual					ditto	Project Coordinator	Project and Institution				
0.5	Hold the Joint Coordinating Committee meetings.	n/a	Plan	Actual					ditto	All technical personnel, administrative staff	ANAM and JICA	CA (Nov 06-Mar.07, Apr-Jun 07, Aug-Dec. 07, Feb-Aug.08, Sep-Dec.08)			
0.6	Carry out the monitoring and evaluation.	n/a	Plan	Actual					ditto	All technical personnel		ditto			
0.7	Systematize the information and disseminate the results.	n/a	Plan	Actual					ditto	All technical personnel	Section	ditto			
1 Output 1 Self-active groups are organized by the participatory manners.										Chief of Participatory Development (PD)					
1.1	Identify and select the communities.	n/a	Plan	Actual					ditto	Staff of PD (Juvencio)	Group	JE<P. Dev(Ext1)> (Nov.2006-Feb.2007)	Sociologist (Suleima)		
1.2	Hold promotion meetings.	n/a	Plan	Actual					ditto	ditto	Group	JE<P. Dev(Ext2)> (Feb-Mar 07, Apr-Aug 07, Nov-Dec 07, Jan-Apr 08, Sep-Nov 08)	ditto		
1.3	Organize or reorganize the groups.	n/a	Plan	Actual					ditto	ditto	Group	ditto	ditto		
1.4	Establish the place for the development of the group's activities.	n/a	Plan	Actual					ditto	ditto	Group	ditto	ditto		
1.5	Carry out activities for the strengthening of the groups.	n/a	Plan	Actual					ditto	ditto	Group	ditto	Sociologist (Suleima) Generator		
1.6	Apply for the funds and/or assistance of other organizations.	n/a	Plan	Actual					ditto	ditto	Group	ditto	Sociologist (Suleima)		
2 Output 2 The group members are skilled in environmental friendly production techniques.										Chief of Extension			CA (Nov 06-Mar 07, Apr-Jun 07, Aug-Dec. 07, Feb-Aug 08, Sep-Dec 08)		
2.1	Conduct field trips to demonstration plots.	n/a	Plan	Actual					ditto	Extension Staff (Carlos, Aris, Hector, Jose)	Group	ditto			
2.2	Carry out training on topics of interest related to environment-friendly production techniques.	n/a	Plan	Actual					ditto	ditto	Group	ditto	Tractor, satellite telephone (2), chain saw, vech		
2.3	Carry out farmer-to-farmer exchange.	n/a	Plan	Actual					ditto	ditto	Group	ditto			
2.4	Validate techniques learned in plots established with the group's work and the extension service.	n/a	Plan	Actual					ditto	ditto	Group	ditto			
3 Output 3: Farm-land-use plans that contribute to the territorial ordering of the watershed and the conservation of the Chagres National Park are elaborated and in process of implementation by the members of the groups										Chief of Extension			JE in Agricultural land use plan: Jun-Jul 2008		
3.1	Carry out market research.	n/a	Plan	Actual					ditto	Extension Staff (Carlos, Aris, Hector, Jose)	Group	JE in Marketing: Aug-Oct 07			
3.2	Carry out trainings on the elaboration of farm-use plans.	n/a	Plan	Actual					ditto	ditto	Group	JE in Agricultural land use plan: Jun-Jul 2008	GPS		
3.3	Assist the groups in elaborating the group farm-use plan in harmony with the effective legislation	n/a	Plan	Actual					ditto	ditto	Group	ditto	GPS		
3.4	Assist the group in implementing the group farm-use plan with the support of the extension service.	n/a	Plan	Actual					ditto	ditto	Group	ditto	Tractor		
3.5	Monitor the implementation of the group farm-use plan.	n/a	Plan	Actual					ditto	ditto	Group	ditto			
3.7	Assist the members in elaborating the individual farm-use plan in harmony with the effective legislation	n/a	Plan	Actual					ditto	ditto	Group	ditto			
3.8	Assist the members in implementing the individual farm-use plan with the support of the extension service.	n/a	Plan	Actual					ditto	ditto	Group	ditto			
3.9	Monitor the implementation of the individual farm-use plan.	n/a	Plan	Actual					ditto	ditto	Group	ditto			

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RM D: Activity Chart

Activities as per PDM E	Expected results	Planned schedule (Calendar Year) as per the tentative PO and actual progress							Persons in charge	Implementors	Coordinate	Other Major Inputs			Necessary conditions	
		2005	2006	2007	2008	2009	2010	2011				Japanese sides		Panamanian sides		
		Personnel(Expert)		Others												
4. Output 4: The forest coverage for the soil restoration in critical areas and important areas in common interest of group members and related authorities, are increased by the members of the groups												Chief of Extension		CA (Nov 06-Mar.07, Apr-Jun 07, Aug-Dec 07, Feb-Aug 08, Sep-Dec 08)		
4.1	Select critical areas and common interest areas to the communities and the Project.	n/a	Plan							ditto	Extension Staff (Carlos, Aris, Hector, Jose)	Group				
			Actual							ditto	ditto	Group				
4.2	Carry out training on silviculture.	n/a	Plan							ditto	ditto	Group				
			Actual							ditto	ditto	Group				
4.3	Assist the groups in selecting species to be planted.	n/a	Plan							ditto	ditto	Group				
			Actual							ditto	ditto	Group				
4.4	Assist the groups in establishing group nurseries.	n/a	Plan							ditto	ditto	Group				
			Actual							ditto	ditto	Group				
4.5	Assist the groups in planting the trees in the selected areas.	n/a	Plan							ditto	ditto	Group				
			Actual							ditto	ditto	Group				
4.6	Maintain the reforested areas.	n/a	Plan							ditto	ditto	Group				
			Actual							ditto	ditto	Group				
5. Output 5: Extension service in line with the needs of group members and the related policies (*4) is provided by extension members (*5).												PM		CA (Nov 06-Mar.07, Apr-Jun 07, Aug-Dec 07, Feb-Aug 08, Sep-Dec 08)		
5.1	Design an extension system with consideration of the role of ANAM.	n/a	Plan							Chief of Extension	Extension Staff (Carlos, Aris, Hector, Jose)	Coordinator	ditto			
			Actual							ditto	ditto	Extension Staff	ditto			
5.2	Elaborate a plan of technical transfer for extension team, which meet the group's needs	n/a	Plan							ditto	ditto	Extension Staff	ditto			
			Actual							ditto	ditto	Extension Staff	ditto			
5.3	Implement the annual theory-practice training plan of technical transfer for the extension members	n/a	Plan							ditto	ditto	Group	ditto			
			Actual							ditto	ditto	Group	ditto			
5.4	Elaborate an action plan for the extension service.	n/a	Plan							ditto	ditto	Extension Staff	ditto			
			Actual							ditto	ditto	Extension Staff	ditto			
5.5	Provide the extension service to community members.	n/a	Plan							ditto	ditto	Group	ditto			
			Actual							ditto	ditto	Group	ditto			
5.6	Exchange techniques with other projects.	n/a	Plan							ditto	ditto	Group, Extension Staff	ditto			
			Actual							ditto	ditto	Group, Extension Staff	ditto			
5.7	Compile knowledge and technique of extension service learnt through 5-2 to 5-6 into an extension guidebook for the extension	n/a	Plan							ditto	ditto	Participatory Development Extension Staff	ditto			
			Actual							ditto	ditto	Participatory Development Extension Staff	ditto			
5.8	Elaborate a sustainable training plan for new extension team by utilizing the guidebook.	n/a	Plan							ditto	ditto		ditto			
			Actual							ditto	ditto		ditto			
5.9	Provide the extension service in accordance with the extension guidebook.	n/a	Plan							ditto	ditto		ditto			
			Actual							ditto	ditto		ditto			
5.10	Review the extension system upon the results if necessary, and established the extension system through 5-1 to 5-8.	n/a	Plan							ditto	ditto		ditto			
			Actual							ditto	ditto		ditto			
6. Output 6: The community members are conscious of the importance of the appropriate use of natural resources and environmental conservation in the Project area												Staff of Environmental Education?		J/E in Environmental Education (EE)		
6.1	Elaborate an action plan for environmental education.	n/a	Plan							ditto	Staff of Environmental Education		EE(1): Dec.06-Jan 07, Feb-Mar.07			
			Actual							ditto	ditto		EE(2): Jun-Sep. 07, Aug-Dec.08			
6.2	Prepare and/or procure materials for environmental education.	n/a	Plan							ditto	ditto		ditto	Generator		
			Actual							ditto	ditto		ditto	Generator		
6.3	Implement the action plan for environmental education.	n/a	Plan							ditto	ditto		ditto	Generator		
			Actual							ditto	ditto		ditto	Generator		
6.4	Facilitate the establishment of areas for the development of environmental education activities.	n/a	Plan							ditto	ditto		ditto			
			Actual							ditto	ditto		ditto			
6.5	Monitor the implementation of the action plan for environmental education and feed back the result.	n/a	Plan							ditto	ditto		ditto			
			Actual							ditto	ditto		ditto			

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RM E: List of Abbreviation

E List of Abbreviation

No.	Abbreviation	
1	ACP	Panama Canal Authority
2	AMPYME	Micro, Small and Medium Scale Enterprises Authority
3	ANAM	National Environment Authority
4	APRODECA	The Farmers' Association of the Upper Panama Canal Watershed
5	ARI	Inter-Ocean Region Authority
6	CICH	Inter-institutional Commission of the Canal Watershed
7	CONADES	National Committee for Sustainable Development
8	FIDECO	Panamanian Ecological Trust fund
9	IDB	International Development Bank
10	JCC	Joint Coordination Committee
11	JICA	Japan International Cooperation Agency
12	MEF	Ministry of Economy and Finance
13	MEDUCA	Ministry of Education
14	MIDA	Ministry of Agricultural Development
15	MIDES	Ministry of Social Development
16	MIVI	Ministry of Housing
17	M/M	Minutes of Meeting
18	ODA	Official Development Assistance
19	PCM	Project Cycle Management
20	PDM	Project Design Matrix
21	PNCH	Chagres National Park
22	PO	Plan of Operation
23	PRA	Participatory Rural Appraisal
24	PROCCAPA	The Panama Canal Watershed Conservation Project
25	R/D	Record of Discussions
26	TNC	The Nature Conservancy
27	UNDP	United Nations Development Program
28	USAID	United States Agency for International Development

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