

## SUBPROJECT COMPLETION REPORT

OF

### MARIVELES WATERSHED REHABILITATION SUBPROJECT

Loan Agreement No. PH-P 135  
Forestry Sector Project

#### **I. Subproject Description**

The Subproject site is situated in the Municipality of Mariveles, Bataan covering Barangays Biaan, Balon-Anito and Sitio Lilimbin and Palanas in Barangay Camaya. It is specifically located between 14° 26' to 14° 29' latitude and 120° 27' to 120° 30' longitude with a total area of 2,000 hectares. The area has a generally rugged terrain with elevation ranging from 100 to 700 meters above sea level. It is approximately three kilometers away from Mariveles town proper and can be reached through an access road within five to ten minutes using a 4-wheel drive vehicle.



##### 1. Purpose/Objectives

###### A) Original

The Subproject's general objective was to pursue sustainable forest management to address the environmental degradation that had been going on in the area and to alleviate poverty among the people.

Specifically, the Subproject aimed to accomplish the following:

1. To establish/develop 1,120 hectares for Reforestation/Protection; 255 hectares for Agroforestry Plantations; 78 hectares for Enrichment Planting; and 547 hectares for Rattan Plantation under the scheme Community-Based Forest Management;

2. To restore the protective cover of the watershed to minimize erosion and siltation and increase water yield;
3. To raise income and improve the living conditions of the people in the project area and adjacent communities by introducing more effective techniques on forestry and agricultural productions; and
4. To involve the barangay residents in implementing sustainable use of forest-reserve watershed.

## B) Modification

### a. Modified purpose/objectives

To establish/develop 311.33 hectares for reforestation/protection; 511.59 hectares for agro forestry plantations; 722.31 hectares for enrichment planting; and 347.77 hectares for rattan plantation through Community-Based Forest Management scheme.



### b. Reasons for the modification

The objective of rehabilitating the area through reforestation, agroforestry, enrichment planting and rattan components was not changed. Change in area covered by each component was brought about by the inability of the organized community people to establish the 2,000 hectares within three years and the result of actual resurvey conducted by the Subproject Site Management Office (SUSIMO) in 2001.

## 2. Subproject Scope and Dimension

### A. Comparison of Original and Actual Scope & Dimensions

A.1. Please check: There has been (revision and/or modification or  no revision and/or modification) of the Subproject scope and dimensions.



<p>c. Plantation</p> <p>2. VEGETATIVE MEASURES<sup>2</sup></p> <p>a. Agroforestry</p> <p>b. Assisted Natural Regeneration</p> <p>c. Enrichment Planting</p> <p>d. Tree Plantation</p> <p>d.1. Bamboo</p> <p>d.2. Rattan</p> <p>d.3. Mangrove</p> <p>d.4. Plantation Species</p> <p>e. Timber Stand Improvement</p> <p>3. INVENTORY RESIDUAL FOREST</p> <p>4. INCOME ENHANCEMENT PROJECT</p> <p>5. INFRASTRUCTURE</p> <p>a. bunkhouse</p> <p>b. lookout tower</p> <p>c. footpath</p> <p>d. fireline</p> <p>e. graded trail</p> <p>D. MAJOR INFRASTRUCTURE</p> <p>a. Rehabilitation of Farm-to-market road</p> <p>E. Monitoring &amp; Evaluation (M &amp; E)</p>	<p>255 hectares</p> <p>78 hectares</p> <p>547 hectares</p> <p>1,120 hectares</p> <p>2 units</p> <p>4 units</p> <p>Inspection Chart Mapping (ICM)</p>	<p>511.59 hectares</p> <p>722.31 hectares</p> <p>347.77 hectares</p> <p>311.33 hectares</p> <p>3 units</p> <p>6 units</p> <p>10 sq.meter</p> <p>20 sq.meter</p> <p>7.20 kilometer long</p> <p>Physical Validation: Conducted in three (3) passes:</p> <p>January 2000 to April 2000</p> <p>February 2002 to March 2002</p> <p>February 2003 to March 2003</p> <p>(1,893 hectares)</p> <ul style="list-style-type: none"> <li>• Verification of</li> </ul>
<p>Year 1</p> <p>Year 2</p> <p>Year 3</p>		

		<p>boundaries, monuments, and block corner posts</p> <ul style="list-style-type: none"> <li>• Seedling production inventory analysis</li> <li>• Survival Counting with 20% sampling intensity, including mapping of developed areas</li> <li>• Height and diameter measurement, assessment of overall health/appearance</li> <li>• Inspection of physical infrastructure</li> </ul>
<p>Year 1</p> <p>Year 2</p>		<p>Institutional and Project Benefit Assessment:  Conducted in two (2) passes: (1,893.00)  December 2001 to April 2002  December 2002 to May 2003</p> <ul style="list-style-type: none"> <li>• Assessment of the overall development of the PO</li> <li>• Assessment of the capability of the PO to pursue sustainable resource management and sustain its livelihood initiatives</li> </ul>

		<ul style="list-style-type: none"> <li>• Identification of various issues/problems/constraints related to the development and strengthening of the PO and the relevant support systems</li> <li>• Identification of immediate benefits of the project and evidences that would indicate the intermediate and long-term socio-economic and environmental impacts.</li> </ul>
<p>2. Subproject Site Management Office (SUSIMO) Equipment provided to this Office:<sup>3</sup></p>		<ul style="list-style-type: none"> <li>▪ 2 units Binocular</li> <li>▪ 4 Calculators</li> <li>▪ 1 set Computer Desktop with printer</li> <li>▪ 2 units GPS</li> <li>▪ 1 set Medical Kit</li> <li>▪ 2 sets Fire fighting equipment</li> <li>▪ 1 unit Steel tape</li> <li>▪ 1 Lettering set</li> <li>▪ 1 Drafting table</li> <li>▪ 2 units Petromax</li> <li>▪ 1 unit UPS 500VA</li> <li>▪ 1 GIS (maptitude) software</li> <li>▪ 4 Steel Cabinets</li> <li>▪ 1 unit Handheld Radio</li> </ul>

<p>Researches conducted:</p> <p>Training attended by the SUSIMO personnel:<sup>4</sup></p>		<ul style="list-style-type: none"> <li>▪ 1 unit Brunton Compass</li> <li>▪ 1 unit Abney Hand Level</li> <li>▪ 2 Cameras</li> <li>▪ 3 Motorcycles (SUZUKI 125)</li> <li>▪ 1 Utility Vehicle (KIA Ceres)</li> <li>▪ 1 unit Forester's Transit</li> <li>▪ 1 unit Base Radio</li> <li>▪ 1 unit Rain Gauge</li> <li>▪ 3 brushcutters</li> <li>▪ 1 unit Computer Table</li> <li>▪ 11 Office tables</li> <li>▪ 11 chairs</li> <li>▪ 1 unit Generator</li> </ul> <p>NONE</p> <ol style="list-style-type: none"> <li>1. Orientation/Reorientation Seminar on FSP for the PO Cum Action Planning Workshop</li> </ol>
		<ol style="list-style-type: none"> <li>2. FSP Re-Orientation Seminar</li> <li>3. Leadership Capability Enhancement Training</li> <li>4. Leadership Capability Enhancement Training Track II</li> </ol>

Others:		5. Orientation Seminar for SUSIMO Staff for Watershed Subproject Site  Construction of Subproject Site Management Office (SUSIMO) building
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<sup>1</sup>Please refer to **Table 1** for the details on trainings attended by the POs

<sup>2</sup>**Table 2** details the subproject performance in terms of area planted

<sup>3</sup>**Table 3** shows the details of the equipment provided to the SUSIMO

<sup>4</sup>Please refer to **Table 4** for the trainings attended by the SUSIMO Staff

## B. Reasons for Revision/Modification of scope and Dimensions

### B.1. Where there has been "revision/modification" of the Subproject scope and dimensions.

Please choose the reason(s) from the following list and check.

- Revision of the superior plan (e.g. sector development plan, etc.)
- Revision of the supply-and-demand estimate
- Large fluctuation in the Subproject cost
- Substantial revision of design due to the unforeseeable physical condition at the time of the original design (e.g. poor soil condition, etc.)
- Natural disaster/unseasonable weather
- Unusual circumstances beyond the control of the Executing Agency
- Structural and organizational problems of the agencies concerned (e.g. lack of staff, inadequate coordination with other agencies, etc.)
- Availability of funds (e.g. lack of funds, use of contingency, fluctuation of the exchange rate, etc.)
- Unrealistic initial plan/Technical problems
- Procurement problems
- Performance of contractor/supplier
- Performance of consultant
- Change in construction period
- Others

### B.2. Detailed statement of reasons

*Others*



- Attitude of residents of the community (CO)

A two-year contract was awarded to a non-government organization (NGO) for the conduct of Community Organizing activities. The CO contractor had difficulty in mobilizing the members of the community because the residents were uncooperative during the early part of project implementation.

Major activities like assistance on policy formulation, networking and linkaging, identification and implementation of income generating projects for the PO was not conducted on schedule.

- Resurveying of the area by the SUSIMO (CSD)

Of the total original areas targeted for establishment under Comprehensive Site Development, only 1,848.00 hectares was found out to have been established by the People's Organization after the Inspection Committee had done its validation and monitoring. The figure went down further after a resurvey was made by the SUSIMO soon after its creation in 2001. Based on the survey using GPS, the total actual area established by the PO was 1,893.00 hectares. This was accepted and served as final area accomplished by the PO.

The construction of additional units of bunkhouse and lookout tower was based on the actual need of the project site. One bunkhouse and two lookout towers were constructed for each of the three barangays.

- Inclusion of Major Infrastructure Development Project

Improvement in the standard of living of beneficiary communities is considered as the key to sustainable management of forest resources. As an additional support for the communities in developing their existing and alternative livelihood projects under the FSP, the rehabilitation and construction of



infrastructures that are most directly linked to promoting livelihood in the communities were included as a major project component.

C. Contribution of Subproject to Relevant (Sub) Sector(s)

C.1. (Sub) Sector(s) to which the Subproject belongs

- Electric Power and Gas
  - (Multi purpose) Dams
  - Power plants
  - Transmission lines
  - Distribution systems
  - Gas
  - Others
- Telecommunication
  - Telecommunications
  - Broadcasting
- Agriculture, Forestry & Fisheries
  - Agriculture and Forestry
  - Fisheries
- Social Services
  - Water Supply
  - Sewerage
  - Education
  - Health
  - Tourism
  - Others (employment and income raising opportunities)
- Irrigation and Flood Control
  - Irrigation
  - Flood Control
- Transportation
  - Roads
  - Railways
  - Bridges
  - Airport
  - Ports
  - Marine transportation
  - Others
- Mining and Manufacturing
  - Mining
  - Manufacturing

C.2. Original (At the time of appraisal/Planned)

Item	Description
1. Social preparation and development	<ul style="list-style-type: none"> <li>• Through NGO contractor and DENR personnel, the community's knowledge and skills on forest management will be enhanced through Community Organizing and provision of technical assistance. The organized community will be educated/informed on farm and nursery techniques / environment operation and</li> </ul>

<p>2. Project components for site development</p>	<p>management, to include the advantages of rehabilitating and protecting denuded forest areas. They will also be trained to manage and operate existing and proposed income generating activities.</p> <ul style="list-style-type: none"> <li>• The introduction of multiple tree species in the openlands and grasslands will apparently enhance ecological diversity and soil productivity.</li> <li>• Erosion and sedimentation will certainly be reduced to tolerable level. The presence of vegetative cover will intercept the erosive force of rainfall, promote stem flow, increase percolation rate and reduce run-off.</li> </ul>
<p>3. Employment and economic opportunities</p>	<ul style="list-style-type: none"> <li>• The Subproject is community-oriented in nature. It will directly involve the local communities in the agro forestry, reforestation, and forest protection works. The community will benefit financially from the CSD activities and livelihood projects to be implemented. The introduction and enhancement of agro forestry products will improve the quality of life of the community people as well.</li> </ul>

### C.3. Present situation and outlook for the future

<b>Item</b>	<b>Description</b>
<p>1. The community and tenurial instrument</p>	<ul style="list-style-type: none"> <li>• The Mariveles Watershed Farmers Association, Inc. (MAWAFAS) was organized, educated, and trained to do the CSD activities. Members were trained as well in the identification and implementation of feasible livelihood operations in their locality.</li> <li>• With the assistance of the NGO contractor for CO, the Assisting Professional, and DENR personnel, MAWAFAS capability to conduct sustainable forest management has improved. With a strong leadership that is determined, and core participants who are committed as well, they are now able to act</li> </ul>

<p>2. Project Site Development</p>	<p>on important issues and concerns needed to further strengthen the organizational capability and performance as well.</p> <ul style="list-style-type: none"> <li>• The Community-based Forest Management Agreement (CBFMA) covering a total area of 2,000 hectares was issued to MAWAFAS on December 16, 1998 as a legal tool in the long-term management and operation of the whole forest area as indicated.</li> </ul> <p>The MAWAFAS has achieved a lot but is yet to become viable and enterprising organization. With the continuous provision of technical assistance, especially on networking for livelihood project operations, it is expected that people empowerment in upland communities can be achieved in the immediate future.</p> <ul style="list-style-type: none"> <li>• A total of 1,893.00 hectares were rehabilitated by MAWAFAS through reforestation, agro forestry, enrichment planting, and rattan component with a weighted average survival rate of 81.14% based on the latest monitoring and evaluation of the NGO contractor.</li> <li>• Significant impact on the water yield, erosion, and sedimentation is yet to be felt considering that the plantations are only six years old.</li> <li>• Continuous maintenance and protection activities should be done in order to maintain the existing condition of the plantations.</li> <li>• Once the site is fully vegetated with trees, approximately 15 years onward, soil productivity and yield of ground and surface water are expected to improve, and so is the quality of agricultural products. Flash flooding downstream during stormy months will be minimized. Bigger and better habitat will be available for wildlife in the Subproject site.</li> </ul>
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<p>3. Employment and socio-economic benefit of the project</p>	<ul style="list-style-type: none"> <li>• During the five years implementation of the Subproject, residents of Barangays Balon-Anito, Biaan, and Camaya, Mariveles, Bataan (members and non-members of MAWAFAS) were employed to conduct nursery operation, plantation establishment, and maintenance and protection. Payments were made based on specific accomplishments governed by the existing policies of MAWAFAS and unit cost set per approved Work and Financial Plan.</li> <li>• Out of the 15% administrative and supervision cost and 5% capital build-up per salary claimed by members, MAWAFAS has embarked on the following livelihood projects: Tilapia Culture, Micro -lending, and Sweet Potato (Camote) Production from which members are expected to benefit as additional source of income.. Please refer to <b>Table 5</b> for more detailed information on the livelihood projects being implemented by the PO.</li> <li>• With strong leadership and positive response from the DENR and other entities, especially on networking for livelihood operations, financial management system strengthening and managerial capability development for key leaders, empowered MAWAFAS will emerge in less than a decade from now.</li> </ul>
<p>4. Infrastructure Project</p>	<ul style="list-style-type: none"> <li>• In support to the operation of livelihood<sup>5</sup> activities of MAWAFAS and to facilitate mobility of residents directly and indirectly affected by the project, a 7.20-kilometer farm-to-market road was rehabilitated and a memorandum of agreement between the DENR and the local government unit of Mariveles was signed by both parties to assure the serviceability and maintenance of said infrastructure.</li> </ul>

Please refer to Table 5 for the livelihood project being implemented by the POs

II. Subproject Implementation

1. Organizations for Implementing Subproject

Function in the Subproject Implementation	Name of Organization		Reasons for Change
	(1) Original	(2) Changed	
1. Survey, Mapping & Planning	Bataan Forest Environmentalist Association, Inc.		
2. AO for Community Organizing	Forest Development Foundation, Inc. (FDFI)		
3. Assisting Professional	Mr. Ferdinand Cruz		
4. Peoples Organization	Mariveles Watershed Farmers Association, Inc. (MAWAFAS)		
5. Monitoring & Evaluation Contractor	University of the Philippines Los Baños Foundation, Inc. (UPLBFI)		
6. Infra Contractor	ABESCO Construction & Development Corporation		

Please state:

1.1 Reasons for the change - NOT APPLICABLE

1.2 Problems arising, counter measures adopted and results.

Problems that arose during implementation of Mariveles Watershed Subproject affected the performance of the PO as well as condition of established plantations.

Problem/Concern	Counter Measure Adopted	Remarks/Results
1. Misunderstanding (personal) within the PO - during early part of project	Continuous dialogues, leveling-off, and meetings conducted by	Effect of personal misunderstanding on the performance of the whole organization was minimized. The PO was

implementation, this affected the operation of the organization, specially the conduct of CSD.	the AO and DENR/SUSIMO	able to accomplish its physical targets on time.
2. Presence of land claimants (member and non-member of the PO) - there was difficulty in the identification of site to be planted with the presence of claimants. Majority did not want to subject their land claims for development.	Continuous Information Education & communication on the importance of rehabilitating the forest was conducted by the AO and DENR	With the concerted efforts of the AO and DENR field office, the claimants were convinced and total area required for planting was established.
3. Conduct of illegal grazing at the project site - Planted and replanted trees are affected by this operation (the person involved has strong "political" influence)	Information dissemination of existing policies and corresponding penalties were conducted by concerned DENR offices	Such illegal operation still exists but minimized. Approximately 475 hectares of forestland is affected during each grazing period.
4. Fire occurrence - approximately 50-75 hectares are affected by forest fires each year.	Conduct of intensive patrolling activity and replanting in affected sites.	Established plantations were restored but intensive conduct of patrolling activity is needed in order to minimize if not control the spread of fire.
5. Loss in livelihood operation (Tilapia Production) due to mismanagement	Conduct of assessment and evaluation with regard to the first operation	The Tilapia Production, among other livelihood activities is still on going with three fishponds. Net income is yet to be determined.

- 1.3 The latest organization chart (or equivalent) for the implementation of the Subproject is ( attached or  not available).

The latest organizational chart of the Assisting Organization, PO, M & E and Infrastructure contractors, and SUSIMO are attached as **Annexes 1a-1e**.

- 1.4 If the organizational chart (or equivalent) is not available, please state the reason. (NOT APPLICABLE).

2. Implementation Period

A. Comparison of Original Schedule and Actual Period

Please fill in the following blanks with actual period for each item.

ITEM	ORIGINAL SCHEDULE	ACTUAL PERIOD
1. Contract of NGO for SMP	April 24, 1997-May 30, 1997	April 24, 1997 - May 30, 1997
2. Contract of AO for CO	December 1997-December 1999	December 1997 - June 2000
3. Contract of PO for CSD	February 1998 - December 2001	February 1998-June 30, 2003
4. Contract of NGO for M&E	December 1999 - December 2000	January 2000 - March 2003
5. Contract of Infrastructure Component	December 31, 2001-April 2002	December 31, 2001-April 2002
© Completion (completion of Subproject)	Dec. 2001	June 31, 2003

Please refer to **Table 6** for the subproject status report.

Notes: Completion of the Subproject was defined as ( completion ceremony or  final disbursement or  other than the above.



The completion date was scheduled for December 2001 (at the time of appraisal) and is indicated (thus ©) in the above Table.

#### B. Reasons for Delay or Early Completion

B.1. In case of delay or early completion, please choose the reason(s) from the following list and check.

- Change in scope/dimensions
- Natural disaster/Unseasonable weather (e.g. earthquake, typhoon, etc.)
- Shortage of funds/Fluctuation of the exchange rate
- Problems in procurement
- Inflation
- Unusual circumstances beyond the control of the Executing Agency
- Structural and organizational problems of the agencies concerned (e.g. lack of staff, inadequate coordination with other agencies, etc.)
- Legislative matters
- Unrealistic initial plan/Technical problems
- Performance of contractor/supplier
- Performance of consultant
- Others

B.2. Reasons and background for delay or early completion

*Natural disaster/Unseasonable weather/Unusual circumstances beyond the control of the executing agency*

- On the conduct of Comprehensive Site Development

The PO was not able to meet the 2,000 hectares physical target after three years of project implementation and the condition of the plantations in terms of quality was not good either. During the management by the SUSIMO, it was seen that intensive conduct of replanting in areas affected by the occurrence of El Niño, illegal grazing, and intentional and unintentional forest burning is needed prior to final evaluation by a composite team that will determine whether the 15% Retention Fee will be released to the PO.

*Legislative matter*

- On the conduct of Monitoring and Evaluation

The original schedule of the M & E involved three passes for Physical Accomplishment validation only per Memorandum Circular 99-17 entitled "Guidelines on the Conduct of Monitoring and Evaluation (M & E) of Forestry Sector Project under Loan II." But with the inclusion of another aspect, the Institutional and Project Benefit Assessment per Revised Guidelines on the Conduct of Monitoring and Evaluation of the Forestry Sector Project provided for under MC 2001-04, the contract schedule was revised per pass per aspect.

*Others (Attitude of residents of the community)*

The uncooperativeness of the community members directly involved in the project led to the delayed completion of Community Organizing activities. Majority of community residents were not supportive of activities that were usually held.

C. Remedial Action Taken in Each Case of Delay

*Natural disaster/Unseasonable weather/Unusual circumstances beyond the control of the executing agency*

- On the conduct of Comprehensive Site Development

Additional one and a half years was given by the Project Management Office to the PO to conduct intensive maintenance and protection of plantations, at the same time, to further strengthen members' capabilities in organizational development and forest resources management.

*Policy Matter*

- On the conduct of Monitoring and Evaluation

In compliance to MC 2001-04 and to further improve the accomplishment and organizational management of MAWAFAS, schedule of the conduct of the activity was further revised in

details, per pass per component (Physical Validation and Institutional and Project Benefit Assessment Components).

*Others (Attitude of residents of the community)*

A six-month extension was given to the NGO for the continuity of unaccomplished activities stipulated in the contract, assistance on networking and linkage, policy formulation, and identification and implementation of income generating projects of MAWAFAS, among others. No additional amount was incurred for the said extension of contract.

3. Subproject Cost

A. Comparison of Original Estimated Cost and Actual Expenditure (by Component)

(Unit: in Mil peso)

Item	Original Cost	Actual Expenditures
Survey, Mapping and Planning	1.350000	1.350000
Community Organization	3.600000	3.500000
Comprehensive Site Development	19.326187	17.849635
Monitoring and Evaluation	1.444190	3.388870
Infrastructure Dev't	9.589131	12.980721
Subproject Coordinating Office (SUSIMO)	1.852248	1.468382
<b>TOTAL</b>	<b>37.161757</b>	<b>40.537608</b>

Please refer to Tables 7, 8, 9a-d, 10 for the details on cost of SMP, CO, CSD and M & E. List of Infra project/s with its corresponding cost is also attached as Table 11.

B. Reasons for Difference between Original Estimated Cost and Actual Expenditure

B.1. If there is any difference between Table a.1 and Table a.2 in Paragraph a, please choose the reason(s) from the following list and check.

- Increase in reconstruction cost arising from natural disaster/unreasonable weather (e.g. earthquake, typhoon, etc.)
- Increase or decrease arising from a change in construction period
- Increase or decrease arising from inflation
- Increase or decrease arising from fluctuation in the exchange rate
- Increase or decrease arising from a change in the scope/work volume of the Subproject
- Decrease arising from keen competition in tender
- Unusual circumstances beyond the control of the Executing Agency
- Unrealistic cost estimates/Technical problems
- Others (Reduction of CSD project cost and Performance of Contractor)

B.2. Description of the detailed reason(s) and background

*Increase or decrease arising from a change in the scope/work volume of the Subproject and Reduction of CSD Project Cost*

- On the Comprehensive Site Development Cost

The original cost amounting to PHP 19,326,187.15 has undergone revisions due to the following; reduction of established plantations as a result of resurveying by the SUSIMO, updating of cost estimates of activities per MC 2000-19 entitled "Guidelines Governing the Updating of Cost Estimates and Intensification of Plantation Maintenance and Protection Activities for DENR-FSP Watershed Subprojects under JBIC Funding", and reduction of total project cost as a result of the evaluation of the performance of FSP subprojects nationwide. The final revision of the total project cost amounted to PHP 18,382,822.38. Payments for the maintenance and protection activities were based on the new costing. Unit cost per activity increased but with the reduction of the area and the total project cost, the actual disbursement amounted to PHP 17,849,635.25

- On the Monitoring and Evaluation Cost

The coverage area per contract and the revision of MC 99-17 reflected a difference between the original and actual disbursement for this activity. The original contract covered a total area of 1,382 hectares to be subjected to three passes at PHP 1,045.00 per pass. Taking into consideration the latest guidelines in MC 2001-04, the cost per hectare per pass has been revised to only PHP 643.00 for the Physical Validation component and an additional PHP 215,000.00 per pass for the conduct of Institutional and Project Benefit Assessment.

- On the Major Infrastructure Development Cost

The DENR-Region 3 has accepted the bidding amount of PHP 9,589,131.49 for the construction and completion of infrastructure works for Mariveles Watershed Subproject. An excess amount of PHP 3,410,868.51 was provided as allowance for the actual conduct of the Project and consequently treated as supplemental contract. The revised project cost then was PHP 13,000,000.00 with an actual disbursement of PHP 12,980,720.87. The balance per revised contract cost amounting to PHP 19,279.13 was a result of the evaluation and review of engineers at the Central Office and representatives from the field office on the actual accomplishments of ABESCO per approved design/specifications. Said amount was reverted to the National Treasury.

*Others (Performance of the Contractor)*

- On the Community Organizing Cost

The FDFI was able to complete its accomplishments per contract. The quality, however of output was not that impressive as far as the DENR field offices was concerned, hence the PHP 100,000.00 was not disbursed. It was reverted to the National Treasury.

- On SUSIMO Cost

There is a difference between the original and actual cost inasmuch as the allotment or original cost is not necessarily the same amount that was obligated for the expenditures of the SUSIMO.

C. Action taken in Case of Cost Overrun and Results

Cost overrun on M & E and infrastructure components was addressed through revision and approval of supplemental contracts. The latest revised contracts were greater than and equal to the amount disbursed for the M&E and infrastructure component, respectively.

D. Comparison of Original Estimated Expenditure and Actual Expenditure (by Year)

Unit: (Mil peso)

Calendar Year	Original Cost	Actual Expenditures
1997	1.350000	1.350000
1998	10.136616	5.395187
1999	8.598555	8.175096
2000	4.699445	1.609533
2001	1.708535	3.464362
2002	10.066803	16.983226
2003	0.601803	3.560204
<b>Total</b>	<b>37.161757</b>	<b>40.537608</b>

Please refer to Table 12 for the details of the Annual Work and Financial Plan.

4. Comments on Performance of Assisting Organizations (AOs), Assisting Professionals (APs), Peoples Organizations (POs), M&E and Infrastructure contractors.

Please describe the performance of each organization after checking the item(s) in the relevant lists on which you have any comment.

A. Performance of Assisting Organizations & Assisting Professionals (if any) Peoples Organizations, M&E and Infrastructure contractors

- A.1.  Overall performance  Design  
 Contract administration  Construction supervision  
 Expertise  Staff qualifications  
 Coordinating ability  Compliance with Contracts  
 Performance related to any other than the Subproject scope, if any.  
 Others

A.2. Description

*Overall Performance*

- Assisting Organization for Community Organizing

The contractor has provided social, technical, and managerial assistance to the PO and the Subproject. Deployed staff have shown commitment and patience in dealing with and resolving conflicts within and among the members of the organization.

- Assisting Professional

The AP's services in MAWAFAS left a significant mark in the implementation of the project. He personally assisted the officers and BOD in dealing with the problems and conflict that the MAWAFAS encountered in the implementation of the Subproject. He also assisted the PO in developing linkages with other government agencies, other POs and NGOs, which helped a lot in obtaining free training and seminars for the establishment of livelihood projects for MAWAFAS. Further, the AP strictly monitored the PO's capability in managing their finances.

- Peoples Organization for CSD activities

Initially, the MAWAFAS members were uncooperative to the DENR and the Assisting Organization, ignoring some of the recommendations and organizing activities of the Assisting Organization and the DENR field offices. But with continuous dialogues, leveling-off, and meetings on the importance of the Subproject and the inculcation of their responsibilities per signed contract, they have managed to accomplish the CSD activities as well as operate identified livelihood projects. The PO, however, still needs further strengthening and technical assistance to ensure success of their endeavors.

- NGO for M & E activity

The NGO to a certain degree, has been effective in providing assistance as far as overall implementation and improvement of Mariveles Watershed Subproject is concerned. However, it failed to provide deeper analysis of employment trends and income increase of the community that directly participated in the Subproject. The information could have more or less gauged the level of Project success insofar as poverty alleviation is concerned.

- Contractor for Major Infrastructure Development

In terms of physical operation and accomplishment, the performance of ABESCO was satisfactory since the activities were successfully finished as scheduled. The contractor has the expertise, experience and available resources to be able to conduct the activities stipulated in the contract. There was full cooperation and coordination from ABESCO that contributed greatly to the realization of the infrastructure project.

5. Other matters relating to Subproject Implementation

Please choose the item(s) from the following list on which you have any comment, check it (them), and describe it (them) with measure and results in (B) below.

- A.  Technical     Financial     Institutional     Economic  
 Social/Distributional     Others

B. Description (in detail)

*Institutional*

The creation of the SUSIMO and contracting of the Assisting Professional in 2001 per DAO 2000-65 contributed immensely to the improved implementation of the DENR forest development project. Issues and concerns in the field were acted upon immediately. More intense monitoring and necessary assistances were provided to the community involved in the Mariveles Watershed Subproject.

*Diverse Culture/Provincial characteristics of members of the organization*

Within the PO are members who are *Ilocanos, Pampangeños, Batangeños, Visayans, and Bicolanos* so that misunderstanding within the organization cannot be avoided nor the existence of factions. This is crucial to the sustainability of the Mariveles Watershed Subproject.

III. Action Taken by the AOs, APs and POs relating to Recommendation(s)



1. Recommendation(s) made by SUSIMO

This article is ( applicable  not applicable. There has been no recommendation with regard to the Subproject).

RECOMMENDATION	ACTION TAKEN		RESULT/REMARK
	By the AP	By the PO	
1. Conduct of election for the officers of the PO to start the unification process among its members	Assisted the SUSIMO during the election and act as the COMELEC	Participated in the election and afterwards abided by the results of the election	Election was held peacefully. Despite protests from inactive members, the election was done in accordance with the election guidelines of the PO.
2. Preparation of clear policies regarding financial and organizational concerns	Assisted in the conduct of trainings and seminars to improve the POs managerial capability	Adopted cash receipt and cash disbursement books system to separate expenses from cash receipts and simplified the format of financial reports through the Cash Position reports per month and the Consolidated Cash Position report per quarter	Financial reports were posted at the PO office for transparency on financial records
3. Continuous IEC activities among its members to minimize the occurrence of break-away groups	Assisted in the conduct of IEC activities to ensure full participation of the members	The officers initiated the IEC activities through general assembly, BOD meetings, EXECOM and Committee meetings	Awareness of PO members increased which is envisioned to further encourage them to give their best for the Subproject.

IV. Initial Operation and Maintenance of Subproject Facilities

1. Present Condition of Facilities

A. Please check: This article is ( applicable due to problem(s) or  not applicable. No particular problem has occurred since the initial operation started). If there have been any problems, please check the relevant space in the Table.

For the SUSIMO:

Item	Status	Initial Operation	Maintenance	Management
1. KIA Cross Truck	Serviceable		✓	
2. Motorcycle	Serviceable		✓	
3. Power Generator	Serviceable		✓	
4. Computer with software	Serviceable			
5. Printer	Serviceable			
6. GPS	Serviceable		✓	
7. UPS 500 VA	Serviceable			
8. GIS software (maptitude)	Serviceable			
9. Base Radio	Serviceable		✓	
10. Handheld Radio	Serviceable			
11. Forester's Transit	Serviceable			
12. Manual Typewriter	Serviceable			
13. Camera	Serviceable			
14. Brunton compass	Serviceable			
15. Steel cabinet	Serviceable			
16. Medical Kit	Serviceable			
17. Fire fighting Equip.	Serviceable			
18. Steel/Nylon Tape/Chain	Serviceable			
19. Abney Hand Level	Serviceable			
20. Rain gauge	Serviceable			
21. Brush cutters	Serviceable			
22. Binocular	Serviceable			
23. Calculator	Serviceable			
24. Lettering set (Leroy Set)	Serviceable			
25. Drafting Table	Serviceable			
26. Tables and Chairs	Serviceable			

27. Flashlight	2 units		✓	
28. Petromax	Unserviceable			
29. SUSIMO building	Serviceable			
	Serviceable			

For the PO:

Item	Status	Initial Operation	Maintenance	Management
1. Steel Cabinet	Serviceable			
2. Electric fan	Unserviceable		✓	
3. Blackboard	Serviceable			
4. Wooden tables	Serviceable			
5. Karaoke	Unserviceable			
6. Television set	Serviceable		✓	
7. VHS player	Serviceable			
8. Set of monoblock long table & 6 chairs	Serviceable			
9. Manual typewriter	Serviceable			
10. Water system	Serviceable			

B. Please check: The Problem(s) has arisen owing to the following reason(s).

- Technical     Financial     Institutional     Economic  
 Social/Distributional     Others (Quality/Serviceability)

C. Description (in detail)

For the SUSIMO

1. KIA CERES - had undergone minor repairs like camber adjustment, caster adjustment, drain radiator, break adjustment, wheel alignment and tire mounting but, at present, still being used by the SUSIMO.
2. MOTORCYCLE - minor repair of the flasher, wiring, & bearing but is still serviceable.
3. POWER GENERATOR - at present, it is already subject for overhauling since its gas is fast-consuming. They have allotted a budget for it.

4. *GPS* - the SUSIMO forwarded it to NFDO Central Office because it is not functioning. After its repair it was again brought to the SUSIMO and is now being used.
5. *Base Radio Transceiver* - it is functioning except that it has limited coverage; can communicate only within the Subproject area.

*For the PO:*

1. *Flashlight* -Still not functioning even with new batteries.
2. *Electric fan* - need to change fan motor.
3. *Karaoke* - karaoke was burned (result of short circuit) and more expensive to repair than to buy a new one.

#### D. Aspect of utilizing the Subproject facilities

*For the SUSIMO:*

<b>Item</b>	<b>Original Plan</b>	<b>Actual Operation</b>
1. KIA Ceres	For SUSIMO use	For SUSIMO use
2. Motorcycle	For SUSIMO use	For SUSIMO use
3. Power Generator	For SUSIMO use	For SUSIMO use
4. Computer with software	For SUSIMO use	For SUSIMO use
5. Printer	For SUSIMO use	For SUSIMO use
6. GPS	For SUSIMO use	For SUSIMO use
7. UPS 500 VA	For SUSIMO use	For SUSIMO use
8. GIS software (maptitude)	For SUSIMO use	For SUSIMO use
9. Base Radio	For SUSIMO use	For SUSIMO use
10. Handheld Radio	For SUSIMO use	For SUSIMO use
11. Forester's Transit	For SUSIMO use	For SUSIMO use
12. Manual Typewriter	For SUSIMO use	For SUSIMO use
13. Camera	For SUSIMO use	For SUSIMO use
14. Brunton compass	For SUSIMO use	For SUSIMO use
15. Steel cabinet	For SUSIMO use	For SUSIMO use
16. Medical Kit	For SUSIMO use	For SUSIMO use
17. Fire fighting Equip.	For SUSIMO use	For SUSIMO use
18. Steel/Nylon Tape/Chain	For SUSIMO use	For SUSIMO use
19. Abney Hand Level	For SUSIMO use	For SUSIMO use
20. Rain gauge	For SUSIMO use	For SUSIMO use
21. Brush cutters	For SUSIMO use	For SUSIMO use
22. Binocular	For SUSIMO use	For SUSIMO use
23. Calculator	For SUSIMO use	For SUSIMO use

24. Lettering set (Leroy Set)	For SUSIMO use	For SUSIMO use
25. Drafting Table	For SUSIMO use	For SUSIMO use
26. Tables and Chairs	For SUSIMO use	For SUSIMO use
27. Flashlight	For SUSIMO use	For SUSIMO use
28. Petromax	For SUSIMO use	For SUSIMO use
29. SUSIMO building	For SUSIMO use	For SUSIMO use

*For the PO:*

Item	Original Plan	Actual Operation
1. Steel Cabinet	For PO use	For PO use
2. Electric fan	For PO use	For PO use
3. Blackboard	For PO use	For PO use
4. Wooden tables	For PO use	For PO use
5. Karaoke	For PO use	For PO use
6. Television set	For PO use	For PO use
7. VHS player	For PO use	For PO use
8. Set of monoblock long table & 6 chairs	For PO use	For PO use
9. Manual typewriter	For PO use	For PO use

## 2. Organization for Operation and Maintenance

### A. Name of PO and SUSIMO

Peoples Organization - Mariveles Watershed Farmers Association, Inc. (MAWAFAS)

Subproject Site Management Office - Mariveles Watershed Subproject Site Management Office

A.1. Please give the name of PO/SUSIMO and/or Body in charge of O/M.

*For the PO* - The PO President, Narciso Vilan, is directly responsible for the operation and maintenance of the PO facilities but in instances where the decision of the Board is necessary, they conduct meetings to discuss their problems, e.g. purchasing of major facilities or equipment.

*For the SUSIMO* - It is the SUSIMO officers who are in-charge of the operation and maintenance of their facilities.

A.2. Please check:

The latest organization chart (or equivalent) for O/M of the Subproject facilities is (attached or  not available).

The latest organizational chart of the SUSIMO is attached as **Annex 1d**.

A.3.If the organization chart (or equivalent) is not available, please state the reason.

Only one person is directly involved in the operation and maintenance of the PO's subproject facilities, hence organizational chart is unnecessary.

B. Number of staff/workers of the PO or Body for Operation and Maintenance of Subproject Facilities.

*For the PO - One person, the PO President*

*For the SUSIMO - Six persons are directly involved in the maintenance and operation of the facilities.*

C. Please check and explain the following.

C.1.The number of staff is currently (sufficient or  insufficient).

If "Insufficient", please describe your estimate of the optimum number of staff and your plan for providing them.

C.2. Average employment period of the present staff

*For the PO - six years*

*For the SUSIMO - Most of the members of the SUSIMO have been connected with DENR for more than 10 years. On the average, they have served for 18 years.*

C.3. Availability of training program to promote the vocational ability of the staff, its contents and expected effects.  
(NONE)

There is no training program planned for the PO and SUSIMO.

3. Annual Budget or Actual Expenditure for Operation and Maintenance  
(by Year)

A. Original Expected Expenditure

For the PO:

The PO is not practicing budget planning for the maintenance and operation of major facilities. They only allot certain amount when it is needed.

For the SUSIMO:

(Unit: Mil Pesos)

Item Calendar year	Maintenance	Operation	Total
2001			0.537339
1. SUSIMOffice (office supplies, communication)		0.186416	
2. Vehicles (insurance, gas and oil lubricants for motor, pick-up, petromax, and generator)	0.262665		
3. Others (advertisements, printings)		0.088257	
2002			0.251942
1. SUSIMOffice (office supplies, communication)		0.082497	
2. Vehicles (insurance, gas and oil lubricants for motor, pick-up, petromax, and generator)	0.105440		
3. Others (advertisements, printings)		0.064005	
2003			0.481143
1. SUSIMOffice (office supplies, communication)		0.203600	
2. Vehicles (insurance, gas and oil lubricants for			

motor, pick-up, petromax, and generator)	0.277543		
<b>TOTAL</b>	<b>0.645648</b>	<b>0.624775</b>	<b>1.270424</b>

B. Actual and Currently Expected Expenditure

For the PO:

(Unit: Mil Pesos )

Item Calendar year	Maintenance	Operation	Total
2001			0.04369
1. PO office (rental, repair, supplies and materials, communication)	0.037078	0.006612	
2002			0.035994
1. PO office (rental, repair, supplies and materials, communication)	0.010000	0.008552	
2. Water system	0.017442		
2003			0.011398
1. PO office (rental, repair, supplies and materials, communication)		0.011398	
<b>TOTAL</b>	<b>0.06452</b>	<b>0.026562</b>	<b>0.091082</b>

The above yearly expenditure of the PO was the only data available in their office. Data from year 1998 to 2000 is not available.

For the SUSIMO:

Item Calendar year	Maintenance	Operation	Maintenance	Operation	Total
			For expanded Portion		
2001					0.53697
1. SUSIMO office (office supplies, communication)		0.186046			
2. Vehicles (insurance, gas and oil)	0.262665				



lubricants for motor, pick-up, petromax, and generator)					
3. Others (advertisement, printings)		0.088257			
2002					0.24397
1. SUSIMOffice (office supplies, communication)		0.074523			
2. Vehicles (insurance, gas and oil lubricants for motor, pick-up, petromax, and generator)	0.105440				
3. Others (advertisements, printings)		0.064005			
2003					0.31896
1. SUSIMOffice (office supplies, communication)		0.056920			
2. Vehicles (insurance, gas and oil lubricants for motor, pick-up, petromax, and generator)	0.262036				
<b>TOTAL</b>	<b>0.630141</b>	<b>0.469745</b>			<b>1.099886</b>

<i>July -December 2003</i>					<i>0.04400</i>
1. SUSIMOffice (office supplies, communication, electricity)				0.04400	
2. Gas and oil lubricants (for motor, pick-up, petromax, and generator)					
4. Others (advertisements, printings)					
<i>January-March 2004</i>					<i>0.05000</i>
1. SUSIMOffice (office supplies, communication, electricity)				0.031250	
2. Gas and oil lubricants (for motor, pick-up, petromax, and generator)			0.018750		
4. Others (advertisements, printings)				0.08000	
<b>TOTAL</b>			<b>0.018750</b>	<b>0.15525</b>	<b>0.1740</b>

Note: Actual and currently expected expenditure for expansion, replacement or any other improvement purposes.

- Please describe the basis for the above estimate and your financing plan for the same.

The SUSIMO budgetary and actual expenditures were based on previous experiences of project operations. It has been part of the strategy to facilitate overall subproject activities, specifically to minimize delay of processing of payments for the PO.

The expenditures of the PO on the other hand were based on the actual need of the organization. They allocate budget as the need arises.

#### 4. Maintenance Method

The maintenance method being applied by the SUSIMO on major facilities are the usual or common like change of oil/tires and tuning up for vehicles and cleaning of hard disk for the computer.

FACILITIES	MAINTENANCE METHOD	FREQUENCY
1. KIA Ceres	Change brake fluid/oil/tires, tune up,	Twice a year
2. Motorcycle	change oil, change tire	Twice a year
3. Power Generator	tune up, cleaning	Twice a year
4. Computer	Hard disk cleaning	Once a month

The PO has no major facilities that need regular maintenance except for the office and water system that are renovated/repared as the need arises.

### V. Benefits derived from Subproject

#### Indirect Effects

Please choose and check the item(s) which are dealt with this Article by you.

- Technological transfer (e.g. application of technology used in the Subproject to other similar projects and subprojects)
- Employment creating (e.g. during construction, contribution to the sector(s) after completion)
- Income-raising (e.g. income of the residents in the region)
- Other intended or unintended effects on the relevant sector(s) and/or the region concerned

B. Please give details for each of the item(s) you checked.

*Technology Transfer*

The PO members are now knowledgeable about nursery practices and operations which they could apply to similar development projects in the future and for further maintenance and protection of the whole CBFMA area awarded to MAWAFAS.

The group tasked on nursery operation now has the basic knowledge on seed propagation and grafting. During plantation establishment and development, the PO learned proper ways to handle, transport, and out-plant tree plantation and agro forestry species. Use of *mychorrizza* for better growth of planting materials was also introduced. They now have the capability to determine different species' suitability to specific areas.

*Employment creating*

The project not only increased awareness of the community residents on environmental conservation, but also generated employment opportunities through direct involvement in the CSD activities, livelihood operations, and day-to-day activities of the organization. A total of 93,090 man days was generated during the implementation of the five-year CSD and 450-day infrastructure contracts.

*Income-raising*

There was a significant increase in the annual income during the project. During appraisal, a total of 126 households were engaged in off-farm activities have an average annual gross income of PHP 5,000.00. As a result of the subproject activities, the average annual gross income of 94 households increased to PHP 37,631.98.

Improvement of financial condition enabled about 25% of the participants to send their children to school. It was also noted that majority of their houses improved with the increase in income as these structures underwent various stages of renovation.

## VI. CONCLUSIONS AND RECOMMENDATIONS

- The end of the Mariveles Watershed Rehabilitation Subproject signaled the start of putting into action role of MAWAFAS as Community-based Forest Management Agreement (CBFMA) holder.
- The training, technical know-how, and lessons learned during the implementation period will serve as tools for the sustainable resource use and further development of the watershed.
- Weaknesses still exist; the management capability of MAWAFAS needs further strengthening.
- It is recommended that PO conduct continuous intensification of protection and maintenance activities in areas with low survival rate, prone to fire, and those that are likely to be intruded and subjected to illegal activities.
- The PO must ensure budgetary allocation for continuous IEC as well as funds for capability building activities for officers and members, and the development of second liners as future leaders.
- Funds should also be set aside for plantation development and management.
- Strictly follow rules and regulations governing the distribution of the CDF.
- The PO should adopt the following measures to improve livelihood operations: instill among officers and members the importance and need to sustain IGPs; conduct of trainings and workshops; formulation and implementation of Benefit Sharing Scheme (BSS); and review/ revision of existing policies and guidelines pertaining to proper recording, reporting, supervision, and monitoring.
- The DENR field offices should conduct regular visits in plantations to supervise and monitor the PO, evaluate the progress of PO activities and make necessary recommendations.

- The DENR should provide continuous assistance to the PO in terms of networking and linkage of members to non-members and other neighboring community to gather support, particularly in the protection of plantations against fires, illegal occupants, among others.

- Members must be encouraged to participate actively in all activities in order to achieve a transparent, participatory, and democratic leadership and minimize, if not eliminate conflicts within the association.
- DENR central and regional offices should be involved regularly in monitoring and supervision to boost the morale and inspire field personnel to perform well.
- Policies and guidelines must be followed accordingly to avoid misinterpretations and confusion among DENR offices that may adversely affect field operations.
- There should be proper selection of NGO/AO for the conduct community organizing work as well as regular evaluation of its performance.
- The DENR should set realistic targets for plantation management to enable POs to accomplish these within the specified period.
- There should be constant provision of enterprise development trainings, seminars, field trips and cross visits to upgrade management skills of PO.
- The Multi-Sectoral Forest Protection Committee (MFPC) must be revived to address the need for collaborative efforts in forest resources protection and management.