

**PROJECT COMPLETION REPORT
IFAD 397 – PH**

**CORDILLERA HIGHLAND AGRICULTURAL
RESOURCE MANAGEMENT PROJECT
(CHARMP)**

REFORESTATION SUBCOMPONENT

**REPUBLIC OF THE PHILIPPINES
DEPARTMENT OF ENVIRONMENT AND
NATURAL RESOURCES
(DENR)**

MESSAGE

After five years of vigorous implementation, the Reforestation Subcomponent of the CHARM Project has been completed. Those past 5 years proved to be a success in reducing poverty in the selected project sites in the Cordillera Administrative Region (CAR) by increasing the disposable incomes of smallholder farm families in the target areas.

The CHARM Project as a whole continued with an interesting approach for development in select areas of the Cordillera. It espoused participatory approach to planning and implementation of poverty reduction programs. It manifested a policy of strong adherence to recognition and respect of indigenous people. It called for coordinative mechanisms to effect development through inter-agency participation of mainline government agencies, local government units and people's organizations. The project was the highlight of natural resource management that integrates progressive agricultural technology and environmentalism while addressing ancestral lands issues.

The synchronized efforts of the DENR, in partnership with the DA, DAR, LGUs, NGOs and their communities, have significantly improved the lives of small farmholders, and enhanced relationships with their families and communities. The DENR fully supported the activities of the project to ensure sustainability and maintain streaming of the gains achieved by the communities towards better lives and continued development.

We wish the People's Organizations whom we worked with all these years more success as they continually apply all the knowledge and skills they acquired from their participation in the project.

I now take this opportunity to thank the Asian Development Bank, the International Fund for Agricultural Development and the Department of Agriculture for their steadfast support to the Project. We also thank our partners in the Local Government Units through their Local Chief Executives, and the Non-Government Organizations, who tirelessly worked with us for the duration of the project.

I extend my warmest congratulations to all for those wonderful and productive years of Partnership.

Mabuhay tayong lahat!

ISAIAS V. BARONGAN, CESO III
Regional Executive Director

MESSAGE

Two of the major thrusts of the CHARMP project are sustainable development through participatory resource management, and environmental protection and community-based enforcement of laws. I believe that the support and involvement of all stakeholders in planning and implementing the thrusts and objectives of CHARM Project, aimed at protecting the environment and conserving biodiversity, are the key to successful resource management project. It was on this premise that the Reforestation Subcomponent of the Charm Project was set up to implement operating models for community-based forest management. The lessons gained from its implementation should be disseminated and, where appropriate, replicated in areas all over the country.

For all the valuable opportunities given us to learn, unlearn and relearn, we profusely thank our CHARMP partners: the communities that gave us more than we did them, the LGUs, the NGOs, and the DA Management in the persons of USEC Edmund Sana, Director Faustino Maslan, and Project Director Cameron P. Odsey. The faith of all these people in what this project can do somehow saw us beyond our weaknesses. Special thanks also go to the ADB and IFAD for their invaluable financial support which made the Project a reality. To all our partners whose high expectations we failed to approximate, we would like to remind them that we have sailed all together as partners, we have become worse or better because of each other's support and otherwise.

And to all our friends and colleagues who offered their heart and hearth, thank you.

FOR. NICANOR SAPLA

Project Director, DENR-CHARMP
Reforestation Subcomponent

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BASIC DATA

A. Loan Identification

- | | |
|-----------------------------|---|
| 1. Country | Philippines |
| 2. Loan Number | IFAD 397-PH |
| 3. Project Title | Cordillera Highland Agricultural Resource Management Project (CHARMP)
Reforestation Sub- component |
| 4. Borrower | Republic of the Philippines |
| 5. Executing Agency | Department of Environment and Natural Resources |
| 6. Amount of Loan (Revised) | SDR 3.150 Million |

B. Loan Data

- | | | |
|---|--|------------------------------------|
| 1. Date of Board Approval | | March 06, 1996 (IFAD Loan 397-PH) |
| 2. Date of Loan Effectiveness
- Actual | | June 03, 1997 |
| 3. Closing Date
- In Loan Agreement
- Actual | | September 30, 2003
June 2005 |
| 4. Terms of Loan
- Interest rate
- Maturity
- Grace Period | | 0.75% p.a.
40 years
10 years |

5. Disbursements
- Dates

Initial Disbursement	Final Disbursement	Time Interval
Effective Date	Original Closing Date	Time Interval
June 03, 1997	September 30, 2003	75 months

- Amount ('000'000)

Category or Subloan	Original Allocation	Last Revised Allocation	Amount Disbursed
Natural Resource Management- Reforestation			
SDR	3.480	3.150	2.9407
USD	4.449	4.0276	3.7599

C. Project Data

1. Project Cost (\$'000'000)

Cost	Appraisal Estimate	Actual
Foreign Exchange Cost	0	
Local Currency Cost	6,400	
Total	6,400	4.0276

2. Financing Plan (\$'000'000)

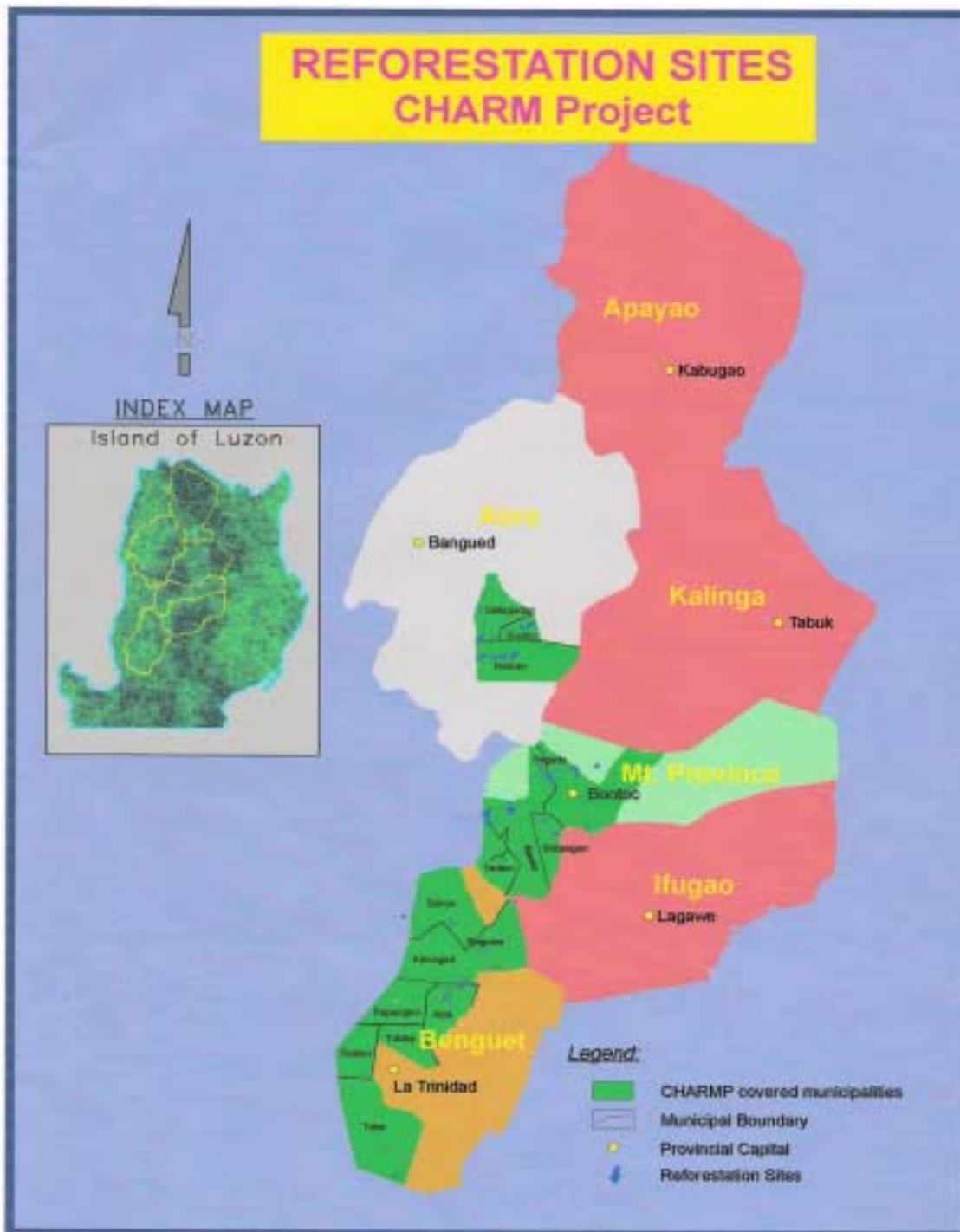
	Appraisal Estimate			Actual		
	Foreign	Local	Total	Foreign	Local	Total
Implementation Costs						
ADB Financed						
IFAD financed	5,760	640	6,400	355.24	207.62	3759.87
Borrower						
Financed						
IDC Costs						
ADB Financed						
IFAD financed						
Borrower						
Financed						
Total	5,760	640	6,400			

3. Cost Breakdown by Project Component (\$'000'000)

Component	Appraisal
Community Mobilization and Resource Management	
Natural Resource Management	
Reforestation	5,400

4. Project Schedule

Item	Appraisal
Date of Contract with Consultants	Year 1, 3 rd -4 th qtr
Civil Works Contract (Comprehensive Site Development)	
- Date of Award	Year 3
- Completion of Work	March 2003 (Year 6)
Equipment and Supplies	
Dates	
- First Procurement	Year 1, 1 st qtr
- Last Procurement	Year 1 4 th qtr



EXECUTIVE SUMMARY

DENR participation in the CHARM Project-Reforestation Subcomponent for Community Mobilization and Participatory Planning was approved on March 6, 1996 with actual loan effectiveness on June 3, 1997. The project objective is to reduce poverty in 82 barangays in 16 municipalities of three provinces (Abra, Benguet and Mountain Province) of the Cordillera Administrative Region (CAR). The main components of the Project were: (i)

community mobilization and resource management, (ii) rural infrastructure development, (iii) provision of agricultural support services, and (iv) project management and coordination.

The CHARM Project was executed by the Department of Agriculture (DA) as lead implementing agency, the Department of Environment and Natural Resources (DENR), the Department of Agrarian Reform (DAR), the National Irrigation Administration (NIA), the National Commission on Indigenous People (NCIP), and the Local Government Units (LGU).

The Department of Environment and Natural Resources (DENR), through the CAR regional and field offices, was primarily tasked to implement the Reforestation Subcomponent of the project in coordination with the Executing Agency (DA) and the other implementing agencies. The Reforestation Subcomponent aimed at developing a total of 6,150 hectares through reforestation, enrichment planting and agro-forestry.

The financing of DENR thrusts on reforestation under CHARMP was enabled through direct access to reforestation funds available out of IFAD loan. The loan closing date was extended by one year to September 30, 2004, with physical completion date on March 31, 2004. On September 29, 2003, partial cancellation of \$86,609.00 million from the IFAD loan was approved, together with the extension of loan closing date to June 30, 2005.

Of the original reforestation target of 6,150 hectares, the Seventh Loan Review Mission recommended reduction of target to 5,885 hectares. This was due to the reversion of ANR targets to reforestation and agro-forestry. However, in December, 2001 the Eighth Loan Review Mission recommended reinstatement of the original target of 6,150 hectares.

The major sector of investment was reforestation, which was implemented through the awarding of community-based contracts. Reforestation was preceded by community mobilization, survey, mapping and planning works (SMP), and comprehensive site development (CSD) activities. The implementation of reforestation activities was impeded at the start, however, by delays in the NGO engagement contract. The NGOs were directly responsible for community organizing and mobilization activities.

As of project completion date, the reforestation target of 6,150 hectares was slightly exceeded. The total accomplishment was 6,560 hectares consisting of: 3,806 hectares reforestation; 1,781 hectares agro-forestry; and, 973 hectares of enrichment planting.

In 1999, the DENR-CAR, NGOs and the PSO staff produced a second revision of the project's Reforestation Guidelines in accordance with agreements made with the Fourth Loan Review Mission. The guidelines were

revised in consideration of IPRA and in order to: (i) clarify government restrictions and policies on land use, especially on the establishment of forest plantations, timber harvesting and utilization of lands with slope gradient of 18 degrees or steeper; and, (ii) ensure that the consultation and monitoring approach outlined in the guidelines were consistent with the participatory planning approaches used in establishing the barangay natural resource management plans (BNRMP).

The project was supposed to be implemented over a period of three (3) years. Due, however, to paucity of fund releases, and delays in awarding of NGO contracts with consequential delay in the conduct of SMP work, CSD activities started late in the fourth year of the Project. As of end of year 2000, CSD accomplishment stood at 14 percent of the overall target.

The DENR-CAR implemented the reforestation activities of the project under a Memorandum of Agreement with the Department of Agriculture, through the PSO, as Executing Agency. In 2001, the DENR appointed a full-time Project Director to manage implementation of the project. Moreover, in agreement with the recommendation of the Fifth Loan Review Mission, thirty-five (35) assisting professionals (APs) were contracted. These APs were to provide technical support to strengthen the NGOs Community Mobilization Officers and the People's Organizations in undertaking CSD activities.

At completion, physical targets on reforestation were efficiently achieved and contributed to the achievement of the Project's immediate development objectives. While economic benefits were to be estimated for the Project as a whole, and no estimates were made particularly for reforestation, increase in incremental income was immediately evident during implementation due to the award of CSD contracts to PO members in reforestation sites. At full development, the Project is expected to result in significant environmental and economic benefits.

I. PROJECT DESCRIPTION

1. On January 11, 1996, two loans of \$9.5 million and SDR6.36 million (\$9.5 million) were approved from the Asian Development Bank's (ADB) Ordinary Capital Resources (OCR) and Special Funds (SF), respectively. The loans were to partly finance the Cordillera Highland Agricultural Resource Management Project estimated to cost \$41.4 million. On 26 April 2001, \$1.2 million from OCR and SDR0.60 million (\$0.8 million) from SF were partially cancelled. To support project financing, the International Fund for Agricultural Development (IFAD) provided a co-financing loan of SDR6.15 million (\$9.2 million).
2. The project objective is to reduce poverty in 82 barangays in 16 municipalities of three provinces (Abra, Benguet and Mountain Province) of the Cordillera Administrative Region (CAR). The main components of the Project were: (i) community mobilization and resource management, (ii) rural infrastructure development, (iii) provision of agricultural support services, and (iv) project management and coordination.
3. The CHARM Project was executed by the Department of Agriculture (DA) as lead implementing agency, the Department of Environment and Natural Resources (DENR), the Department of Agrarian Reform (DAR), the National Irrigation Administration (NIA), the National Commission on Indigenous People (NCIP), and the Local Government Units (LGU).
4. The Department of Environment and Natural Resources (DENR), through the CAR regional and field offices, was primarily tasked to implement the Reforestation Subcomponent of the project in coordination with the Executing Agency (the DA) and the other implementing agencies.
5. The Reforestation Subcomponent aimed at developing a total of 6,150 hectares through reforestation, enrichment planting and agro-forestry.
6. The financing of DENR thrusts on reforestation under CHARMP was enabled through direct access to reforestation funds available out of IFAD loan.
7. The CHARMP loan closing date was extended by one year to September 30, 2004, with the physical completion date of March 31, 2004. On September 29, 2003, partial cancellation of \$86,609.00 from IFAD loan was approved, together with the extension of loan closing date to June 30, 2005.

II. EVALUATION OF DESIGN AND IMPLEMENTATION

A. Relevance of Design and Formulation

8. The CHARM project supported the Government's development thrusts as elaborated under the Philippine Medium-Term Development Plans (1993-1998 and 1998-2002). The project was consistent with the thrusts of the Cordillera Regional Physical Framework Plan 1994-2020 as well as with provincial plans and regional development plans of the implementing agencies.

9. The project objectives supported the Bank's operational strategy of raising economic growth and creating an environment for long-term sustainable development. The Project directly supported ADB's operational strategy in promoting rural employment, sound management of forest resources, and environmental rehabilitation. Moreover, recognizing that improved land tenure and greater involvement of local communities in active forest management were crucial to sustainable development of forest resources, reforestation was implemented through community-based forest management. Approaches similar to that of the Bank-financed Forestry Sector Project¹ were utilized.

10. The Project was initially conceptualized as a second phase of the Highland Agriculture Development Project (HADP)² but with stronger emphasis on environmental concerns and strengthening of local government units. A feasibility study was made by consultants contracted under Bank Technical Assistance³ in 1994. Fact-finding, follow-up and appraisal missions were fielded in 1995. Consultations and discussions were held with national and local government officials, prospective beneficiaries, local investors and NGO's.

11. Of the original reforestation target of 6,150 hectares, the Seventh Loan Review Mission recommended reduction of target to 5,885 hectares. This was due to the reversion of ANR targets to reforestation and agro-forestry. However, in December, 2001 the Eighth Loan Review Mission recommended reinstatement of the original target of 6,150 hectares.

¹ Forestry Sector Project (Loan No. 1191(SF)/1192)

² Loan Nos. 802-PHI and 196-PHI

³ TA No. 1915-PHI

B. Project Outputs

1. Reforestation

12. The major sector investment was reforestation, which was implemented through awarding of community-based contracts. Reforestation was preceded by community mobilization, survey, mapping and planning works (SMP), and comprehensive site development (CSD) activities. However, the implementation of reforestation activities was impeded at the start by delays in the NGO engagement contract. The NGOs were directly responsible for community organizing and mobilization activities.

13. As of project completion date, the reforestation target of 6,150 hectares was slightly exceeded. The total accomplishment was 6,560 hectares consisting of: 3,806 hectares reforestation; 1,781 hectares agro-forestry; and, 973 hectares of enrichment planting.

14. In 1999, the DENR-CAR, NGOs and the PSO staff produced a second revision of the project's Reforestation Guidelines in accordance with agreements made with the Fourth Loan Review Mission. The guidelines were revised in consideration of IPRA and in order to (i) clarify government restrictions and policies on land use, especially on the establishment of forest plantations, timber harvesting and utilization of lands with slope gradient of 18 degrees or steeper, and (ii) ensure that the consultation and monitoring approach outlined in the guidelines were consistent with the participatory planning approaches used in establishing the barangay natural resource management plans (BNRMP).

C. Project Schedule

15. The project was to be implemented over a period of three (3) years. Due to delay in the awarding of NGO contract, and consequential delay in the conduct of SMP work, CSD activities started late in the fourth year of the project. As of end of year 2000, CSD accomplishment stood at 14 percent of overall target.

D. Implementation Arrangements

16. The DENR-CAR implemented the reforestation activities of the project under a Memorandum of Agreement with the Department of Agriculture as Executing Agency, through the PSO of the latter. In 2001, the DENR appointed a full-time Project Director to manage implementation of the project. Furthermore, in agreement with the recommendation of the Fifth Loan review mission, thirty-five (35) assisting professionals were contracted to provide technical support and to strengthen the NGO's community mobilization officers and the people's organizations in undertaking CSD activities.

E. Conditions and Covenants

17. The Loan Agreement included 23 loan covenants. Of particular relevance to DENR is Schedule 6 Paragraph 15, which emphasized that, three years after planting, the operation and maintenance (O&M) of the plantations shall be the full responsibility of the concerned community. This covenant has been complied with.

F. Consultant Recruitment and Procurement

18. Comprehensive Site Development (CSD) contracts were awarded to people's organizations (PO) in each subproject site after these POs have been organized/strengthened and sufficiently prepared to undertake reforestation works based on guidelines approved by the DENR.

G. Performance of the Asian Development Bank

19. ADB monitored the Project closely, fielding ten (10) review missions to solve problems during implementation. Mission recommendations were implemented, such as the establishment, where feasible, of agro-forestry mixed plantations instead of pure reforestation plantations wherein the latter are planted with forest trees only. Another mission proposal was the increase in Imprest Funds ceiling to address problems on cash shortage and disbursement delays in the payment of CSD accomplishment billings. The approval and eventual adoption of this recommendation were timely and greatly contributed to project performance.

III. EVALUATION OF PERFORMANCE

A. Relevance

20. The Project provided support to the Government in addressing the issues of poverty and environmental degradation in the Cordillera Highlands. The provision of land tenure, accompanied by the establishment of agro-forestry and reforestation plantations, will have significant positive long-term effects not only on economic conditions but also on the overall environment.

B. Efficacy in Achievement of Purpose

21. The Project provided a necessary base for improving the management of forest resources by resolving property rights through the awarding of CADCs and support to issuance of CADTs and CALTs. The award of CSD to POs not only resulted to immediate employment and increase in incremental income in project areas, but also fostered strengthening of community ownership of project benefits.

22. At full development, the Project is expected to result in significant environmental and economic benefits. Environmental benefits include improved water retention in uplands resulting from an increased number of trees, higher soil fertility, and reduced soil erosion.

23. The project provided the following benefits as derived from CHARMP by the communities served: employment, leadership development; restored denuded forests; source of income and funds; additional knowledge in protecting the environment and sense of responsibility; livelihood opportunities and skills, forest management knowledge and technology⁴.

C. Efficiency in Achievement of Outputs and Objectives

24. The project clearly met its objectives on reforestation despite delays in NGO engagement at the start. Even without extension of physical completion date, the Project would have accomplished its target. The extension served to enable the planting of additional 410 hectares and the further strengthening of POs towards eventual assumption of O&M of the plantations.

25. As of physical completion date, the average plantation survival rate was satisfactory at 80.27 percent⁵. The survival rates in a few sites fell below satisfactory level. This performance was affected mostly by varying PO capability. Nevertheless, the technical knowledge of POs particularly on silviculture and nursery management would bear further upgrading.

⁴ Estimates of economic benefits were according to the results of the BME conducted by PSO sometime in 2003.

⁵ See Appendix 4: Summary of Established Plantations.

D. Preliminary Assessment of Sustainability

26. Ensuring that project initiatives were integrated into the regular activities and programs of the DENR regional office and the LGUs may enhance sustaining the gains from the Project, in terms of both substance and process. This implies providing budget support to DENR-CAR and LGU environment personnel for the extension of further technical and funding assistance to PO's on plantation maintenance and expansion.

27. Organizational strengthening of POs through established Operation and Maintenance plans were in place to particularly sustain and ensure proper plantations, equitable sharing of forestry benefits, and increase of PO capital build-up funds. This aspect is expected to prove critical on sustainability especially given the reliance, during project implementation, on NGOs. (NGOs by nature are financially unstable. Despite their commitment and dedication, NGO support to project initiatives is expected to eventually dissipate when they have no further funding support.). Moreover, the Sustainability Plans prepared prior to project completion have to be regularly updated to reflect doable sustaining activities from the present onwards, in consonance with the Operation and Maintenance Plan.

E. Environmental, Socio-Cultural and Other Impacts

28. Communities will benefit from positive effects of the Project on the environment. Over the years, as the trees grow to maturity in the reforestation and watershed sites, the topsoil will be stabilized, and erosion and siltation will be reduced. The water-holding capacity of watersheds will increase and surface runoff of rainwater will slow down.

29. Gender roles in planning, implementation monitoring and evaluation of the Reforestation Subcomponent of CHARMP were distributed amongst the male and female counterparts both within the Peoples organizations and the DENR implementers.

IV. OVERALL ASSESSMENT AND RECOMMENDATIONS

A. Overall Assessment

30. At completion, physical targets on reforestation were efficiently achieved and contributed to the achievement of the Project's immediate development objectives. While economic benefits were to be estimated for the Project as a whole, and no estimates were made particularly for reforestation, increase in incremental income was immediately evident during implementation due to the award of CSD (Comprehensive Site Development) contracts to PO members in reforestation sites. At full development, the Project is expected to result in significant environmental and economic benefits.

B. Recommendations

31. The Project lessons and recommendations include the following:
- i. The Government should implement measures to enable LGUs to establish and enforce a land use plan around each subproject site. The deputization by DENR of PO leaders would be useful for enforcement of environmental laws and regulations at community level.
 - ii. The financial sustainability of community-based approach to forest management remains at risk given the relatively low-levels of capital build-up by POs. DENR should formally tie-up with institutions that could assist the POs in identifying, planning and managing alternative income sources. Formal tie-up with the DTI, TESDA or any local confederations of cooperatives could optimize present PO capital build-up funds into sound and sustainable investments.
 - iii. DENR should provide market-linkaging services to assist POs in the disposition of maturing forest products such as the Gmelina, Mahogany, Narra, Benguet Pine, and agroforestry products.
 - iv. Even though reforestation is just a subcomponent of the Project, provisions should have been made for studies establishing baseline economic and environment conditions specifically in reforestation areas and for the conduct of benefit assessment upon maturity of trees⁶.
 - v. A project performance audit mission needs to be fielded in ten years when the planted trees are nearing maturity and a well-informed assessment of reforestation and agro-forestry benefits can be made.

⁶ Benefits in agriculture are almost immediately discernible and measurable after intervention, in contrast to reforestation and agro-forestry. As such, the timing of benefit assessment must be considered to better judge efficacy of a project.

vi. Further studies and modeling should be made on traditional land ownership systems prevailing in the Cordilleras. Some documentation have already been made on the LAPAT system of Abra but there were other systems in Benguet and other provinces that may also prove instrumental in ensuring beneficiary commitment to future similar projects.

vii. An assessment of the relative benefits and efficiencies of different forest management or reforestation approaches would be useful for planning reforestation projects in the future. The CBFM approach, while inarguably strong in fostering community participation and employment generation, is heavily dependent on PO commitment and capability. Such dependence may be exhibiting a “drag effect “ on reforestation. CBFM as such needs to be evaluated specifically in terms of effectiveness at forest restoration.

viii. A forest management project that is allowed to employ a mix of approaches, and not specifically constrained to the CBFM model, may prove more effective in the future.

Appendix 1

**PROJECT LOGICAL FRAMEWORK
DENR-CHARMP Operations**

DESIGN SUMMARY	TARGETS	MONITORING MECHANISM	RISKS/ASSUMPTIONS
GOAL			
<ul style="list-style-type: none"> To increase farm incomes on a sustainable basis To reduce poverty 			
PURPOSE			
To increase agricultural production and productivity in 65 Barangays in Abra Benguet and Mountain Province, using sustainable management practices, involving beneficiaries.		Bench mark profiles Socio-economic surveys at midterm and project completion PCR/PPAR Project Progress Reports Bank Review Missions	
PROJECT COMPONENTS/OUTPUTS			
Natural resource management improved	<ul style="list-style-type: none"> Preserve existing area of protection forestry within the target barangays Reforest 6,150 has with an 80% average survival rate 	Project Progress Reports and Review Missions	Existing forest estate not protected. Survival rates of reforested areas are low. Community enthusiasm for reforestation activities. DENR has inadequate resources or attaches low priority to project
ACTIVITIES/INPUTS			
<ul style="list-style-type: none"> Enhanced land security <ul style="list-style-type: none"> MOA with DA 	\$3.9 Million	Project Progress Reports and Review Missions	No delays in signing of MOA.
<ul style="list-style-type: none"> Natural resource management MOA with DA Procurement of seedlings Procurement of equipment Train staff in environmental awareness & land tenure security. 	\$8.2 Million 35 person-months of international and local consultants	Project Progress Reports and Review Missions	No delays in signing of MOA. Good community participation in reforestation activities.

Appendix 2

**SUMMARY OF MAJOR PROJECT OUTPUTS
1997–2004**

Components	Unit	Targets		Actual Accomplishment
		Appraisal	Revised	
Natural Resource Management				
a. Plantations	number		61	60
	hectares	6,150		6,560
• Reforestation	hectares	3,781		3,806
• Agroforestry	hectares	1,396		1,781
• Enrichment Planting	hectares	973		973
b. Firelines	sq. meters			1,315,157
c. Nurseries	number			
d. Seedlings	number	9,407,687		9,404,375
e. Equipment	cost			
f. CFMAs	number			
g. MOAs	number	1		

Appendix 3

PROJECT IMPLEMENTATION SCHEDULE

Components	Unit	1998	1999	2000	2001	2002	2003	2004	Total
Reforestation		APPRAISAL							
• Survey, Mapping, Planning & Appraisal	hectares		6,150						6,150
• Community Mobilization (POs)	number		61						61
• Seedling Production	number						9,407,687		9,407,687
• Plantation Establishment	hectares				2,683	2805	662		6,150
• Plantation Maintenance & Protection	hectares						6,150		6,150
		ACTUAL							
• Survey, Mapping, Planning & Appraisal	hectares								6303
• Community Mobilization (POs)	number		60						60
• Seedling Production	number			5,194,000	4,210,375	2,800,165	43,058		9,404,375
• Plantation Establishment	hectares				3,345	2,143	1,072		6,560
• Plantation Maintenance & Protection	hectares					3,345	5,488	6,560	6,560

Annex 4

Summary of Established Plantations

Province	Municipality	Barangay	Name of PO	Area Planted Based on Original Target (Ha.)	Additional Area (Ha.)	Total Area Planted Incl. Add'l Area (Ha.)	Survival Rate (%)
Abra				2,238.8	120.0	2,358.8	
	Boliney			746.4	0.0	746.4	
		Baoayan	Baoayan Farmers Refo Association	196.3		196.3	80.00
		Boliney	Boliney Abra Womens Association, Inc.	339.8		339.8	80.00
		Dao-angan	MATABA Farmers Association	210.3		210.3	80.00
	Bucloc			636.6	80.0	716.6	
		Ducligan	Ducligan Integrated Farmers Association	127.2	20.0	147.2	81.26
		Labaan	Labaan-Sacuban-Daldalao FA	120.5	20.0	140.5	80.78
		Lamao	Lamao Farmers Association	116.2	20.0	136.2	80.43
		Lingey	Lingey Panpiaan Farmers Association	272.7	20.0	292.7	80.00
	Sallapadan			855.8	40.0	895.8	
		Bilabila	Bilabila Forest Resources Management	147.2		147.2	81.73
		Gangal	Gangal Farmers MPCl	179.3		179.3	81.00
		Saccaang	KAKAKOMA Refo Association, Inc.	91.8	20.0	111.8	80.00
		Maguyepyep	Maguyepyep Farmers-Lantagan Resource Dev't	190.0	20.0	210.0	80.00
		Naguilian	Manangit, Kanteng, Dagilulo & Mabungi Ass.	247.5		247.5	80.11
Benguet				1,929.0	170.0	2,099.0	
	Atok			311.0	30.0	341.0	
		Abiang	Abiang Farmers & Environmentalists for Dev't. Ass.	66.0	20.0	86.0	80.82
		Cattubo	Bosleng Potato Seed Growers Ass.	43.0	10.0	53.0	81.91
		Paoay	Cattubo Environmentalists for Sustainable Dev't.	82.0		82.0	80.07
		Pasdong	Pasdong Bantay Shontog Movement, Inc.	120.0		120.0	80.22

Province	Municipality	Barangay	Name of PO	Area Planted Based on Original Target (Ha.)	Additional Area (Ha.)	Total Area Planted Incl. Add'l Area (Ha.)	Survival Rate (%)
Benguet Continued	Bakun			423.5	15.0	438.5	
		Ampusongan	Ampusongan Women's Club, Inc.	76.5		76.5	82.53
		Gambang	Gakian-Mabuhay Irrigators Ass.	57.0		57.0	82.26
		Kayapa	Kayapa Bakun Farmers & Irrigators Ass.	60.0		60.0	81.20
		Poblacion	Saguday Foundation, Inc.	125.0		125.0	82.61
		Sinacbat	Sinacbat Farmers Association	105.0	15.0	120.0	82.64
	Buguias			188.0	25.0	213.0	
		Amgaleygey	Amgaleyguey People's Organization, Inc.	28.0		28.0	80.25
		Baculongan Sur	Baculongan Sur Association	54.0	10.0	64.0	81.80
		Catlubong	BALBINNS	35.0	15.0	50.0	81.16
		Cabuguiasan	Cabuguiasan Farmers Ass.	41.0		41.0	80.15
		Bangao	St. Jude Community Multi-purpose Coop. Inc.	30.0		30.0	76.21
	Kapangan			167.5	0.0	167.5	
		Cuba	Cuba Reforestation Association, Inc.	25.5		25.5	88.03
		Beleng-Belis	Mt. Amanayao-Talkip Ecological Dev't. Ass.	84.0		84.0	83.10
		Pudong	Talalang Pudong Refo Association, Inc.	58.0		58.0	85.42
	Kibungan			486.0	10.0	496.0	
		Madaymen	Camiling Napsong Nalusbo Environmental Dev.t.	300.0	10.0	310.0	79.58
		Lubo	Environmentalists of Lubo, Bobocco, Sayangan Ass.	89.0		89.0	81.83
		Tacadang	Tacadang Farmers Association	97.0		97.0	80.75
	Sablan			45.0	10.0		
		Bagong	Big-big Bagong Balluay Multipurpose Coop., Inc	45.0	10.0	55.0	83.25
	Tuba			278.0	80.0	358.0	
		Camp 1	Bes-ig Agroforestry Ass., Inc.	116.0	10.0	126.0	82.26
		Camp 3	Camp 3 Agroforestry & Environmental Dev't. Ass, In	122.0	70.0	192.0	83.55
		Taloy Norte	New Era Farmers Association, Inc.	20.0		20.0	81.64

Province	Municipality	Barangay	Name of PO	Area Planted Based on Original Target (Ha.)	Additional Area (Ha.)	Total Area Planted Incl. Add'l Area (Ha.)	Survival Rate (%)
Benguet		Taloy Sur	Bontagel Farmers Association, Inc.	20.0		20.0	88.07
(cont.)	Tublay			30.0	0.0		
		Ambongdolan	Ambongdolan Multipurpose Coop, Inc.	30.0		30.0	84.62
Mt. Province				1,982.4	120.0	2,102.4	
	Bauko			312.0	25.0	337.0	
		Bila	Bila Activators and Neo-Graduates Alliance	48.0	5.0	53.0	72.99
		Banao	Federation of Banao-Lagawa Community, Org.	50.0	15.0	65.0	82.26
		Guinzadan	Guinzadan Farmers Organization	120.5	5.0	125.5	81.82
		Mabaay	Mabaay People's Organization	24.0		24.0	80.60
		Monamon Norte	Monamon Norte People's Organization, Inc.	23.0		23.0	82.97
		Monamon Sur	Monamon Sur Natural Resource Dev't. Org.	25.0		25.0	80.08
		Sadsadan	Sadsadan Natural Resource Dev't. Org.	21.5		21.5	82.46
	Bontoc			771.1	5.0	776.1	
		Bayyo	Bayyo Multipurpose Cooperative	93.0		93.0	81.32
		Guina-ang	Guina-ang Livelihood and Farmers Org.	91.0		91.0	76.01
		Maligcong	Maligcong Regreener Development. Ass.	294.6		294.6	77.02
		Talubin	Talubin Multipurpose Cooperative, Inc.	68.5		68.5	59.65
		Tocucan	Tocucan Rural Improvement Farmers Ass.	154.0	5.0	159.0	65.92
		Mainit	Wagkahaan Regreeners Farmers Association	70.0		70.0	68.53
	Sabangan			220.0	5.0	186.0	
		Data	Data Farmer's Association, Inc.	39.0		39.0	83.66
		Losad	Losad Community Organization, Inc.	83.0		83.0	79.47
		Pingad	Pingad Farmers' Organization, Inc.	40.0	5.0	45.0	81.31
		Tambingan	Tambingan Farmers Association, Inc.	58.0		58.0	79.34
	Sagada			6.3		6.3	
		Tetep-an	Tetep-an Barrio Ass., Inc.	6.3		6.3	

Province	Municipality	Barangay	Name of PO	Area Planted Based on Original Target (Ha.)	Additional Area (Ha.)	Total Area Planted Incl. Add'l Area (Ha.)	Survival Rate (%)
Mt. Province	Tadian			673.0	85.0	758.0	
(cont.)		Bunga	Bagtey, Cabaruan, Namuntucan Org.	264.0	40.0	304.0	80.10
		Duagan	Duagan Magdan Nabitic Organization, Inc.	20.0	15.0	35.0	82.03
		Lubon	Lubon People's Organization, Inc.	319.0	30.0	349.0	82.67
		Sumadel	Sumadel People's Organization, Inc	70.0		70.0	74.77
		Total Area Planted		6,150.0			
		Total Additional Area			410.0		
		Total Area Planted Including Additional Area				6,560.0	
		Mean Survival Rate					80.27
Note:	1. The additional area of 410 hectares was due to increasing demand from Peoples Organization to expand into agro forestry and reforestation given the available areas for development and financial support by the project.						
	2. The survival rates were based on the results of M & E conducted in the last quarter of year 2004.						

Appendix 5

**PLANTATIONS ESTABLISHED BY LOCATION
(2000-2004)**

PROVINCE / TOWN	APPRAISAL TARGET											
	Reforestation				Agroforestry				E. Planting			
	2000	2001	2002	2003	2000	2001	2002	2003	2000	2001	2002	2003
ABRA												
Boliney	140.2	338.1	-	-	33.0	179.1	56.0	-	-	-	-	-
Bucloc	162.0	135.7	-	-	70.0	59.0	-	-	-	210.1	-	-
Sallapadan	54.7	195.0	-	-	4.0	113.9	-	-	-	488.3	-	-
BENGUET												
Atok	40.1	138.4	-	-	4.0	101.5	20.0	-	7.0	-	-	-
Bakun	17.0	246.0	30.0	-	19.0	48.5	17.0	-	11.0	35.0	-	-
Buguias	18.0	96.0	-	-	9.0	35.0	-	-	6.0	24.0	-	-
Kapangan	53.5	89.0	-	-	-	25.0	-	-	-	-	-	-
Kibungan	95.0	291.0	-	-	-	100.0	-	-	-	-	-	-
Sablan	3.0	40.0	-	-	0.5	1.5	-	-	-	-	-	-
Tuba	40.0	155.0	-	-	6.0	17.0	60.0	-	-	-	-	-
Tublay	3.0	7.0	-	-	5.0	-	-	-	15.0	-	-	-
MT. PROVINCE												
Bauko	46.0	186.3	17.4	-	-	53.0	7.6	-	2.0	-	-	-
Bontoc	160.2	330.4	-	-	-	138.0	37.0	-	82.0	23.0	-	-
Sabangan	13.0	104.7	-	-	-	39.0	-	-	9.0	54.0	-	-
Sagada	1.0	5.3	-	-	-	-	-	-	-	-	-	-
Tadian	280.0	243.0	7.0	-	-	125.0	13.0	-	-	5.0	-	-
TOTAL	1,126.7	2,600.9	54.4	-	150.5	1,035.5	210.6	-	132.0	839.4	-	-

Appendix 5 (Continuation)

PROVINCE / TOWN / BARANGAY	ACTUAL ACCOMPLISHMENT												Add'l Area
	Reforestation				Agroforestry				Enrichment Planting				
	2000	2001	2002	2003	2000	2001	2002	2003	2000	2001	2002	2003	
ABRA													
Boliney	140.0	107.4	139.2	91.5	33.0	164.6	70.5	-	-	-	-	-	-
Bucloc	162.2	56.1	76.6	3.0	70.0	59.0	-	-	-	208.1	2.0	-	80.0
Sallapadan	54.7	51.1	117.1	26.8	4.0	18.4	67.5	28.0	-	168.7	218.5	101.1	40.0
BENGUET													
Atok	40.1	85.4	53.0	-	4.0	45.0	76.5		7.0	-	-	-	30.0
Bakun	17.0	144.0	132.0	-	19.0	28.5	37.0	-	11.0	35.0	-	-	15.0
Buguias	18.0	55.0	41.0	-	9.0	4.0	31.0	-	6.0	24.0	-	-	25.0
Kapangan	53.9	10.6	58.0	20.0	-	-	24.0	1.0	-	-	-	-	-
Kibungan	95.0	180.0	111.0	-	-	5.0	95.0	-	-	-	-	-	10.0
Sablan	3.0	21.5	18.5	-	0.5	5.0	1.5	-	-	-	-	-	10.0
Tuba	40.0	65.0	90.0	-	6.0	-	72.0	-	-	-	-	-	80.0
Tublay	3.0	4.0	3.0	-	5.0	-	-	-	15.0	-	-	-	-
MT. PROVINCE													
Bauko	46.0	60.0	90.2	53.5	-	-	33.6	27.0	2.0	-	-	-	25.0
Bontoc	160.6	35.0	186.5	108.5	-	41.0	32.0	102.0	44.0	12.0	11.0	38.0	5.0
Sabangan	13.0	49.0	38.0	17.7	-	2.0	19.0	18.0	9.0	54.0	-	-	5.0
Sagada	1.0	-	5.3	-	-	-	-	-	-	-	-	-	-
Tadian	280.0	174.0	68.0	8.0	-	-	118.0	20.0	-	-	5.0	-	85.0
TOTAL	1,127.5	1,098.1	1,227.4	329.0	150.5	372.5	677.6	196.0	94.0	501.8	236.5	139.1	410.0

Appendix 6

PLANTATIONS AND SPECIES PLANTED

Province/ Municipality/ Barangay	Area	Species Planted
ABRA	2359	
BOLINEY	746.4	
Baoyan	196.3	Mahogany Gmelina Mango Coffe
Boliney	339.8	Mahogany/ Narra Mango Gmelina Fruit Trees (Agro Species)
Dao-angan	210.3	Gmelina Mahogany/Narra Mango Fruit Trees (Agro Species)
BUCLOC	716.8	-
Ducligan	127.0	Mango/Coconut
	20.0	Coffee/Guayabano/Achuete Gmelina Mahogany Narra Mango Coffee
Labaan	120.9	Mango/Coconut
	20.0	Coffee/Guayabano/Achuete Gmelina Mahogany Mango Coffee/Guayabano
Lamao	116.2	Mango/Coconut
	20.0	Coffee/Guayabano/Achuete Gmelina Mahogany Gmelina Mango Coffee Ipil-ipil/Gmelina

Lingey	272.7	Mango/Coconut
	20.0	Coffee/Guayabano/Achuete Gmelina Mahogany Mango Santol/ Jackfruit/ Guayabano
SALLAPADAN	895.8	-
Bilabila	147.2	Mahogany Gmelina Mango Fruit Trees (Agro Species)
Gangal	179.3	Mahogany Gmelina Mango Guayabano
Sacaang	91.7	Mango/Coconut
	20.0	Coffee/Guayabano/Achuete Gmelina Mahogany Mango Fruit Trees (Agro Species)
Maguyepyep	190.0	Mahogany
	20.0	Gmelina Mango Coffee Mango/Coconut Coffee/Guayabano/Achuete
Naguilian	247.6	Mahogany Gmelina Mango Banana
BENGUET	2099	
ATOK	341.0	
Abiang	66.0	Citrus
	20.0	Coffee Citrus Alnus Guava Benguet Pine

Paoay	43.0	Citrus
	10.0	Coffee
		Benguet Pine
		Alnus
		Citrus
Cattubo	82.0	Benguet Pine
		Alnus
		Citrus
		Coffee
Pasdong	120.0	Benguet Pine
		Eucalyptus
		Gmelina
		Mahogany
		Coffee
		Guava
		Caliandria
		Mango
BAKUN	438.5	
Ampusongan	76.5	Benguet Pine
		Gmelina
		Eucalyptus
		Citrus
		Coffee
		Alnus
Gambang	57.0	Benguet Pine
		Alnus
		Eucalyptus
		Citrus
		Japanese Tomato/Dulce
Kayapa	60.0	Benguet Pine
		Alnus
		Eucalyptus
		Citrus
		Coffee
Poblacion Bakun	125.0	Coffee
		Citrus
		Alnus
Sinacbat	105.0	Coffee
	15.0	Alnus
		Benguet Pine
		Eucalyptus
		Citrus
		Coffee
		Gmelina
BUGUIAS	213.0	
Amgaleygey	28.0	Benguet Pine
		Alnus
		Citrus
		Guava
		Japanese Tomato/Dulce

Baculungan Sur	54.0	Citrus
	10.0	Coffee
		Benguet Pine
		Alnus
		Citrus
Catlubong	35.0	Citrus
	15.0	Coffee
		Benguet Pine
		Alnus
		Citrus
Cabuguisan	41.0	Benguet pine
		Alnus
		Citrus
		Coffee
Bangao	30.0	Benguet Pine
		Alnus
		Citrus
		Pears
KAPANGAN	167.5	
Cuba	25.5	Benguet Pine
		Mahogany
Beleng-belis	84.0	Benguet Pine
		Eucalyptus
		Coffee
		Citrus
		Alnus
Pudong	58.0	Benguet Pine
		Eucalyptus
		Citrus
		Coffee
		Alnus
KIBUNGAN	496.0	
Madaymen	300.0	Citrus
	10.0	Coffee
		Benguet Pine
		Eucalyptus
		Gmelina
		Citrus
		Alnus
Lubo	89.0	Benguet Pine
		Eucalyptus
		Coffee
		Citrus
		Alnus

Tacadang	97.0	Benguet Pine Eucalyptus Coffee Citrus Alnus
SABLAN	55.0	
Bagong-Balluay	45.0	Mango
	10.0	Citrus Mahogany Gmelina Coffee Caliandria
TUBA	358.0	
Camp 1	116.0	Citrus
	10.0	Gmelina Mahogany Cofee Caliandria Mango
Camp 3	122.0	Mango
	70.0	Gmelina Mahogany Coffee Mango Ipil-ipil
Taloy Norte	20.0	Citrus Mahogany
Taloy Sur	20.0	Rambutan Gmelina
TUBLAY	30.0	
Ambongdolan	30.0	Benguet Pine Eucalyptus Coffee Citrus Alnus
MT. PROVINCE	2102	
BAUKO	337.4	
Bila	48.0	Citrus
	5.0	Coffee Benguet Pine Gmelina Citrus Bamboo Mango

Banao	50.3	Citrus
	15.0	Coffee
		Benguet Pine
		Mango
		Citrus
Guinzadan	120.6	Citrus
	5.0	Coffee
		Benguet Pine
		Gmelina
Mabaay	24.0	Benguet Pine
Monamon Norte	23.0	Benguet Pine
Monamon Sur	25.0	Benguet Pine
		Citrus
		Coffee
Sadsadan	21.5	Benguet Pine
BONTOC	775.6	
Bayyo	93.0	Benguet Pine
		Citrus
		Coffee
Guina-ang	90.6	Benguet Pine
		Citrus
		Coffee
		ipil-ipil
Maligcong	294.4	Benguet Pine
		Citrus
		Coffee
Talubin	68.6	Benguet Pine
		Mango
		Citrus
		Ipil-ipil
Tocucan	154.0	Mango
	5.0	Citrus
		Coffee
		Benguet pine
		Citrus
		Mango
Mainit	70.0	Benguet Pine
		Citrus
SABANGAN	224.7	
Data	39.0	Benguet Pine
		Citrus
		Persimon
		ipil-ipil
		Bamboo

Losad	83.0	Benguet Pine Mahogany Citrus Coffee ipil-ipil Mango
Pingad	40.0 5.0	Citrus Coffee
Tambingan	57.7	Benguet Pine Benguet Pine Citrus Coffee
SAGADA	6.3	
Tetep-an	6.3	Benguet Pine
TADIAN	758.0	
Bunga	264.0 40.0	Mango Coffee Benguet Pine Mango Santol Duhat Ipil-ipil Rambutan Mahogany Bamboo
Duagan	20.0 15.0	Benguet Pine Benguet Pine Citrus Coffee
Lubon	319.0 30.0	Benguet Pine Gmelina Mango Coffee Benguet Pine Santol Citrus ipil-ipil
Sumadel	70.0	Benguet Pine Mahogany Citrus Coffee Ipil - ipil

Appendix 7

PHOTO DOCUMENTATION



BARANGAY ASSEMBLIES/ CONSULTATIONS



SEEDLING PRODUCTION



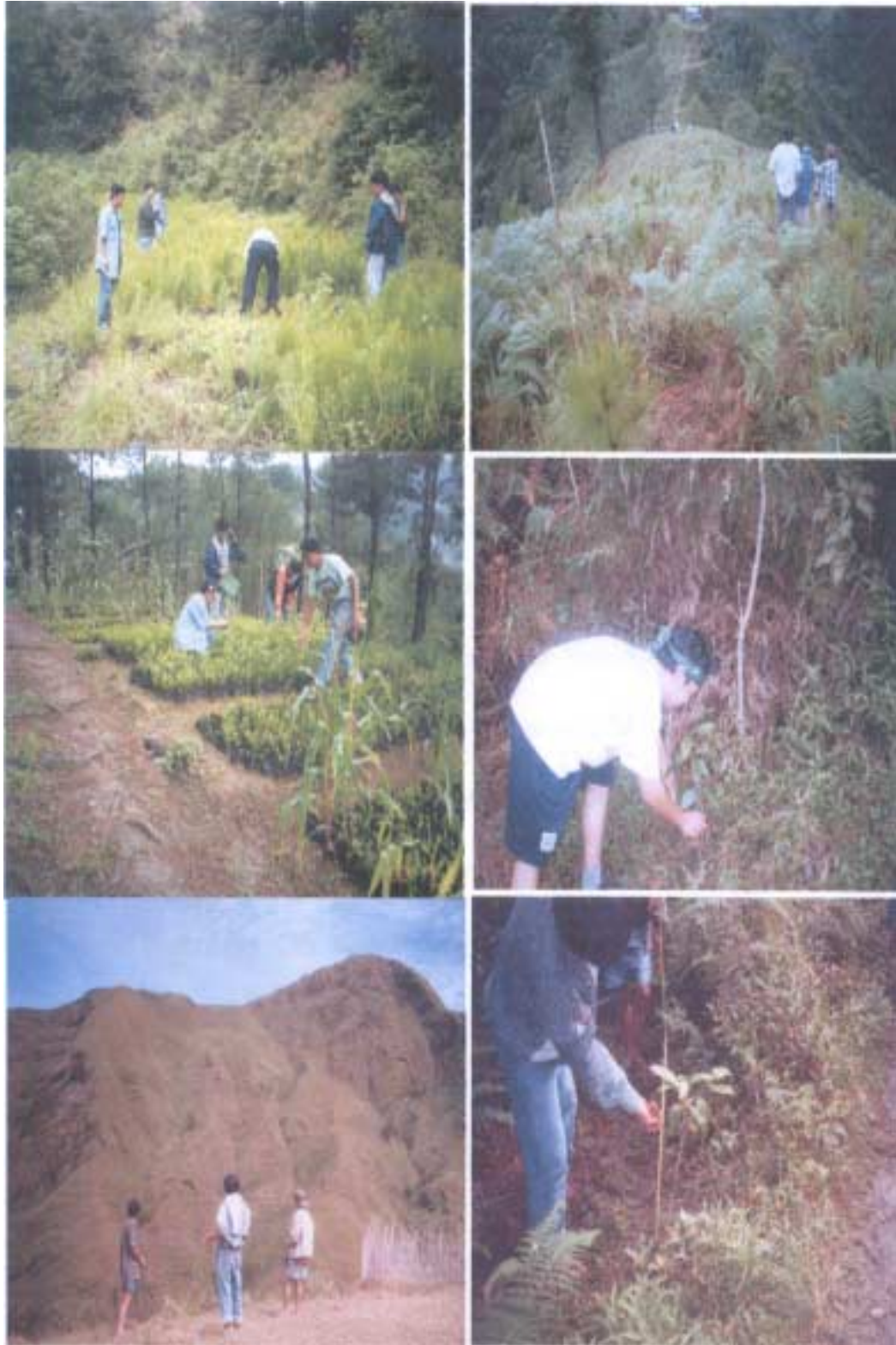
PLANTATION ESTABLISHMENT



MAINTENANCE AND PROTECTION



MAINTENANCE AND PROTECTION



PHYSICAL MONITORING AND EVALUATION



..... ENGAGING RESOURCES FOR SUSTAINABLE DEVELOPMENT....