

1311903 PD-ABT-965  
 A.I.D. EVALUATION SUMMARY - PART I XD

1. BEFORE FILLING OUT THIS FORM, READ THE ATTACHED INSTRUCTIONS.  
 2. USE LETTER QUALITY TYPE, NOT "DOT MATRIX" TYPE.

IDENTIFICATION DATA

<b>A. Reporting A.I.D. Unit:</b> Mission or AID/W Office <u>USAID/Philippines</u> (ES# _____)		<b>B. Was Evaluation Scheduled In Current FY Annual Evaluation Plan?</b> Yes <input checked="" type="checkbox"/> Slipped <input type="checkbox"/> Ad Hoc <input type="checkbox"/> Evaluation Plan Submission Date: FY <u>91</u> Q <u>4</u>		<b>C. Evaluation Timing</b> Interim <input checked="" type="checkbox"/> Final <input type="checkbox"/> Ex Post <input type="checkbox"/> Other <input type="checkbox"/>	
<b>D. Activity or Activities Evaluated</b> (List the following information for project(s) or program(s) evaluated; if not applicable, list title and date of the evaluation report.)					
Project No.	Project /Program Title	First PROAG or Equivalent (FY)	Most Recent PACD (Mo/Yr)	Planned LOP Cost (000)	Amount Obligated to Date (000)
492-0444	Natural Resources Management Program	'91	9/30/95	\$125M	\$116,995,00

ACTIONS

E. Action Decisions Approved By Mission or AID/W Office Director	Name of Officer Responsible for Action	Date Action to be Completed
<b>Action(s) Required</b>  1. Prepare consolidated tenure instruments for forest resource managers. Status: Ongoing  2. Strengthen provisions of Integrated Forest Management Agreements relevant to resource management planning. Status: Administrative Order was revised in 1st quarter '93 to incorporate planning process.  3. Focus work on residual forests in areas adjacent to identified old growth forests.  4. Reinforce mechanisms for public participation in resource management planning for residual forests. Status: Incorporated into the extension of NRMP and follow-on TOR for technical assistance.  5. Use number of hectares as performance indicator for residual forest management. Status: Incorporated into extension of NRMP. Specific targets agreed upon by DENR and USAID.  (See Continuation sheet)	USec Ben Malayang (DENR)    USec Ben Malayang   USec Ben Malayang/Delbert McCluskey (USAID)   Delbert McCluskey/Usec Ben Malayang	End 3rd Qtr. '95    End 4th Qtr. '95   End 4th Qtr. '95   End 4th Qtr. 1994
(Attach extra sheet if necessary)		

APPROVALS

<b>F. Date Of Mission Or AID/W Office Review Of Evaluation:</b>				(Month)	(Day)	(Year)
				August	12	1992
<b>G. Approvals of Evaluation Summary And Action Decisions:</b>						
Name (Typed)	Project/Program Officer	Representative of Borrower/Grantee	Evaluation Officer	Mission or AID/W Office Director		
Signature	Delbert McCluskey	Substance discussed with DENR (see attached)	Sulpicio S. Roco, Jr.	Thomas W. Stukel		
Date				8/23/94		

**ABSTRACT**

**H. Evaluation Abstract (Do not exceed the space provided)**

The Natural Resources Management Program (NRMP) is a policy based, sector assistance program undertaken by the Department of Environment and Natural Resources (DENR) and USAID. NRMP supports policy reforms that promote ecologically sustainable management of the Philippine's natural resources, with special attention to tropical forests, biodiversity and to the increased economic efficiency of the forest products industries.

Signed in September 1990, NRMP focused on eight policy areas: resources tenure, forest charges, entry into and exit from the forest products industry, privatization of Government holdings, old growth forest protection, residual forest management, technology development and transfer and community-based forest management. The Program has released two tranches, totalling \$35 million, based on the GOP's meeting of requisite tranche requirements. With program assistance, the DENR has promulgated the following policy, administrative actions:

- Land Tenure: Issued new forms of tenure agreements, for both industry and community based resource management.
- Forest Charges: Raised charges on forest products that increased revenue to GOP seven and a half times.
- Entry into and Exit from Forest Products Industries: Little action taken by DENR.
- Privatization: GOP has sold almost 50% of forest products processing assets, but has had no effect on stimulating increased investment in forest products industry.
- Old Growth Protection: NRMP has mapped old growth forests.
- Residual Forest Management: DENR pursuing land based management approach with support from NRMP, focusing on data collection and compilation.
- Technology Development and Transfer: This component has encountered major implementation problems due to unworkable organizational arrangements.
- Community-Based Forest Management: Activities have made good progress, and evaluation recommends a number of actions to strengthen program.
- Other Actions: Evaluation reviewed progress on establishing the Foundation for the Philippine Environment, the Program's information, education and communication component, and Program management.

**COSTS**

**I. Evaluation Costs**

1. Evaluation Team		Contract Number OR	Contract Cost OR	Source of Funds
Name	Affiliation	TDY Person Days	TDY Cost (U.S. \$)	
Christopher Hermann, Ph.D.	TR&D	)PDC-5517-I-00-0105	\$47,348.08	NRMP 492-0444
Lane Khral Ph.D.	TR&D			
James Seyler Ph.D.	ABT Associates	)DHR-5555-0-00-1087-00	\$74,673.00	NRMP 492-0444
Keith Openshaw Ph.D.	ABT Associates			
Craig Smith Ph.D.	ABT Associates			
2. Mission/Office Professional Staff		3. Borrower/Grantee Professional		
Person-Days (Estimate) <u>30 person days</u>		Staff Person-Days (Estimate) <u>-</u>		

## NATURAL RESOURCE MANAGEMENT PROGRAM (492-0444)

SUMMARY OF REACTIONS/COMMENTS<sup>1</sup>

OCTOBER 29, 1992

RECOMMENDATIONS			
NRMP Interim Evaluation	USAID	DENR	Agreements Between USAID & DENR
<p><b>A. GENERAL MATTERS</b></p>		<p>o Provide allowance to respond to changes in policy thrusts in the DENR should any occur in the future.</p> <p>o Undertake EIA of policy options recommended by NRMP</p>	<p>o Provide allowance to respond to changes in policy thrusts in the DENR should any occur in the future</p> <p>o Undertake EIA of policy options recommended by NRMP</p>
<p><b>B. POLICY ACTIONS</b></p> <p>1. Increase tenure security to encourage private investment in sustainable forest management</p> <p>o Simplify tenurial instruments</p>	<p>o <u>Agree.</u> The tenure instrument must be internally responsive to varying land capabilities in a given area covered by the instrument. Equally important is NRMP's main focus to strengthen application of existing instruments particularly for small-holder forest occupants and ICCs to address their immediate tenure needs</p>		<p>o <u>Agree.</u> The tenure instrument must be internally responsive to varying land capabilities in a given area covered by the instrument. Equally important is NRMP's main focus to strengthen application of existing instruments particularly for small-holder forest occupants and ICCs to address their immediate tenure needs</p> <p>NFP II shall be looking into this. Also, this has been recommended under the MPFD</p>

<sup>1</sup>This summary documents agreements on Evaluation Comments reached between DENR and USAID on October 29, 1992

<p>o Examine provisions of IFMAs TPSAs to determine if they create incentives for unsustainable management</p> <p>o Investigate alternative tenurial periods and privatization of bare forest lands conditional upon reforestation</p>	<p>o <u>Agree.</u> NRMP's Environmental Assessment will address this section and alternative measures to mitigate disincentives will be formulated</p> <p>o Already being addressed in the short run by Forest Lease Management Agreement (FLMA) and IFMAs and in the long run by NRMP policy study on conversion of "open" public lands into Alienable and Disposable Status</p>	<p>o Review provisions of IFMA and TPSA in the aspect of creating incentives for sustainable resource management and to come up with recommendations and/or draw up simplified but workable tenurial instruments</p> <p>o Conduct thorough study on types of tenurial instruments to be adopted by government -- i.e., groupings may either be based on types of forest lands per PD 705 or on the kind of management activities to be undertaken therein</p> <p>o Reexamine constitutional tenure limit of 50 years</p> <p>o Tenurial instruments should be drawn up considering the following:</p> <p>-- land-use should not be changed;</p> <p>-- greater percentage of area will be planted to forest crops and the rest to agri cash crops</p>	<p>o <u>Agree.</u> NRMP's Environmental Assessment will address this section and alternative measures to mitigate disincentives will be formulated</p> <p>o LBII shall develop/amend Scope of Work to include studies on effectivity of tenurial instruments and make recommendations on simplifying them and/or narrowing their number. Amended SOW will address concern to the mid-term evaluators</p> <p>o Already being addressed in the short run by Forest Lease Management Agreement (FLMA) and IFMAs and in the long run by NRMP policy study on conversion of "open" public lands into Alienable and Disposable Status</p> <p>o LBII should review the current draft of the New Forestry Code with regard to its consistency with the Master Plan for Forestry Dev't. and NRMP Policy Agenda</p> <p>o Constitutional limitation on tenure of 25 years renewable for another 25 years will be studied</p>
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<p>2. <b>GOP collects substantially larger % of economic rents of timber harvested on forest concessions</b></p> <ul style="list-style-type: none"> <li>o Clarify the basis for new forest fees</li> <li>o Revise the accounting system that can trace costs and revenues to their origin.</li> <li>o Pilot test a system for imposing fees on standing timber</li> <li>o Establishment of a new accounting system should be a performance indicator for the fourth tranche</li> </ul>	<ul style="list-style-type: none"> <li>o This is a DENR concern. NRMP's policy study is addressing the issues to a certain extent. NRMP will continue to provide DENR the necessary assistance</li> <li>o DENR with NRMP assistance is looking at this issue currently</li> <li>o <u>Agree</u>. This will be addressed by the TD/T component</li> </ul>	<ul style="list-style-type: none"> <li>o NRMP should also look at the attitudinal make-up of forest users/communities and implementing agencies</li> <li>o Increasing the length of lease is not a guarantee that the lease will not be terminated by the government, the fact that the lease itself contains a lot of prescriptions for its upkeep</li> <li>o Strengthen monitoring, improve, recording system and revise DENR's accounting system of revenues</li> </ul>	<ul style="list-style-type: none"> <li>o Already being addressed by the Policy studies to a great extent. There is a need to strengthen LBII's SOW to capture the intent of the recommendation</li> <li>o Studies on drawing up of a better accounting focused on collection mechanism system for forest fees are now underway. Pilot-testing will be undertaken once studies are completed</li> <li>o Already being addressed by the Policy studies to a great extent. There is a need to strengthen LBII's SOW to capture the intent of the recommendation</li> <li>o <u>Agrees</u>. A fourth tranche indicator will be included for a mechanism to track down costs and revenues on forestry activities and how a portion of collected revenues may be returned to or retained in DENR for the management and protection of residual forests</li> </ul>
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<p><b>4. Encourage private investment and competition in sector by divesting/liquidating parastatals and/or GOP equity/assets in forest enterprise</b></p> <p>o Eliminate this item</p>	<p>o <u>Disagree.</u> Completed analysis for the third tranches show that the performance indicator has been met</p> <p>o For the fourth tranche, this policy action will be retained and an alternative indicator will be jointly determined before the third tranche review. It is recommended that further studies on the following be further conducted:</p> <p>(i) Re-valuation of PICOP by private appraisal firms and APT/COP's marketing offer to sell PICOP;</p> <p>(ii) Re-structuring of PICOP debt through a debt-swap offerings to reduce burden to be assumed by the private sector purchases;</p> <p>(iii) Conversion of PICOP-debt to GFIs into a public offering to be dispersed and marketed through ten stockmarkets.</p>	<p>o To eliminate privatization is welcome inasmuch as DENR does not have a direct hand in the privatization activities of APT</p>	<p>o Completed analysis for the third tranches show that the performance indicator has been met</p> <p>o For the fourth tranche, this policy action will be retained and an alternative indicator will be jointly determined before the third tranche review. It is recommended that further studies on the following be further conducted:</p> <p>(i) Re-valuation of PICOP by private appraisal firms and APT/COP's marketing offer to sell PICOP;</p> <p>(ii) Re-structuring of PICOP debt through a debt-swap offerings to reduce burden to be assumed by the private sector purchases;</p> <p>(iii) Conversion of PICOP-debt to GFIs into a public offering to be dispersed and marketed through ten stockmarkets;</p> <p>(iv) Working with COA to relax restrictions on PICOP's sales of assets below transferred price;</p> <p>(v) Legal implications of transferring license agreements from PICOP to prospective new owners</p> <p><u>Note:</u> When sent to DENR for validation, DENR again suggested that this indicator be dropped. NRD requested further clarification at the same time provided updates on PICOP privatization activities of APT/COP for reconsideration of their stand/position</p>
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<p><b>5. Preserve the remaining old growth forest and the biodiversity therein</b></p> <p><b>o Focus field activities in residual forest management and community forestry in and around old growth areas</b></p> <p><b>o Fourth tranche indicators should include requirements for funding for ground demarcation</b></p> <p><b>o There should be a prioritization scheme in the regions</b></p> <p><b>o Catalog and define biodiversity within the old growth forests</b></p>	<p><b>o Already being addressed in the current workplan; a key constraint that NRMP will address is availability of competent local NGOs for CFP work adjacent to critical old growth areas. Likewise, old growth areas will be prioritized by GOP</b></p> <p><b>o <u>Agree.</u> But formulate tranche cognizant of resource limitations; and opportunities such as ENR SECAL</b></p> <p><b>o <u>Agree.</u> NRMP has made this possible through aerial support identifying the "universe" upon which prioritization can be made</b></p> <p><b>o <u>Agree.</u> To be addressed by both the Resources Protection Component and the TD/T</b></p>		<p><b>o Already being addressed in the current workplan; a key constraint that NRMP will address is availability of competent local NGOs for CFP work adjacent to critical old growth areas. Likewise, old growth areas will be prioritized by GOP. While the efforts institutionalizing old growth forest protection are being sustained, DENR will look at the long term objective of putting up these structures on a more permanent basis, i.e., legislation that would eventually formalize these structures for protecting this natural resource.</b></p> <p><b>o <u>Agree.</u> Fourth tranche performance indicators cognizant of resource limitations and opportunities such as ENR SECAL will be formulated jointly (that reflects DENR's best effort)</b></p> <p><b>o <u>Agree.</u> NRMP has made this possible through aerial support identifying the "universe" upon which prioritization can be made</b></p> <p><b>o <u>Agree.</u> To be addressed by both the Resources Protection Component and the TD/T</b></p>
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<p>o Use as performance indicator the number of hectares of residual forest under approved management plans</p> <p>o Inventory the size and condition of the residual forest so that it can make reasonable estimates of what that forest area can contain</p> <p>o DENR should commit or at least decide on the use of land-based planning and management approach for residual forests</p> <p>7. Facilitate technology development transfer in forestry management and preservation plus wood processing</p> <p>o Terminate the IRDC, return original LBII proposal</p>	<p>o <u>Agree.</u> For the fourth tranche, the number of hectares of residual forest under approved management plans will be included as performance indicator</p> <p>o <u>Agree.</u> IRDC will be dissolved; LBII will handle TDT independently and decide on proposals; part of TDT funds will be used to support NRMP's EA</p>	<p>o The recommendation to return to original LBII approach should be discussed before implementation, as some changes may have to be done based on present experience on TDT implementation</p> <p>o NRMP should come up with procedures to have the Agencies pull their acts together</p>	<p>o <u>Agree.</u> This indicator will be included for the fourth tranche</p> <p>o DENR will look into the character and contiguity of residual forests outside the TLA system; prioritize and prescribe management schemes before entering into agreements</p> <p>o Existing TLAs will follow the current mid-term planning system. Areas outside existing TLAs will follow the land-based planning and management approach initiated by NRMP</p> <p>o <u>Disagree.</u> A three-man committee (C. Tomboc, R. Acosta and M. Wallace) was assigned to re-study the IRDC scheme for the purpose of streamlining the approval process and determine the TDT budget until 1995. Based on the Committee's report (which is due on November 5, 1992), <u>final decision will be made</u></p>
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<p><b>8. Increase local community and NGO participation in forestry management</b></p> <ul style="list-style-type: none"> <li>o Use more short-term consultants to backstop NGO community organization</li> <li>o Reflect in the NGO contracts differing capabilities of the NGOs and the process orientation of the community organizing</li> <li>o Emphasize strong participation in the CFP and treat the community as partners rather than hired labor</li> <li>o Locate future CFP sites near high priority old growth forests and integrate with other NRMP field activities</li> </ul>	<ul style="list-style-type: none"> <li>o Already part of workplan but will reinforce further</li> <li>o <u>Agree</u>. The issue is not a burning need. NRMP training programs for NGO presently tailored to address this reality</li> <li>o NRMP CFPs are acutely aware of this shortcoming that characterized ADB CFPs. NGO SOWs and training programs address this need</li> <li>o NRMP will help GOP identify priority old growth forests and work with other donor funded CFPs for better project site combinations</li> </ul>	<ul style="list-style-type: none"> <li>o Verify/confirm and institute corrective measures on reports that there is overlapping of NRMP-CFP sites with ENR-SECAL-RRMP sites</li> <li>o Review credentials of consultants based on field experience</li> <li>o The direction should first be clear and definite of areas for management and identification of type of management strategies for specific sites should be delineated. While pilot sites are being done, it is equally important to determine and study all of the remaining residual as well as virgin forests for nationwide application</li> </ul>	<ul style="list-style-type: none"> <li>o DENR and USAID jointly agree with the recommendation</li> <li>o DENR and USAID agree with the recommendation</li> <li>o SOWs of consultants shall be modified to give more emphasis on strong community participation</li> <li>o DENR and USAID agree that future CFP sites should be near high priority old growth forests and should be integrated with other NRMP field activities</li> </ul>
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<p>o Reduce the number of signed agreements for the third and fourth tranches to 40 sites and emphasize on improved NGO performance</p> <p><b>C. OTHER NRMP ACTIVITIES</b></p> <p><b>1. Resource Protection</b></p> <p>o Expedite next debt-swap to bring FPE endowment to \$18 million</p> <p>o After 18 months, determine whether the remaining \$7 million should be invested and whether other donors should provide funding</p> <p><b>2. IEC</b></p> <p>o DAI should give it high priority</p>	<p>o <u>Agree</u>. NRMP is presently assisting DENR revise program guidelines to improve implementation process particularly of ADB-CFP sites. To the extent possible, NRMP will sustain TA and training support to ADB CFP sites</p> <p>o To be addressed by Mission Management and the FPE Board of Trustees</p> <p>o Series of meetings with DAI set the following deadlines:  Oct. 21 - submit NRMP IEC Framework Plan; based on MPFD.  Oct. 30 - decide on direction of IEC: if Plan is acceptable, get subcontractors and have outputs by January; if Plan is not acceptable, remove component from DAI and give it to another contractor or decommit funds from the Program</p>	<p>o Although the sub-components of IEC -- i.e., (a) Information, (b) Education and (c) Communication -- require distinct technical expertise, their implementation strategies and projects should be complementary</p>	<p>o The original target may be retained but at the same time there is a need to tighten the monitoring system by the DENR for improved NGO performance</p> <p>o This issue could be best decided on by the FPE Board. However, it is recommended that there should be more representation from GOP</p> <p>o DENR and USAID agree with the recommendation. SOW of the contractor will be tightened</p>
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E. Actions Decisions Approved by Mission (continuation sheet)

6. Streamline the review and approval system for projects under the Technology Transfer and Development (TDT) Component. Status: Done as of end 1992	Delbert McCluskey	End 1992
7. Expedite Debt for Nature Swap. Status: Completed as of November 1993.	Delbert McCluskey/ OFM	4th Qtr. 1993
8. Strengthen mechanism for reviewing findings/recommendations of the Monitoring/Evaluation Component. Status: Completed. More frequent joint reviews conducted by DENR and USAID since end 1992.	Delbert McCluskey/ Usec Ben Malayang	4th Qtr. 1992
9. Strengthen mechanisms for proactive participation of DENR career officers in the program's operational planning and decision making. Status: Technical Assistance Staff now physically deployed in various bureau offices.	Usec Ben Malayang	End 2nd Qtr. '92

## A.I.D. EVALUATION SUMMARY - PART II

### SUMMARY

**J. Summary of Evaluation Findings, Conclusions and Recommendations (Try not to exceed the three (3) pages provided)**

Address the following items:

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|--|--|
| <ul style="list-style-type: none"> <li>● Purpose of evaluation and methodology used</li> <li>● Purpose of activity(ies) evaluated</li> <li>● Findings and conclusions (relate to questions)</li> </ul> | <ul style="list-style-type: none"> <li>● Principal recommendations</li> <li>● Lessons learned</li> </ul> |
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Mission or Office: USAID/Philippines	Date This Summary Prepared: 6/28/94	Title And Date Of Full Evaluation Report: Natural Resources Management Program Interim Evaluation 9/30/92
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**Purpose:** The evaluation was to conduct an external assessment of progress to date to identify where mid-course corrections were needed and to recommend appropriate actions.

**Methodology Used:** The evaluation team reviewed documents and interviewed DENR, NGO, USAID staff, and participating community members involved with the Program both in the central offices and at field sites

**Program Focus:** The Natural Resources Management Program (NRMP) is a policy-based, sector assistance program designed to contribute to economically and ecologically sustainable forest resource management. NRMP is a hybrid form of assistance program, having technical assistance embedded into a policy-based program. It focuses on eight policy areas:

**Tenure Security:** Increase tenure security to encourage private sector investment in sustainable forestry management. DENR has issued new forms of land tenure agreements. However, the new industrial tenure agreements may contain elements that discourage sustainable forest management.

**Forest Charges:** Substantially increase GOP collections of economic rents of timber harvested on forest concessions. The DENR implemented policy changes that increased forest charges, raising revenue collected in 1991 seven and a half times compared to 1989 revenue. However, the volume of logs on which the charges were imposed decreased by fifty percent. Therefore, the increased charges may have contributed to under-reporting and increased illegal logging. It also appears that increased charges have not led to better forest management or more efficient processing.

**Entry into and Exit from the Forest Products Industries:** Revoke or amend regulations that restrict exit/entry of firms to and from the forest products industries. The major barrier to entry and exit is uncertainty about supply. The Program has had limited impact on GOP policies effecting wood products supply.

**Privatization:** Encourage private investment and competition in the forest sector by divesting or liquidating para-statal and GOP equity assets in forest enterprises. NRMP's support for privatization of public forest products industries has not led to increased investment and competition in the sector.

**Old Growth Protection:** Preserve the remaining old growth forests and the biodiversity contained therein. Program has located the old growth forest areas, and has produced the documentation and maps needed to identify and mark their boundaries. This represents the significant first step to protecting the old growth forests.

**Rationalize DENR Management:** Rationalize DENR management of residual forests and provide adequate financial resources to carry out this mandate. NRMP is pursuing an approach in which the management plan for an area determines the type of management agreements for the area. The approach provides valuable information on cost-effective inventory methods, but does not address the critical issue of how and who will make forest management decisions. The performance indicators focus on measuring expenditures by DENR on forest management, including plantation management rather than measure movement towards rational residual forest management.

**Technology, Development and Transfer:** Facilitate technology development and transfer in forestry management and preservation plus wood processing. This component has encountered major implementation problems due to unworkable organizational arrangements.

**Community-Based Forest Management:** Increase local community and NGO participation in forestry management. The program is helping organized upland communities to become legally empowered to manage and harvest wood from residual forests. NGOs are to be

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## S U M M A R Y (Continued)

used as the vehicle to provide organizational and technical assistance to the communities. This element is making good progress, but needs to be strengthened.

### Major Findings and Conclusions:

- NRMP has provided important support to DENR in its successful efforts to obtain higher priority for environmental management in the GOP budget process.
- With the exception of privatization, NRMP is directed toward important policy areas.
- Most of the policy areas are much more complicated than the original policy agenda suggested. Achieving the expected policy objectives will require substantially more work.
- Progress towards establishing the Foundation for the Philippine Environment has been impressive; this promises to be a sustainable development result of NRMP.
- In general, the technical assistance NRMP provides for policy studies and policy implementation is helping DENR to accelerate the process of policy formulation and implementation.
- The results of aerial photography supported through NRMP have been a clear success for the program to date, enabling DENR to begin to demarcate old growth forests that need be protection.
- Residual forests could, if efficiently managed, meet the country's demand for lumber and need to be placed under sustainable management as soon as possible.
- Privatization of GOP assets in the forestry sector will not contribute to increased competition and investment in the sector.
- Problem areas in NRMP have resulted from poor organizational arrangements for implementation (TDT), poor contractor performance (DAI for IEC), and unanticipated difficulty and time requirements (residual forest management planning).
- The structure of NRMP assistance and USAID's contracting approach greatly complicated program management requirements and has contributed to confused roles and responsibilities among USAID, DENR and contractors, impairing working relationships, and the institutionalization and coordination of activities.
- NRMP suffers from lack of coordination of its technical/field assistance activities; suggesting lack of a strategic focus.

### Recommendations:

- DENR needs to reassure that new forest management agreements are not producing incentives that encourage unsustainable management practices.
- DENR needs to reduce the number of forest management agreements being developed for individuals, communities and industry.
- DENR needs to establish priority areas for old growth forest demarcation and protection.
- DENR should inventory the size and condition of residual forests to develop reasonable estimates of what these forests can provide in terms of wood and non-wood products on a sustainable basis.
- The old growth forest areas should be a focal point for coordinating and integrating NRMP activities.
- A single approach to residual forest management planning is needed and the basic planning areas need to be identified.
- Community-based forest management should concentrate on developing NGO capabilities for community organizing and encouraging community participation.

<p>o Focus on current forestry issues</p> <p><b>3. RPTS</b></p> <p>o Reassess whether RPTS component should be expanded to include support to devolve functions to LGUs as well as include more regions</p> <p><b>4. Donor Coordination</b></p> <p>o Should have adequate coordination</p> <p><b>D. PROGRAM MANAGEMENT</b></p> <p>o Establish a mechanism to assure that Winrock's analyses of program performance indicators are acted upon by DENR and USAID</p>	<p>o The new IEC framework plan is focused on current forestry issues such as log ban, residual forest management, etc.</p> <p>o Devolved functions to LGU presently cover only programs dealing with open upland areas. RPTS focuses on support systems for natural forest management. Resource constraints do not warrant an expanded SOW. However, NRMP will work with programs assisting LGUs, e.g., LDAP, ENR's SECAL</p> <p>o This is currently being addressed. Better planning will be done to discuss issues and solutions as well as complementation of efforts</p> <p>o NRD always acts on Winrock's analyses in consultation with the Program Committee</p> <p>o During the second tranche review, due to fast inter-related actions in assuring the release of the second tranche, letters or documentations were not prepared. For the forthcoming tranche review, NRD will document every action that will be taken</p>	<p>o Review the draft AO revising AO 84</p>	<p>o The DENR and USAID jointly agree with the recommendation. The new IEC framework has been refocused accordingly.</p> <p>o Component activities will be assessed later</p> <p>o <u>Agree</u>. A mechanism to coordinate donor-funded activities is already in place</p> <p>o DENR and USAID will review Winrock's analysis of Program performance indicators and provide response to Winrock on a timely basis</p>
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<p>o Integrate NRMP activities more fully into the appropriate line offices</p> <p>o Institutionalize the Program Support Office so it can play a useful function after NRMP</p> <p>o Improve the working relationships among DENR, USAID and TA teams -- define respective roles and responsibilities</p>	<p>o This issue will be addressed by DENR with NRMP initiating the process, e.g., working groups, Task Force</p> <p>o <u>Disagree.</u> However, this is a decision for DENR to make if there is a need for a PSO even after NRMP</p> <p>o <u>Agree.</u> NRD holds regular monthly meetings with the Chiefs of Party to discuss progress and problems of implementation</p> <p>o Better planning will be undertaken for these meetings to focus on issues/problems and solutions/recommendations</p>	<p>o It is important to phase in the Forest Management Bureau in NRMP activities as well as the other Bureaus, EMB and PAWB, to provide for policy institutionalization even after the Project is over</p>	<p>o <u>Agree.</u> TA consultants (DAI) transfer to FMB is underway</p> <p>o The DENR and USAID jointly agree with the recommendation</p>
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XD-ABI-963-A

**INTERIM EVALUATION OF THE NATURAL RESOURCES  
MANAGEMENT PROGRAM**

**September 30, 1992**

**Tropical research and Development  
Chis Hermann, Team Leader  
Lane Krahl, Environmental Specialist**

**ABT Associates, Inc.  
Keith Openshaw, Resource Economist  
James Seyler, Community Specialist  
Craig Smith, Forest Industry Specialist**

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INTERIM EVALUATION OF THE NATURAL RESOURCES  
MANAGEMENT PROGRAM

September 30, 1992

Tropical Research and Development

Chris Hermann, Team Leader  
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## EXECUTIVE SUMMARY

The Natural Resources Management Program (NRMP) is a policy-based, sector assistance program undertaken by the Department of Environment and Natural Resources (DENR) and USAID. NRMP supports policy reforms which will contribute to economically and ecologically sustainable forest resource management and the protection of the biodiversity within the old growth forests. USAID provides \$75 million in support of policy reforms, \$25 million for a debt-for-nature swap to endow the Foundation for the Philippine Environment (FPE), \$20 million for technical support services and \$5 million for monitoring, evaluation and audit. DENR's counterpart contribution is the peso equivalent of \$33 million.

During the late 1980's, several donors agencies, including USAID, assisted DENR to analyze constraints to sustainable management of forest resources. As a result of this work, DENR determined that it would re-direct its policies and programs to protect the old growth forests while improving the management of residual forests to meet the country's requirements for forest products. NGOs and local communities would need to play a major role in assuming responsibility for sustainable management of forests. NRMP was the first major donor funded program in support of DENR's new direction. NRMP enabled the DENR to obtain higher priority for natural resource management within the GOP and leverage increased annual budget allocations. NRMP played an important role in demonstrating that natural resource management could attract major donor funding. NRMP has also facilitated donor coordination involving complimentary investments in the sector made by the World Bank, the ADB and other bilateral agencies.

Signed in September 1990, NRMP focuses on eight policy areas: land tenure, forest charges, entry into and exit from the forest products industry, privatization of Government holdings, old growth forest protection, residual forest management, technology development and transfer and community-based forest management. The first two tranche requirements have been met with disbursements totalling \$35 million. The third is scheduled for the end of 1992 if the program performance indicators are met, with the final tranche anticipated for late 1993. NRMP's PACD is September 30, 1995.

USAID and the World Wildlife Foundation, Inc. (WWF) signed a cooperative agreement for administrative services to establish the Foundation (FPE) in March 1991. WWF is assisted by the Philippine Business for Social Progress (PBSP). Technical assistance for policy studies (through Louis Berger International, Inc. - LBII), policy implementation (Development Alternatives, Inc. - DAI) and program monitoring and assessment (Winrock International) started in August 1991.

This interim evaluation was conducted during August and September 1992 over a four week period by five external consultants. The evaluation examined progress toward accomplishing the policy objectives of NRMP, the associated issues with each of the policy items and the field activities in Regions 2,4 and 11 that support policy implementation. The evaluation identified additional issues and actions that need to be considered to achieve NRMP's objectives. Nonetheless, the overall impression of the team is that, with the exception of privatization, NRMP is supporting important policy actions fundamental to sustainable management of forest resources and the protection of biodiversity of old growth areas. The following sections summarizes the evaluation's review of NRMP's eight policy items.

1. Land Tenure: Since the inception of NRMP, DENR has promulgated new forms of land tenure agreements. Concern has been raised that the new industrial tenure agreements (IFMAs and TPSAs) contain elements which discourage sustainable forest management. With the exception of the TLAs, none of the old forms of agreements have been abandoned. This proliferation of tenure vehicles has caused confusion in the private sector. To increase tenure security, DENR needs to simplify tenurial instruments by creating, if possible, one type for communities and one for individuals and companies adaptable to a broad range of conditions and interests. NRMP should support this effort through examination of the provisions of IFMAs and TPSAs to determine if they create incentives for unsustainable management. NRMP should also investigate alternative tenurial periods and options for expanding privatization of "bare forest" lands.

2. Forest Charges:

The objective of this policy action is to capture a much larger share of raw material value so that Government, as well as private individuals, benefits from the assets of the public forest. Forest charges should cover the cost of growing and managing trees, as well as "rental value" for the land and all infrastructure. In lieu of actual measurement, the government currently uses a monitoring system and monthly surveys to estimate FOB price of forest products. The increase in forest charges imposed by the government resulted in revenue collection in 1991 exceeding that of 1989 by seven and half times. However, the volume of logs on which the charges were imposed decreased by fifty percent. Increased charges may have contributed to under-reporting and increased illegal logging. It also appears that increased charges have not led to better forest management or more efficient processing. The evaluation recommends clarifying the basis for new forest fees, revising the accounting system that can trace costs and revenues to their origin and pilot testing a system for imposing fees on standing timber.

### 3. Entry into and Exit from the Forest Products Industries:

This policy strives to promote competition in the forest products industry and facilitate adaptation in the sector. The entry/exit issue is essentially one of constraints to investment in the sector. Security of raw product supply is the principal concern of industry and the major constraint to entry or exit to or from the industry. The industry is presently faced with a diminishing supply of "legal" logs and the shortfall in demand cannot be met from imported roundwood and timber products. Illegal sources principally from residual forests make up the shortfall.

The possibility of a commercial logging ban is causing uncertainty for the forest products industries. Other actions, such as the new forest charges schedule, changes in management agreements, the ban on lumber exports and a ban on cutting of narra, have also created uncertainty. Uncertainty in log supply makes financing difficult to obtain. Restrictions on removal or transport of some species and forest products limits the location of industries, perhaps impeding efficient allocation of industrial resources. Current taxes and tariffs affect the industry's international competitiveness. Some of these issues are addressed in the Forestry Code of 1992. Existing forest management regulations should be further examined to identify how they affect investment in the forest products industry.

### 4. Privatization:

NRMP's support for privatization was based on the assumption that the GOP's holdings in the forest product industries (resulting from defaults on earlier "behest" loans) was a impediment to increase investment and competition in the sector. This has proven to be largely unsubstantiated. Eleven out of the fourteen firms controlled by the GOP retain little of their original assessed value. Of the three functioning firms, one is a leased plantation, portions of the assets of one have been sold (Cellophil) and one is a major integrated operation (PICOP) which is the country's sole producer of newsprint. Because of the location, size and very large debt PICOP carries, the Government has not been able to find a buyer. The integrated nature of PICOP operations does not allow breaking up its constituent parts for sale. Moreover, there is no evidence that PICOP's privatization would stimulate increased competition or investment in the sector. Therefore, this policy item should be eliminated.

5. Old Growth Protection: One of the successes of NRMP is its support of DENR's efforts to protect old growth forests. The program produced photos and maps of closed canopy forests which are used by DENR as the basis for marking the boundaries of old growth forests. These forests cannot be truly protected until

their boundaries are established. The major concern in this area is DENR's ability to fund demarcation. At the time of the evaluation, sources for full funding had not been identified. Given the likelihood of limited funding, it is imperative that DENR develop a priority system for identifying those old growth forests which most need protection. NRMP should focus its field activities in residual forest management and community forestry in and around priority old growth areas.

**6. Residual Forest Management:** Assuming legislation banning logging is not enacted, the residual forests will be the primary source of wood for the Philippines in the future. DENR has acknowledged the importance of rationalizing the management of the residual forests, but has not yet determined how this will be done. NRMP is pursuing a land based management approach in which the management plan for an area determines the type of management agreements for the area. DENR currently requires management planning only after an agreement has been signed. DENR needs to determine which of these approaches it will use in the future. If it opts for a land based approach, DENR must identify basic land management planning areas.

The technical assistance activities of NRMP have focused on data collection and compilation. It appears that the program will provide valuable information on cost-effective inventory methods. But to date, the program has not addressed the critical issue of how management decisions will be made and by whom. DENR needs to assure that NRMP develops and tests processes to involve forest communities, industry, NGOs and government in the decision-making process. Finally, NRMP should work more closely with the staff and line offices in DENR who have responsibility for forest management to generate ownership of its planning methodologies.

The performance indicators for Policy No. 6 do not measure movement towards rational residual forest management. Rather, they measure expenditures by DENR on forest management, including plantation management. A better performance indicator would be hectares of residual forest under approved management plans.

**7. Technology Development and Transfer:** This component has encountered major implementation problems due to unworkable organizational arrangements. An Integrated Research and Development Committee (IRDC) was established, consisting of representatives from various public and private organizations, to direct the use of funds for "demand-driven" research and development. However, basic agreements on the purpose of the activities, who the activities should assist, research selection criteria, appropriate roles in managing the component, etc. were never reached. An attempt to determine research priorities produced a "wish list" from organizations contacted. IRDC's

internal conflicts impeded selection of proposals for funding. The evaluation recommends terminating the current arrangement and returning the original LBII proposal.

**8. Community-Based Forest Management:** The Community Forestry Program (CFP) was launched in late 1989 to democratize resource access and privatize forest management for the benefit of upland communities. Organized upland communities are to be legally empowered through contracts with DENR to manage and harvest wood from residual forests. NGOs are to be used as the vehicle to provide organizational and technical assistance to the communities. NRMP provides technical assistance (via DAI) for program development.

CFP is making good progress; however, the evaluation recommends a number of actions to strengthen the program. Training and support services need to be tailored to the strengths and weaknesses of individual NGOs. More short-term consultants with community organizing experience should be used to backstop NGO community organizing, particularly in the initial stages. NGO contracts need to reflect: a) the differing capabilities of the NGOs and b) the process orientation of the community organizing in setting performance targets. Community organizing activities should emphasize more strongly participation in the CFP and treat the community as partners as opposed to hired labor. NRMP's approach to CFP needs to include agro-forestry or other income generating elements to assure participation and sustainability. The importance of pump-priming activities needs to be better understood. Resolving land tenure security issues will be critical to encouraging greater and broader participation in CFP and DENR needs to simplify and clarify land tenure instruments. Future CFP sites should continue to be located near high priority old growth forests and integrated with other NRMP field activities. The number of signed agreements for the third and fourth tranche should be reduced to thirty sites. Improved NGO capability for community organizing and encouraging participation at these sites should be the basis for future performance indicators.

**- Other NRMP Activities and Issues:** The evaluation reviewed progress to date on establishing the FPE and concluded that this activity has a very high potential becoming an important, sustainable result of NRMP. The evaluation recommends expediting USAID's next debt swap to increase the FPE endowment. After eighteen months, evaluate the FPE to determine whether additional funding is necessary and whether other donors would provide funding if FPE proves effective.

NRMP contains an Information, Education and Communication component funded through the DAI contract. Implementation of

this component has been very problematic largely due to past staffing decisions, as well as to inadequate attention by the contractor. The evaluation recommends that this activity be given higher priority by DAI and that it focus on current forestry issues, e.g., implications of the commercial logging ban, to get it moving.

The Local Government Code has very clear implications for DENR operations at the local government level. NRMP's Regional and Provincial Technical Services is assisting local governments to respond to its new responsibilities for forest management. DENR has taken actions to comply with the Code by devolving the Integrated Social Forestry (ISF) Program and associated staff to the local government level. However, DENR needs to re-consider whether it has provided sufficient support to local governments in managing ISF and community forestry activities.

Donor coordination in the forestry sector was strong during the strategy development phase led by DENR. The Department used its Forestry Master Plan to allocate areas of involvement among the donors and to subsequently coordinate among them. Donor coordination continues; however, appears to have weakened recently due to organizational changes in DENR and inadequate coordination efforts by the donors.

**NRMP Program Management:** NRMP is a hybrid form of assistance by USAID - i.e., a technical assistance project embedded in a policy-based program based on the assumption that policy analysis should be supported by policy implementation. This hybrid nature combined with the division of the technical assistance component among separate contracts has substantially complicated management requirements. DENR needs to move forward on its proposed plan for integrating NRMP activities more fully into the appropriate line offices, including institutionalizing the Program Support Office if that Office can play a useful function after NRMP. Working relationships among DENR, USAID and the contract team staff need improvement due to a lack of agreement on their respective roles and responsibilities. An outside management assessment to resolve these problems is recommended. NRMP also needs to establish a mechanism to assure that Winrock's analyses of program performance indicators are acted upon by DENR and USAID.

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SECTION 1: PROGRAM PURPOSE, IMPLEMENTATION STATUS AND PURPOSE OF THE MID-TERM EVALUATION

- 1.1 Program Purpose

The Natural Resource Management Program (NRMP) is a joint undertaking between USAID and the Department of Environment and Natural Resources (DENR) to support the development of ecologically sound and economically rational policies that are expected to arrest the rapid degradation of forest resources. The enactment and implementation of policy reforms are expected to promote improved resource management practices, conservation of biological systems and protection of biodiversity, as well as greater efficiency and competitiveness of the forest products industries. NRMP constitutes an important part of DENR's continuing efforts to establish the policy environment necessary for sustainable management and use of the country's forest resources.

Beginning in the 1987, DENR's senior management embarked on a major revamping of the Department's forestry resource management programs in an effort to make DENR a more development oriented agency than it had been in the past. Over the next several years, various donor agencies assisted DENR to conduct a series of analyses of the major development constraints in the forestry sector. Major studies conducted during this period include: a) DENR's Philippine Strategy for Sustainable Development; b) Sustainable Natural Resources Assessment funded by USAID; c) DENR's Master Plan for Forestry Development funded (MPFD) by the ADB and Finnish aid; and d) Philippine Natural Resources Assessment funded by the World Bank. The results of this work led to major investments in by a number of donor agencies.

USAID's funding of NRMP provided the first major donor contribution to operationalizing MPFD. This lent important support to DENR's efforts to obtain higher priority for environmental issues in general, and forest resource management in particular. DENR's successfully argued for and received an increase in its annual budget of more than one billion pesos (roughly \$0 million). The Department has subsequently used the MPFD to coordinate other donor assistance in the sector. Equally important, NRMP attempts to bring together the diverse interests of government agencies, non-governmental organizations and the forest products industries in developing policies and activities to improve forest management. The process of establishing the Foundation for the Philippine Environment is illustrates this.

As stated in the Program Assistance Approval Document (PAAD), the NRMP is to: "...support the Government of the Philippines to develop the policy environment for ecologically sound and sustainable economic growth with special attention to tropical forests, biodiversity and the forest products industry." NRMP

consists of four main components: a) policy reform; b) resource protection through NGO administration; c) support services to understand policy options and their effects, and to identify policies implementation approaches and strategies; and d) monitoring, evaluation and auditing.

USAID will provide a total of \$125 million in grant assistance, with the Government of the Philippines contributing \$33 million in counterpart funding, between September 1990 through August, 1995 for support of the four major program components as follows:

**A. Policy Reform:** In conjunction with the enactment and implementation of policy reforms in eight areas considered critical to achieving NRMP's development objectives, USAID plans to provide \$75 million through four disbursements. NRMP's eight policy objectives are as follows:

- 1) Increase tenure security to encourage private investment in sustainable forestry management.
- 2) Substantially increase GOP collections of economic rents of timber harvested on forest concessions.
- 3) Revoke or amend regulations that restrict exit/entry of firms to and from forest product industries.
- 4) Encourage private investment and competition in the forest sector by divesting or liquidating parastatals and GOP equity assets in forest enterprises.
- 5) Preserve the remaining old growth forests and the biodiversity contained therein.
- 6) Rationalize DENR management of residual forests and provide adequate financial resources to carry out its mandate.
- 7) Facilitate technology development and transfer in forestry management and preservation plus wood processing.
- 8) Increase local community and NGO participation in forestry management.

**B. Resource Protection:** \$25 million will be used for the conservation of biological diversity and sustainable management of natural resources through local and U.S. non-governmental organizations (NGOs). Debt-for-nature swaps will be used to endow the Foundation for the Philippines Environment, which in turn will make grants (using interest earnings from the endowment) to NGOs for natural resource programs.

**C. Support Services:** \$20 million will be provided to contract for: a) policy studies and analyses to understand policy reform options and the potential ecological and economic impact of these actions, and b) identify and test alternative strategies and approaches to actual implementation of policy reforms. Studies and implementation support services include work on conservation and development of residual forests; development of community based forestry management; aerial survey for old growth protection; Information, Communication and Education (IEC) and Regional and Provincial Technical Services.

**D. Monitoring, Evaluation and Audit:** In addition to standard evaluation and audit requirements, NRMP budgeted \$5 million to fund implementation monitoring and assessment of the policy reform component. Contract services are provided to monitor actions taken toward reaching benchmarks mutually acceptable to DENR and USAID as measures of progress toward achieving policy objectives and, in turn, satisfying the conditions for the release of policy-based performance disbursements (i.e., the four tranches totalling \$75 million). Verifying the implementation of announced policy reforms and assessing the subsequent impact of policy changes are also part of this component.

It is important to recognize that NRMP is being implemented in a rapidly changing political context at a time when environmental problems are taking on increasing importance in the Philippines. This is reflected in the new priorities the GOP is assigning to improved environmental management, a growing NGO community advocating new and stronger environmental conservation measures and a growing awareness and concern on the part of the general public about environmental problems. Moreover, DENR's policy reforms are being made while fundamental changes in the structure of public administration are being initiated. The Local Government Code will decentralize numerous government functions, staff and budget resources from the central government to local government units.

In this setting, NRMP is helping the DENR redirect its past orientation, functions and services to be more responsive to the protection, management and sustainable use of forest resources. The policy actions and associated implementation strategies being followed in a number of areas with NRMP's support are new directions and/or pilot activities for DENR.

- 1.2 Current Status of NRMP

At the time of the signing of NRMP's Program Agreement in September 1990, work on the policy agenda by DENR was already underway. The first set of policy performance indicators was met in December 1990, triggering the release of the first tranche of \$15 million. During 1991, the technical assistance contracts for the Support Services component were awarded to Louis Berger International, Inc. (LBII) for the policy studies, and to Development Alternatives, Inc. (DAI) for the policy implementation component. Winrock International was selected for the monitoring and assessment component, and the World Wildlife Foundation, Inc. (WWF), with the Philippine Business for Social Progress (PBSP) as its local partner, was selected to establish the Foundation for the Philippine Environment (i.e., the Resource Protection component). The cooperative agreement with WWF was signed in April 1991 and the technical assistance arrived in June. WWF/PBSP began work on the Foundation in June 1991 and technical assistance for the other NRMP components began in July 1991.

The second set of policy indicators was met in December 1991, with the release of the second tranche of \$20 million occurring shortly thereafter. Work is currently underway toward meeting the third tranche indicators by December 1992. At this pace, the fourth (and last) tranche will be met by the end of 1993. Funding for the Resource Protection, Support Services and Monitoring and Assessment components will continue until September 1995. As of early August 1992, the technical assistance components have been operating for a little over one year. Nonetheless, reasonably good progress has been made in each of these areas, with some exceptions, summarized as follows:

**Resource Protection:** \$10 million has been earmarked for the debt-for-nature swap, \$5 million of which have already been used for an initial debt swap to capitalize the FPE and establish a small interim fund for grants to NGOs. A board of trustees for the FPE has been elected comprising leading environmentalists, the heads of local and international NGOs, grassroots groups, religious organizations, representatives of the Central Bank/Department of Finance and the private sector.

**Support Services:**

a) Policy Studies: Work is underway in five study areas - land tenure, economic forest charges, forest product industries, employment from forest industries and privatization. Sub-tasks within these five areas focusing on elements of the broader study topic are in process or nearing completion. The Technical Development and Transfer (TDT), also part of the policy studies component, has had a slow start due to organizational problems. An Integrated Research and Development Committee and a TDT

Working Unit have been established. Fifteen research proposals have been received, but none have been selected for funding at this time. This element requires immediate remedial action.

b) Policy Implementation: Integrated Aerial Support has accomplished the following: a) completed reconnaissance of closed canopy forests nationwide; b) completed aerial photo mosaics of old growth forest overflight areas; c) prepared maps for delineating closed canopy forests, resource management and planning uses; d) completed videography of overflight areas; and e) providing training for staff in the CAR and Regions 1, 2 and 3 on using aerial photography support. At the very least, the completed aerial photography will provide a baseline for monitoring future encroachment on protected areas after old growth forests are delineated from closed canopy forests.

Three residual forest management plans are being developed for three 2,100 hectare pilot areas in Regions 2, 8 and 11. From these pilot areas, NRMP is expected to expand residual forest management coverage to some 60,000 hectares. Fifteen Community Forest Management contracts have been awarded to NGOs in Regions 2, 4, 10 and 11. Regional and Provincial Technical Services (RPTS) has completed its assessment of regional organizational and management systems and is working to strengthen those systems in Regions 2 and 11. RPTS is conducting seminars for local government officials on the devolution of DENR functions resulting from the Local Government Code. IEC has encountered start-up problems due to staffing problems, but it has provided useful assistance in coverage of recent DENR media events. A training plan in support of NRMP activities has been approved and some training sessions have already been completed.

**Monitoring and Assessment:** The Winrock team has produced several insightful analyses of the progress under the policy agenda of NRMP, raising critical questions that needed to be addressed in conjunction with the second tranche, and more recently, in reviewing progress toward the third tranche. Winrock staff have also participated in the planning and methodological development of upcoming studies and other activities needed to implement policy reforms. The quality of the work of the Winrock team to date exceeds expectations. Planning is underway for policy impact assessment.

### 1.3 Purpose of the Mid-term Evaluation

As planned in the design of NRMP, this evaluation was conducted to review progress to date on the NRMP policy agenda and the initial work of the technical assistance components (see Annex 1 for the evaluation scope of work). As of August 1992, policy actions covered a two-year implementation period, whereas the WWF's work on the FPE and the technical assistance teams have been active for a over a year. Any serious assessment of the impact from these activities would be premature at this point, a conclusion substantiated by the Winrock's monitoring team.

As planned, this evaluation was principally an exercise in mid-course corrections. The initial planning and analyses conducted to develop the policy agenda was close to four years old and much had happened in the interim, warranting an outside reappraisal of the policy objectives and the individual benchmarks associated with them. In this light, the team considered whether the overall set of policies was still central to achieving DENR and NRMP objectives, as well as contributing to operationalizing DENR's Master Plan for Forestry Development. Similarly, the team examined the performance indicators used for monitoring progress in light of whether they were really meaningful measures which would contribute to establishing the policy environment needed for sustainable resource management.

For each policy item, the team considered how probable it was that behavioral changes, economic benefits and ecological impacts implied in the policy reform would actually occur. This includes: a) the likelihood of involving communities and local government in forest protection and management; b) increasing growth in forest products industries due to new investment and improved resource management; c) preventing logging in old growth forest areas and d) improving residual forest management so that forests are sustained on an economically and ecologically sound basis. The team also assessed how those policies were being implemented, through what types of strategies, via what types of organizational mechanisms and using what types of technologies. That analysis and the recommendations which follow from it are presented in Section 3 treating with respect to the eight NRMP policy objectives.

The remainder of this "mid-course correction" concerns the management systems and practices established for the program and where improvements are needed. Additional NRMP activities and issues, including the two "problematic" elements - the Technology Development and Transfer (TDT) and IEC - are covered in Sections 3 and 5 respectively. The report ends with some lessons learned to date from NRMP which the team believes should be noted.

The evaluation was conducted over a four week period from mid-August to mid-September 1992 by a team comprised of a resource economist, an environmental management specialist, a forest industries specialist and a community forestry specialist, all of whom are also foresters. A program management/monitoring and evaluation specialist (who is not a forester) served as team leader. Needless to say, this is a relatively brief amount of time to carry out an evaluation covering the complex issues noted above ( a copy of the scope of work is found in Annex 1). The team relied principally on interviews, NRMP documents, other sectoral studies and a large dose of its own judgement and common sense. Field visits were conducted in Mindanao and Samar to see how policy implementation was taking shape with respect to residual forest management, community/NGO involvement and the forest industries' initial response to reforms that should directly affect it. The field visits helped the team get a rough idea of the reality of the policy reform process outside of the confines of Manila.

The scheduling of this evaluation at this particular time can be viewed in at least two ways. DENR had been without a new Secretary and two of its senior officials under the Ramos administration since July 1992. The appointment of Secretary Alcala was announced August 31 and took office on September 7, midway through the evaluation. As with any senior level appointment, staff changes and programmatic changes are likely. How this affects NRMP remains to be seen. This might be good if NRMP is in line with the new Secretary's ideas for the forestry sector. Alternatively, scheduling the evaluation several months after the appointment might have made the evaluation more useful. The USAID NRMP Program Officer was also reassigned and left Manila midway through the evaluation. All of these changes at least create opportunities for making needed changes.

**SECTION 2: NRMP POLICY AGENDA**

**POLICY REFORM MATRIX FOR PERFORMANCE BASED DISBURSEMENTS UNDER NRMP  
Amended 12/26/91**

Policy Actions Tranche	P e r f o r m a n c e I n d i c a t o r s			
	First Tranche	Second Tranche	Third Tranche	Fourth Tranche
1. Increase tenure security to encourage private investment in sustainable forestry management.	Agreed on SOW to analyze major factors affecting tenure security (ancestral domain, public vs. private ownership, etc.)	AO issued ensuring compensation to TLA holders whose licenses are revoked for reasons other than non-compliance	Formal GOP action taken to implement agreed upon study recommendations for increased tenure security.  GOP shall develop clear implementation guidelines for AO 42, Series of 1991	
2. GOP collect substantially larger % of economic rents of timber harvested on forest concessions.	Forest charges increased by at least 20% from the 1989 levels.	Revenues from forest charges collected in 1990 are 300% of revenues in 1989.	Revenues from forest charges collected in 1991 are 500% of revenues in 1989.	Forest charges collected in 1992 are 80% of potential 1992 revenues based on actual

Policy Actions Tranche	P e r f o r m a n c e I n d i c a t o r s			
	First Tranche	Second Tranche	Third Tranche	Fourth Tranche
3. Revoke or amend regulations that restrict entry/exit of firms to	Agreed on SOW to study impact of current regulatory policies e.g. capacity & trade		Formal GOP action taken to implement agreed upon regulatory reforms in the sector.	cut & FOB price in view of RA 7161.*

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and from forest products industries. restrictions, etc.

4. Encourage private investment & competition in sector by divesting/ liquidating parastatals and/or GOP equity/assets in forest enterprises.

More than 25% of aggregate equity/assets as of September 1990 in these firms has been offered for sale on fair market terms and conditions and widely publicized

More than 50% of aggregate equity/assets as of September 1990 in these firms has been offered for sale on fair market terms and conditions and widely publicized.

5. Preserve remaining old growth forests and the biodiversity contained therein.

Agreed to ban logging on slopes over 50% and on the remaining old areas.

Adm. Order issued with guidelines for implementing agreed upon bans.

Logging ban implemented in all virgin forests.

Continued logging ban implemented in all virgin forests.

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 \* -- Republic Act (R.A.) NO. 7161 is the GOP Act providing for the increased of forest charges on timber and other forest products. R.A. 7161 (Section 70) provides that charges shall be collected on each cubic meter of timber cut in forestland of twenty-five percent (25%) of actual FOB market price based on species and grading. (pap:12/17/91)

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 P e r f o r m a n c e    I n d i c a t o r s  
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Policy Actions Tranche	First Tranche	Second Tranche	Third Tranche	Fourth Tranche
6. Rationalize DENR management of residual	Agreed to issue AO establishing	Budget submitted to Congress for	Budget submitted to Congress for	Budget submitted to Congress for

forests and provide adequate financial resources to carry out its mandate.	guidelines for DENR selection of private contractors to develop forestry management plans.	forestry management activities is P100 million above FY 91 level.	forestry management activities is P200 million above FY 91 level.	forestry management activities is P200 million above FY 91 level.
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GOP report analyzing the breakdown of expenditures on forest management activities submitted.

GOP report analyzing the breakdown of expenditures on forest management activities submitted.

7. Facilitate technology development and transfer in forestry management & preservation plus wood processing.

TDT plans have been jointly developed by public and private sectors; budgets and TORs.

Budget provided, TDT program underway and progress including private and public sectors,

reviewed by

8. Increase local community and NGO participation in forestry management.

AO issue giving guidelines for NGO participation in community forestry programs.

DENR finalized 25 community forestry management agreements which use NGOs to provide services.

DENR finalized a total of 50 community forestry management agreements with NGOs.

At least a total of 75 community forest management projects initiated and underway with NGO assistance.

**2.1 Policy Action No. 1: Increase tenure security to encourage private investment in sustainable forestry management**

**- Findings:**

The Master Plan for Forestry Development (MPFD), prepared in 1990, examined the supply and demand of wood from the natural forests and plantations of the Philippines in the light of the proposed ban on logging in old growth dipterocarp forests and in forests above 1000 meters in elevation or where the slope is more than 50 percent. It estimated that the residual dipterocarp forests would be the principal source of timber in the near

future. However, the MPFD noted that under existing management, the residual forests could not meet demand on a sustainable basis, primarily because the Timber License Agreements (TLA) did not encourage long-term forest management. Therefore, it was proposed that TLA holders and small communities within or near the forests be given enhanced tenure security both on land with tree cover and in former forested land.

The expressed intention of increased tenure security was to provide incentives for industries, communities and individuals to manage the existing residual dipterocarp forests and reforest degraded and bare "forests."

NRMP incorporates the goal of increased tenure security as one of its policy actions. Progress in this policy action is measured through the achievement of performance indicators for tranche disbursements. The program also supports policy studies regarding tenure issues.

Sixteen million hectares of land in the Philippines are legally classified as forest land; however, only from six to seven million hectares have forest cover (Annex 3 Table 1). It is from these forests that the bulk of timber supply will come. This policy action is mainly concerned with forested areas, although increased security could create incentives for reforesting some "bare" forest land.

In 1991, as proposed in the MPFD, DENR issued Administrative Order No. 24 which banned logging in old growth forests. This action made the residual dipterocarp forests the main legal source for timber. The need for increased tenure security has subsequently been focused on the residual forests.

The total area of residual forests is not known. Estimates of the area range from 3.4 to 5.7 million hectares (see Annex 3). In the past, much of this area was under Timber License Agreements (TLAs) which are now being phased out. There are only between twenty-seven to forty TLAs still in existence (Annex 3). The area occupied by these agreements is between 1.3 to 1.8 million hectares, or about one third of the residual dipterocarp forest.

Little information is available on the condition and productivity of the residual forests and the demands being placed upon them. This information is essential if the forests are to be allocated through tenure agreements and brought under sustainable management. NRMP is trying to obtain this information.

Increased tenure security is focused on three groups of forest users: industrial timber concerns, indigenous cultural communities (ICCs), and upland settlers.

Industrial timber concerns can currently secure tenure on forest land through two vehicles: Timber Product Sharing Agreement (TPSA) and Industrial Forest Management Agreement (IFMA). The TPSA was created to replace the TLA as the vehicle for managing natural forests. TPSAs have been available since 1990, several have been tried but they failed. Industry currently appears to be disinclined to pursue TPSAs. In 1991, DENR issued Administrative Order No. 42 (AO 42) which gave conditions for the establishment of Industrial Forest Plantations through IFMAs. An individual or company can apply for an IFMA, provided the area of land contains less than 50% of "stocked" dipterocarp forest. If the area has more than 50% stocked forest then they must apply for a TPSA.

The applicant for a TPSA or IFMA must post a bond. The size of the bond depends on the value of the residual forest in the proposed area. The TPSA and IFMA applicants must also bid competitively for the area. This creates an incentive for current TLA holders to only apply for and bid on agreements for their existing areas after they have reduced the value of the forest by harvesting the most valuable timber. Such harvests may not be good forest management. Thus, the current tenurial options offered to industrial forest concerns may work against the policy of sound forest management.

ICCs and upland settlers are covered by other types of agreements. Communities can apply for an IFMA, but they can also manage forest land under Forest Land Management Agreement (FLMA), Community Forestry Stewardship Agreement (CFSA) and Community Forestry Management Agreement (CFMA). An individual can take responsibility for a forest area with a Certificate of Stewardship Contract (CSC). ICCs may also obtain a Certificate of Ancestral Land Claim (CALC). Each of these agreements was developed to allocate different resources and uses -- commercial/noncommercial, plantations/natural forest. A community needs at least three of these agreements (FLMA, CFMA and CFSA) to have tenure over forest land if it wants to manage the natural forest, create plantations and control the use of noncommercial products. This proliferation of agreements has caused confusion for many communities.

The reliance upon community agreements to supply timber could

prove to be a monumental task under the current guidelines. Community agreements may occupy up to 1,000 hectares of forest land under the existing DAO. If the existing TLA's convert to TPSAs and IFMAs, this will leave between 1.6 to 4.4 million hectares to be managed through community agreements, or up to 4,400 agreements. Under current procedures, each agreement would need its own management plan to be implemented by communities whose members may number in the hundreds. DENR does not have the capacity to operate such a program. However, work is underway to revise the Community Forestry Program (CFP) guidelines which might increase this area to as much as 10,000 hectares per agreement. This could lead to a more manageable CFP for DENR.

All of the existing vehicles for securing land tenure are based on lease agreements. Privatization of forests has not been considered as an alternative to lease because this would require a constitutional amendment. However, privatization of "base forests" is possible under the FLMA. Although securing tenure for communities and industry is important, it may not be wise to allocate all of the forest to the private sector. DENR could maintain control over some areas for demonstration and research purposes.

- Conclusions:

In general, the estimated area of residual forests suggests that even in their present degraded condition, the forests have the potential for meeting current demand if the existing residual forests are managed efficiently. The residual forests comprise a substantial under-developed resource; thus, the "panic mentality" which seems to be driving public opinion, e.g., a total logging ban, exaggerates the current situation. NRMP can play an important role to through strategy formulation and planning needed for efficient management of residual forests.

The idea of increasing tenure security to encourage private investment in sustainable forest management is a good one, but it should not be the only one. Neither should it be limited to industrial timber concerns, upland settlers and indigenous cultural communities. Other potential forest management arrangements are possible which are not included in the present system. One such possibility is forest management companies which could manage forests or plantations on behalf of single investors or as joint ventures. Such arrangements exist in many countries (e.g., Argentina and Chile) with people obtaining grants or tax incentives for their long-term investments.

The existing tenure vehicles all are based on land leases of 25 years with optional renewal for an additional 25 years. Long term leases of 99 years or 199 have not been considered. Experience in other countries shows that longer leases of this sort have encouraged investment in the forestry sector. The

twenty-five duration might not be long enough to overcome investors' concerns about the security of their investment. While private ownership of reforested public domain lands might be preferable in the long-run, FLMA's inclusion of privatization of "bare forests" is a good step in the right direction. However, the proliferation of types of agreements for community tenure of forest lands has created confusion regarding tenure. Even the existence of only two types of industrial agreements, IFMA and TPSA, has caused confusion in that sector.

The area of residual forests may be between 3.4 and 5.7 million hectares. The current TLAs cover 1.3 to 1.8 million hectares of this area. At present, the areas outside of the TLAs are envisioned to be managed by indigenous cultural communities and upland settlers. If current limitations in community forestry continue, up to 4,400 management agreements would be required, clearly an unmanageable number. If CFP guidelines are revised to increase the area covered by CFMA's to 10,000 hectares, the total number of agreements might be much more manageable. In this respect, proposed revisions of the CFP DAO is one of the more significant policy actions currently being considered. However, the community agreements and management schemes have not been fully tested yet in the field.

The performance indicators for this policy action for the third tranche are to: develop guidelines for AO 42 and to implement agreed upon study recommendations for increased tenure security. The guidelines for AO 42 have been developed. The agreed upon investigations of the legal and institutional issues surrounding tenure on ancestral land and for upland settlers is on schedule to be completed by the tranche deadline of December 1992. However, it is not clear whether these indicators are sufficient or the most appropriate to meet the objective of a sustainable supply of wood from the forests and plantations of the Philippines.

- Recommendations:

- DENR should simplify tenurial instruments, limiting the number to two broad types of tenurial agreements if possible. These should be adaptable to varying local conditions and community interests, e.g., one which grants tenure rights to communities and indigenous upland farm families (i.e., smallholders), and another which grants tenure to individual and companies. The Policies Study group should assess options for simplifying tenurial instruments.

- NRMP should investigate means for individual investors and groups of investors to enter into agreements with DENR for forest management. NRMP should also investigate the use of government grants and tax incentives to stimulate such investments.

- NRMP should investigate the potential for and impacts of extending tenure periods beyond the current limit of 50 years and making such extensions conditional on forest management.

- NRMP should investigate expanding the use of privatization for reforestation of "bare forest" lands, in which these lands would be privatized under the condition that a percentage of the land be planted and maintained as a forest. (We recognize this runs contrary to current Constitutional limitations.)

- After the current review of IFMAs and TPSAs is completed, specifically on the bonding and bidding requirements, DENR needs to follow through eliminate any incentives for unsustainable forest management. The examination should be conducted in conjunction with a committee of all interested parties.

- Some areas of residual forests should be managed by DENR to experiment with different management systems and to serve as demonstration areas for management practices in collaboration with the private sector.

2.2. Policy Action No. 2: GOP to collect a substantially large percentage of the raw material value (economic rent) of timber harvested on forest concessions

- Findings:

The Master Plan for Forestry Development (MPFD) recognized that the actual stumpage price paid for wood, defined as the standing value paid for the tree just before felling, does not reflect the cost of growing and managing a tree, or its replacement cost. Nor does the price approach the residual stumpage value, which is the price a purchaser is willing to pay after all his costs, including an acceptable profit margin, have been deducted from the selling price of the logs or processed wood.

To address this issue, NRMP established the above policy action. Its objective is to capture a much larger share of raw material value so that the government, as well as private individuals, benefits from the assets of the public forests.

Apart from increasing forest revenue, the anticipated impacts of this policy action were to:

a) encourage more careful forest management in order to conserve residual trees for future harvests;

b) encourage investment in equipment and technology that processes timber more efficiently; and

c) make logging unprofitable in fragile upland slopes with meager timber stands.

DENR has taken actions to implement this policy action. In June, 1990, it issued Administrative Order 62, Series of 1990, which imposed an environmental fee of ₱500 per cubic meter on logs extracted from the forest in addition to the standard stumpage fee, which varied according to species. For common timber species the standard fee was ₱30 per cubic meter. The environmental fee was imposed to offset adverse environmental effects of logging.

In 1991, DENR issued Administrative Order 56, Series of 1991, which established interim forest charges. These charges cover all forest products of commercial value. The charges for wood are as follows:

PRODUCT	PRICE (P/m3)
Premium hardwood logs	3,000
Common construction logs	550
Pulpwood and matchwood	60
Firewood	10

The interim forest charges are to be replaced soon by a system which will charge a percentage of the actual market price (FOB price) of the round logs or converted products. This percentage has been fixed at 25% for sawlogs and peeler logs and 19% for pulpwood and matchwood. The charge for firewood will still be ₱10 per cubic meter.

A new fee structure will come into operation shortly. For all products except firewood, the fees will be a percentage of actual market prices of wood at twelve centers throughout the country. However, the percentage varies from 25 percent for sawlogs and peeler logs to 19 percent for pulpwood and matchwood. The fee for firewood is fixed at ₱10 per cubic meter. The differing percentages are the result of a compromise between alternative tax levels proposed by Congress. This could create incentives to mis-categorize wood products.

In theory, the forest charges cover the cost of growing and managing the trees as well as a "rental value" for the land and all infrastructure. However, these costs have not been actually measured for the Philippines.

DENR Administrative Order No. 65, Series of 1991, sets out guidelines to calculate the actual FOB price of forest products. DENR will monitor prices at twelve commercial centers once a year

These monitored prices are to be backed up with monthly price surveys in the twelve centers. The FOB price should vary across regions according to the proximity of wood supply and other costs, as well as demand for logs.

The increase in forest charges has increased revenues to GOP. The Winrock monitoring team found it difficult to ascertain the exact revenue collected from the sale of wood from the natural forests, because recorded revenue could not always be accurately traced to source of origin. Comparisons were made with figures from the Community Environment and Natural Resource Offices, DENR Regional Offices and the DENR Headquarters Office. These gave significantly different results. However, using the most accurate data from the regional offices, Winrock determined that revenue collected in 1991 was 7-1/2 times greater than that collected in 1989.

In contrast, the revenue collected per cubic meter was 15.3 times greater in 1991 than in 1989. This means that the revenue per unit volume collected in 1991 was substantially less than that collected in 1989. The actual volume reported in 1991 was 1.1 million cubic meters compared to 2.3 million cubic meters in 1989. This drop in volume can be partially explained by the reduction of the area of TLAs and the reduction in the annual allowable cuts, but it is also likely that it reflects under reporting.

Consumption of wood in the Philippines rose from approximately 4.3 million cubic meters in 1989 to approximately 4.7 million cubic meters in 1991 (Annex 3). In both years imports of roundwood and a small quantity of sawnwood were about 400,000 cubic meters. Thus domestic production was 3.9 million cubic meters in 1989 and 4.3 million cubic meters in 1991. In 1989, 1.6 million cubic meters of wood was produced which was not subject to forest fees. In 1991, this volume rose to 3.2 million cubic meters. Although some of this increase can be attributed to increased production of coconut lumber, the implication of the preceding discussion is that a substantial volume of wood was cut for which forest fees were not collected (there are, of course, no data on the actual volume for which fees were not collected).

The key people who record the amount of logs removed from the forest are amongst the lowest paid cadre in DENR. On paper, DENR has an elaborate monitoring system with various checkpoints from the forest to the factory, but again the monitors are relatively low paid. Thus, there is the temptation not to record or monitor all removals from legal and illegal sources, particularly if those removing the logs are supplementing the checker's income.

Thus, the increase in forest charges may have created incentives for under-reporting. These illegal removals are likely to encourage non-sustainable management practices on all types of forests, including virgin forests and fragile upland slopes. On the positive side, increased forest charges may induce many more private individuals to invest in tree growing (outside forest lands) as a commercial venture.

It is very unlikely that increased forest charges have encouraged more careful forest management or efficient processing, primarily because of where the fee is assessed. DENR's forest charges are levied on the actual logs removed from the forest, not on the standing tree. Thus, undesirable trees and felled wood (e.g., crooked or small diameter trees, tops and logs which have defects or irregular cross sections) are left in forest because a smaller percentage of that wood can be converted into a marketable product. If stumpage prices increase significantly, as they have done recently, then the logger is likely to leave even more wood in the forest, removing only the very best and largest logs which will give the greatest returns. This response facilitates neither careful forest management nor increased processing efficiency. Proper forest management often requires the removal of the poor quality as well as the high quality products. And if only the best logs are removed from the forest, the sawmill owner has little incentive to increase processing efficiency.

- Conclusions:

The fees charged for wood and other forest products coming from government-owned natural forests and plantations have increased over fifteen fold. This was done in order that the government rather than the logger or sawmill owner would capture this value. The increase in forest charges has dramatically increased forest revenues. Because of poor book-keeping and inconsistencies among the revenue records of local, regional and central DENR offices, recorded revenue from forest charges could not always be traced to their source. However, Winrock was able to estimate that the revenue from the sale of forest products was over seven times higher in 1991 than 1989. This meets one of the third tranche performance indicators for this policy action.

It appears likely, however, that the increased charges caused some wood to go unreported. The 1991 recorded volume on which revenue was collected was approximately half that of the 1989 volume. During the same period, domestic demand for wood increased and wood imports remained constant. Some of the increased wood demand was met by coconut wood and illegal logging, but it also is likely that unrecorded wood is being removed from the natural forest by legitimate loggers.

One weakness of the present system appears to be the low pay of the recorders and monitors of logs. The value of one cubic meter

of sawlog is more than twice their daily wage. If they and the people who control them, were to receive a percentage of the value of the products, then an incentive would exist to increase recorded volumes, with benefits both to the government and to the people managing the forests. No amount of checks and controls will stop unrecorded (legal and illegal) logs leaving the forests as long as rewards for correct reporting are less than the rewards (bribes) for under reporting.

The fixed percentages of 25 and 19 are supposed to be the residual stumpage value of the log. It is not clear why the residual stumpage value of pulpwood and matchwood should be a lower percentage of the round log price than that for sawlogs and peeler logs.

The cost of growing and managing trees is important to determine, because once new tenure agreements come into force, the private managers, and not the government, should receive this portion of the charges. The government should receive only the land rental value, as well as charge for use of government provided infrastructure (e.g., roads). LBII's analysis of forest charge collection procedures should result in a system which allows tracing all costs and revenues to their origin

The current practice of charging for what is taken out of the forest, rather than what is cut leads to waste in the forest, loss of government revenue and a greater number of trees cut to meet demand. Only the best logs are removed from the forest. Utilization and revenue could be increased if the charges were made on the standing volume instead of the removed volume.

Charging for the standing volume would require well trained and well paid people capable of estimating standing volume. Monitoring under this approach requires site verification that the cutting prescriptions have been followed. Thus, all subsequent checkpoints and controls could be removed, greatly simplifying the monitoring task, if these conditions were attainable. However, monitoring of forest management along these lines has definite increased cost implications for DENR and assumes adequate numbers of qualified staff which DENR currently lacks.

Which ever system is used, all the residual forest areas should be opened up for sustainable management. This might lead to a reduction in illegal and unrecorded removals and a marked increase in revenue collection.

Increasing fees on logs removed from public forests has had a dramatic effect on the revenue collected by the government. However, it is very unlikely that increased fees have improved forest management, increased efficiency in logging and wood processing or stopped logging in fragile areas. More illegal and

unrecorded logging seems to be taking place. With insecurity of supply and prices assessed only on wood removed from the forest, there is little incentive to invest in more efficient equipment and technology.

- Recommendations:

- DENR should clarify the economic basis for the new forest fees and justify the use of different percentages on various roundwood products. This should be done in cooperation with the growers, managers, end users and NGOs so that they can see how the prices are derived.
- Based on the results of the LBII study, DENR should revise its accounting system so that all costs and revenues can be easily traced to their origin. In addition to the current indicator of collecting 80% of potential revenues, establishment of this system in DENR should be a performance indicator for the fourth tranche.
- NRMP should conduct a study on how the forest charge should be allocated between growing and management costs and rents on land and infrastructure.
- NRMP should exam the creation of economic incentives to reduce under reporting of timber harvests and make recommendations for implementing those incentives.
- NRMP should develop and test, in pilot areas, a system for charging forest fees on standing timber.

2.3 Policy Action No. 3: Revoke or amend regulations that restrict entry/exit of firms to and from forest products industries.

- Findings:

This policy strives to promote competition in the forest products industry and facilitate adaptation in the sector to changing conditions in the forest resource. The forest products industry includes supply, transport and utilization of wood and other forest products. To achieve these objectives, removal of constraints on raw materials, products and technology, as well as barriers to movement into and out of the forest products industries, are encouraged. Though the policy statement refers to entry and exit to and from the forest products industries, the underlying, more important issue is reducing the constraints to investment in this sector.

Policy concerns of the forest products industry have been identified in joint discussions among DENR, NRMP and industry representatives. From the industry's point of view, security of raw product supply is the biggest issue. The pending action on a commercial logging ban in its various forms remains a dominant source of uncertainty for the forest products industries. Other actions such as the new forest charges schedule, the ban on lumber exports and a ban on cutting of narra (*Pterocarpus spp*) have also created uncertainty.

Financing is difficult for industry to obtain because of the uncertainty in log supply. Banks and other financial institutions are reluctant to lend to the forest products industry due to pending bans on harvest. Working capital and loans for capital expenditures are reported to carry interest charges of over 20%. Financing is available from the Asian Development Bank (ADB) for forest plantations, but the flow of funds is complicated. IFMA holders pay 14% interest on ADB loans which originate as 6% loans to the Central Bank which on-lends to the Land Bank that finally lends to the IFMA holder.

The industry obtains its supply from several sources, including the natural forest; plantations of timber, coconuts and rubber wood; trees outside the forest and timber imports. However, the largest supply comes from the dipterocarp forests and future supply, in adequate quantities, is uncertain. The Timber License Agreements have been reduced and are being phased out. In their place, various other agreements have been authorized, ranging from Industrial Forest Management Agreements (IFMA) to Community Forestry Management Agreements (CFMA). These agreements are supposed to give more security of tenure to the agreement holders, but as yet, they only cover a small area of the residual

forests. Indeed, one main thrust of the IFMA's is to promote plantations of fast growing non-dipterocarp species, thus switching future supply away from dipterocarps.

To what extent it is necessary to shift supply away from dipterocarps is unknown. There is little information regarding the exact area of residual forests, their current growing stock and yield or future potential. What is known is that the industry is presently faced with a diminishing supply of "legal" logs and the shortfall in demand cannot be met from imported roundwood and timber products. The difference is coming from illegal sources principally from residual forests that are not covered by agreements.

Some species and grades of forest products are banned from removal from the region of origin and thus, industry is forced to locate within the region. This may be a restriction to efficient allocation of industrial resources. Regulations of the transport of logs and wood product also poses barriers to efficient operation. For example, to transport products out of the forest, a Certificate of Timber/Log Origin (CTO/CLO) must be obtained. A CTO/CLO requires approval at three levels within DENR: community (CENRO), provincial (PENRO) and regional (RED). This 30-day approval process is a constraint to processing and exporting forest products expeditiously. Expeditious transportation is also hindered by the several check points and road blocks between the forest and the processing plant or end user. Not only does this delay the transport of wood and wood products, but it also exposes the system to abuse even for legitimate operations.

At present, little information is available about the formal or informal wood processing industry. There is need to obtain an industrial profile of the wood processors, such as sawmills, plywood plants, pulpmills, and wood using industries, including rattan (e.g. furniture and joinery factories as well as many small scale wood producing/wood using cottage industries plus those using non-wood products). NRMP is currently obtaining information on equipment, labor force, rated capacity, supply source, etc. in Region 11. This information should assist the industry to improve its efficiency.

Taxes and tariffs are also a problem for the forest industries. Bender (1991) raises the concern about industry having to pay various taxes on imported wood when much of the resulting finished product is exported. These taxes increase the price of the product and are a drawback when competing on international markets. Some of these concerns have been addressed in the proposed Forestry Code of 1992 which deals with tariffs and other custom duties. The Code proposes to remove tariffs and taxes from imported wood material and wood industry machinery.

- Conclusions:

The major barrier to entry and exit in the forest products industry is uncertainty about supply. One means to reduce this uncertainty is to place residual forests under management as soon as possible. Promoting whole tree utilization could also improve supply sources and reduce uncertainties at the same time as increasing efficient use of wood. Importation of wood, perhaps soft wood from the U.S., might be a possibility for meeting the supply requirements of some forest products industries.

NRMP is presently obtaining industry profiles, both for formal and informal wood using industries. Such information will help focus assistance to forest product industries. It should also highlight the number and kind of people that are employed in this sector. These profiles will also provide information on the impacts of a commercial logging ban in all natural forests. However, this work needs to be expanded to regions in addition to Region 11.

Working capital and loans are expensive and difficult to obtain, especially for long term investments such as industrial plantations. Taxes and tariffs also present a problem industries in the international wood products trade. Some of these concerns are being addressed in the proposed Forestry Code of 1992, but others should be examined to see if solutions can be found.

Tenure insecurity continues to be a barrier to entry and investment in the forest products industry. This issue is addressed in the section of this report on Policy Action No. 1.

- Recommendations:

- The on-going review of existing policies and regulations concerning management agreements, regional and international import and export restrictions and log transport needs to identify how they affect investment in the forest products industry and recommend necessary changes. This review is consistent with the existing performance indicator.

- Expand the industry profiles studies to additional regions.

- The policy studies group of NRMP should assess the costs and technology requirements involved with importing whole trees (soft woods) from the U.S. as a possible means of assuring supply for some of the forest products industries.

2.4 Policy Action No. 4: Encourage private investment and competition in forest products sector by divesting/liquidating parastatals and/or GOP equity/assets in forest enterprises.

- Findings:

The Government of the Philippines owns assets in fourteen forest products firms. These assets were acquired by the Government through foreclosure on "behest" loans owed to governmental financing institutions. The private sector typically views governmental ownership as a disincentive to investment since it inhibits free market competition. As a result Government holdings, therefore, it was assumed that prospective investors may be reluctant to invest in some wood products industries.

One of the strategies undertaken by the government to increase competition is by selling all or a major portion of its equity in the parastatals. Despite efforts to privatize its holdings, the Government equity positions in the forest products sector still appear substantial, based on the initial appraisal value when the Government assumed ownership. NRMP encourages the privatization of government holdings in the forestry sector. However, only marginal progress has been made because of inoperable or obsolete conditions of much of the plant and equipment.

Eleven out of fourteen government controlled forest products firms are defunct, with machinery of relatively little value. Of the eleven firms not working, four have been sold, part of the assets of three firms have been sold, three are unsold and the ownership of one is disputed. Of the three working firms, one is leased, one consists only of a forest plantation, and the other is the Paper Industries Corporation of the Philippines (PICOP). The Government's total assets based on the transfer price as of September 1990 was P4.7 billion of which PICOP's value amounted to P2.6 billion. The next largest asset is Cellophil valued at P400 million.

There are several key factors which most affect the operation of the forest product sector. These include: security of and type of supply, movement of raw material, location of manufacture, and various taxes and tariffs, and the constitutional requirement that a minimum of 60% equity must be held by Filipino nationals. The latter is a major constraint to foreign investment, in general, and to investment in the forest sector, in particular. These factors inhibit investment and competition far more than government holdings.

PICOP, the largest forestry firm under government ownership, is an integrated forest industries complex. It has a sawmill, plywood and blackboard mill, pulp and paper complex and its own power plant run from mill residues. It has a logging unit servicing the mills from plantations and natural forests, an

extension service which assists farmers in tree planting and agricultural programs, a nursery to supply plants to farmers and its plantation and an applied research section. It has been suggested that PICOP be broken up and its constituent parts sold separately.

PICOP is fully operational but carries a large debt. In the early 1980's, approximately P300 million were borrowed in U.S. dollar denominated loans through an international banking consortium with GOP loan guarantees. The exchange rate at that time was about P4 to US\$1. At the present exchange rate of P24 to US \$1, this debt is now six times larger. Because of the unfavorable exchange trends, PICOP services only its debt but has not been repaying its loans, which discourages potential buyers.

Imported newsprint faces a thirty percent tariff which is favorable to PICOP, the sole manufacturer of newsprint in the Philippines. The only justification for this tariff is that it has been a government policy to maintain a domestic source of newsprint while PICOP conducts research and development into tropical pulp and paper technology.

PICOP has invested in plantations to secure and stabilize its raw material supply. Most plantations are not yet mature and are in the first rotation, i.e., they are in the development phase. PICOP conducts results-oriented applied research programs focusing on increased yields of principal plantation species. Over the past few years, PICOP has initiated and managed an agricultural outreach program that encourages farmers to supply PICOP with raw materials from agro-forestry woodlots.

PICOP operations could be improved or adjusted to meet the wood supply requirements of other forest products industries. For example, some "reject" lauan logs that are chipped for pulp at PICOP could be sawn into export grade sawnwood suitable for the furniture industry. Furniture manufacturers have identified shortages of supply as a principal constraint.

Cellophil is the other major parastatal investment, but it is not a functioning firm. It was built to produce high grade pulp and paper. Parts of Cellophil's assets have been sold and as a result, Cellophil cannot be valued as an operating enterprise. It was built in a very poor location and its wood-based raw materials supply is insufficient to sustain an operation. Technology has by-passed Cellophil; its 30 year old technology is obsolete. Residual value can only be realized by selling it in parcels.

The other working company with debt to the government of P187 million is Santa Ines Melale Forest Products. This was offered for sale, but the bid price was not accepted. A leased agreement was subsequently established and the company is now fully

operational. Thus, its privatization would probably not increase competition.

The NRMP "privatization" policy study identified retooling forest industries as a way to improve their efficiency and increase their competitiveness. According to the study's scope of work, retooling was viewed as imperative when the industry has overcapacity and when machinery is designed for large diameter logs. However, overcapacity should encourage some firms to leave the industry with the remaining firms adapting existing equipment to current raw material requirements, especially when there is uncertainty of supply.

As a way to improve competitiveness and hear the concerns of the various parties, NRMP has encouraged better dialogue among the suppliers and users of wood. Three seminars were organized with representatives of all wood using industries and DENR staff. Participants discussed a wide range of issues pertinent to the forest industries and produced a number of papers on how the industry could be assisted. These meetings have the potential for improving communication between government and industry.

The third tranche performance indicator originally specified that "more than 50% of aggregate equity/assets as of September 1990 be offered for sale on fair market terms and conditions and be widely publicized." This indicator has been revised for the third tranche to "more than 25%" based on difficulties experienced in placement of PICOP shares on the financial market. The 50% indicator is now the requirement for the fourth tranche.

- Conclusions:

The third tranche indicator has been met. However, achieving this indicator does not stimulate competition because most of the firms were inoperable due to obsolescence of plant and equipment. This also applies to another six firms still to be sold.

PICOP is the sole manufacturer of newsprint in the Philippines. Privatizing it will not increase competition for this product because current demand does not warrant another newsprint mill. PICOP's operations are dependent on existing tariffs; however, the Government plans to eliminate them gradually. This should force PICOP to become a self-sufficient enterprise that can compete with foreign suppliers of newsprint, or cease operations because it is dependent of government subsidies.

The break up of PICOP will not increase competition or efficiency. The separate units are simply too intertwined to operate independently. The relative isolation of the PICOP operation impedes the dissemination of market intelligence, as well as the exposure to opportunities in expanding product lines. For example, wood raw material at the mill site could be

allocated more profitably if all market opportunities were known. In short, privatization is not an important means of promoting competition the forest products industry.

- Recommendation:

- Privatization should be dropped as a policy objective under NRMP immediately. NRMP efforts should be concentrated on the remaining seven policy areas.

2.5 Policy Action 5: Preserve remaining old growth forests and the biodiversity therein

- Findings:

In the late 1980s an advance party of specialists working on a special analysis of biodiversity for the Master Plan for Forestry Development (MPFD) estimated that the virgin dipterocarp forests of the Philippines were being reduced by about 40,000 hectares per year. The replacement of these forests by residual forests seemed inevitable in the absence of government action. To forestall this inevitability, NRMP adopted the preservation of remaining old growth forest as a major focus for its activities. The need for preserving old growth remains a critical environmental issue for the Philippines.

The contract for the policy implementation component of NRMP identifies this policy area as "...effectively stop(ping) logging in the remaining primary (old growth) forests", reflecting the focus of activities in this area -- to protect old growth forests by issuing and implementing an old growth logging ban. This focus was translated into tasks identified in the contract for policy implementation as well as specific tranche performance indicators for DENR.

The contract identified the major need in this policy area as monitoring compliance by logging companies and thus focussed on periodic aerial monitoring of old-growth stands supported by stereoscopic aerial photography. The contract also identified upland community forestry activities as a mechanism for protecting old growth forests. (The community forestry activities have been initiated under Policy Action 8 and are discussed in section 2.8.)

Early in program implementation it became clear that the policy implementation activities had to shift from periodic monitoring of old growth forests to delineation of those forests. This shift was necessary for practical and budgetary reasons as well as changes in existing conditions. Practically, old growth forests could not be monitored if they were not delineated, and at the beginning of the program only approximate areas of old

growth had been mapped. In regard to budget, as early as August 1991 the Chief of Party for policy implementation identified that funding for these activities was sufficient for only one overflight of old growth. Changes in conditions also occurred. The contract appeared to be based on the assumption that enforcing a log ban would concentrate on the existing sixty-three Timber Licensing Agreements (TLAs). However, this failed to acknowledge the role of agricultural encroachment on old growth forests, a critical factor identified in the Master Plan for Forestry Development. The threat from agricultural encroachment and small scale logging was even further increased with the suspension by DENR of over half of the TLAs.

The general program work plan for policy implementation reflects these practical and budgetary constraints as well as changes in conditions. The work plan calls for using aerial methods to delineate old growth forest, identifying aerial methods for use in enforcing the ban and providing training in the use of those methods. The contractor (DAI) has proceeded to implement this work plan. Unfortunately, the contract has not been amended to reflect these new realities. Indeed, the existing work plan under which the contractor is operating has only received conditional approval by USAID. At the time of this evaluation, the contractor had nearly completed all of the activities in the provisional workplan.

The tranche performance indicators for this policy action are shown in the Policy Agenda Matrix (see beginning of Section 2). As with the contract, the tranche conditions focus on protecting old growth and the biodiversity therein through the promulgation and implementation of a logging ban in old growth forests. DENR has met the first and second tranche indicators and it appears that it will meet the indicators for the third tranche.

The old growth activities of NRMP have been a clear success. In 1991 DENR issued Administrative Order No. 24 which banned logging in old growth forests. However, that order could not be implemented, primarily because DENR had not mapped old growth forests. As one environmental NGO representative stated, "It is commendable that DENR issued an AO to protect old growth forests, but how can it protect that which it has not even identified?"

NRMP, through the DAI aerial support activities, has helped DENR overcome this obstacle by providing a first cut on the location of old growth forests. Through the use of aerial photography and videography coupled with a Global Positioning System (GPS), NRMP mapped closed canopy forest for all of the Philippines. The videos and maps produced by NRMP were officially turned over to DENR on May 14, 1992.

To assist DENR in the future use of this technology for monitoring and enforcing the logging ban in old growth forests,

NRMP has conducted training workshops. The first workshop was held on June 16-19, 1992. This workshop was for Regional Technical Directors (RTDs) for Forest Management and RTDs for Environmental Management. NRMP is in the process of holding subsequent workshops (one each in Luzon, Visayas and Mindanao) for Regional Technical Directors; other workshops are planned for PENROs and CENROs.

The closed canopy forest mapped by NRMP covers 1.8 million hectares, only some portion of which is old growth dipterocarp forest. Included in the mapped areas are closed canopy residual forests, some mossy forests and some non-dipterocarp forests. NRMP estimates that old growth dipterocarp forests cover only 900,000 hectares. Final delineation of old growth forest will have to be made using low level stereoscopic aerial photography and ground truthing. As several individuals in the central and regional offices of DENR as well as in the NGO community have observed, until final demarcation occurs, the ban on logging in old growth forests cannot be fully implemented.

In January 1992, responding to this need, DENR established a national secretariat and technical working group to mark the boundaries of old growth forests on the ground. The National Mapping and Resource Information Agency (NAMRIA) will lead this effort. The secretariat has established 130 mapping teams of 5 individuals each to implement the project (30 teams from NAMRIA and 100 teams from the DENR regions). These teams will use the NRMP maps as a starting point but will also consult previous mapping efforts such as the Second National Forest Inventory conducted with the support of the German government and the forest condition maps created using SPOT satellite imagery supported by the Swedish government and the World Bank. The teams will supplement this information with 1:25,000 stereoscopic aerial photography where available. To facilitate mapping in existing TLAs, DENR issued AO 17, Series of 1992, which requires TLA holders to provide DENR with stereoscopic aerial photos. Finally, the teams will physically mark the limits of old growth forests on the ground as specified by DENR Memorandum Circular No. 14, Series of 1991.

At the time of this evaluation, actual ground demarcation of old growth forests had not begun. The secretariat was awaiting release of funds from DENR to begin the project. The secretariat had requested \$25 million for a two year period. At this time it appears that DENR will rely upon foreign donors for these funds. The Asian Development Bank's forestry sector loan is scheduled to provide \$8.3 million during the three year period from 1993 through 1995. The World Bank's ENR-SECAL program also has some funds earmarked for demarcation. It is unclear how the shortfall in funding will be met by DENR.

In addition to demarcation, GOP and DENR have taken action or are preparing to take action to enforce the old growth logging ban. In 1992, the Congress passed House Bill No. 34696 which establishes a National Integrated Protected Areas System (NIPAS) with a \$20 million dollar budget. DENR is preparing an Executive Order which will include the 1.8 million hectares of closed canopy forest in NIPAS. Staff at DENR assured the evaluators that the order is being written so that the final old growth designation for inclusion in NIPAS will occur only after demarcation, thus preventing the permanent designation of closed canopy residual forest as old growth.

Through ENR-SECAL, DENR is also creating mechanisms for enforcing the old growth logging ban. Local Multisectoral Forest Protection Committees will be established in several regions to monitor forest product harvesting and wood processing. The program is also improving the log monitoring system and providing support in the prosecution of illegal loggers.

Although the old growth protection activities of NRMP have made a positive impact, issues still remain which need to be addressed. One such issue is prioritization of protection. Given limited budgets and enforcement capabilities, DENR needs to identify which areas should be delineated and protected first. Prioritization should be based on the value of the old growth forests as well as the potential for threat. Value of old growth could be determined by measures of biodiversity (diversity of species, families and ecosystems as well as diversity of ecological structures), relative importance of watersheds, as well as spatial arrangement (fragmentation).

Spatial arrangement may be relatively easy issue to address. Generally, large contiguous old growth forests have greater biological values than small fragmented areas. Focussing on larger areas could thus have greater ecological impacts while reducing unit costs of demarcation. (Smaller areas usually have more boundary per unit area than larger areas.) Threat could be determined from activities identified during the aerial mapping undertaken by DAI as well as information from regional personnel.

Another issue which has not been addressed by NRMP is the definition of the ecological or structural biodiversity represented in old growth. Currently the protection of old growth is based on the faith that it contains a unique biodiversity, yet little is known about that biodiversity and how it may differ from the biodiversity represented in residual forests. Although the NIPAS program of DENR is beginning to look at this issue, much remains to be done.

Understanding the biodiversity of old growth forests will be necessary for the long-term management of these areas. DENR and NRMP have recently begun to address long-term management of old

growth. This work is currently part of four community forestry sites which include old growth forests. Understanding the biodiversity of old growth may also assist in determining sustainable management of residual forests and will be necessary for prioritizing protection efforts within the old growth areas. The National Museum funded by the MacArthur Foundation is working on cataloguing bio-diversity, the results of which could assist DENR to develop appropriate policies regarding biodiversity. However, this effort is moving slowly and needs to be expanded.

Finally, it is not clear at this time that the protection of old growth has been integrated into the community forestry and residual forest management efforts of DENR. Clearly it has not been integrated into the activities of NRMP in these areas. Protection of old growth is not a criteria for the establishment of community forestry projects. Nor are buffer areas around critical old growth being targeted for residual forest management activities.

- Conclusions:

Some of the assumptions underlying the contract for policy implementation have proven to be incorrect. This is not surprising in that policy implementation is by its nature new and must occur in an often changing political and institutional environment.

However, as a result of these changed conditions, the existing contract does not reflect the nature of work which has been done by the contractor to support the protection of old growth forests.

Although actual marking of old growth forest has not begun, it appears that the work of NRMP has facilitated a commitment by DENR to protect old growth forests. It has led to the development of a major program in DENR to map and monument old growth forests. Also, through the mapping exercise and subsequent regional training, NRMP has demonstrated to the regions, the ultimate implementors of the old growth logging ban, the value of aerial techniques.

However, demarcation of old growth, which is critical for its protection, is dependent upon uncertain funding. Prioritization of old growth areas by their biological value as well as by threat could help to insure that what funding does become available will be used in the most important areas. Unfortunately, no prioritization scheme exists.

DENR is moving forward with implementing the old growth logging ban through its traditional regulatory activities as well as more innovative activities under NIPAS and ENR-SECAL. Including all of the 1.3 million hectares of closed canopy forest in NIPAS,

however, could have the effect of "locking up" many hectares of closed canopy residual forest. The permanent designation of closed canopy residual forest as old growth could remove some of the best managed and most productive forests from the timber base.

At this time, no effort has been made through NRMP to understand the biological or structural importance of biodiversity in old growth forests. Nor has DENR or NRMP used old growth to focus their community forestry or residual forest management activities.

- Recommendations:

- The fourth tranche indicators should include requirements for funding on the ground demarcation of old growth areas.
- Although including old growth in NIPAS will help insure future protection, the Executive Order must assure that closed canopy residual forests do not become "locked up" as old growth areas.
- NRMP should work with regional personnel to develop a prioritization scheme for the demarcation of old growth and then help to implement those plans.
- Efforts should be expanded to catalog and define the biodiversity of old growth forests and its role in sustaining the forest ecosystem, possibly involving WWF and state universities.
- NRMP/DAI should work with DENR to find ways to integrate old growth protection into its community forestry and residual forest management activities through selection of common field sites.

2.6 Policy Action 6: Rationalize DENR management of residual forests and provide adequate financial resources to carry out its mandate

- Findings:

On May 3, 1991, Secretary Fulgencio S. Factoran, Jr. signed DENR Administrative Order No. 24 which banned logging in virgin forests and required all logging in natural forests to be confined to the residual forest beginning January 1, 1992. This action was anticipated by NRMP which has a major goal to promote ecologically sustainable management of residual dipterocarp forests. Administrative Order No. 24 makes this goal even more important than it was when NRMP was conceived.

The statement of work (SOW) for the policy implementation activities of NRMP identifies this policy area as: "To develop

and implement site-specific management plans for the conservation and rational development of all of the country's residual forests." (C-2) This in turn is translated into specific requirements in the SOW and performance indicators for tranche releases.

The activities undertaken in this policy action are based on assumptions regarding the physical character of the residual forest as well as the institutional barriers to their rational management. In regard to the physical characteristics of the forest, NRMP program design assumed that ecological conditions in the residual forests would vary from site to site, thus requiring site specific management planning. NRMP design also assumed that site specific resource inventory would be critical because no one was quite sure what the resource conditions were in the residual forests, particularly in regards to non-timber resources. Indeed, even the area of residual forests is uncertain with estimates ranging from 3.4 to 5.7 million hectares (see Annex 3). Implementation of activities under this policy action has shown that these assumptions were correct.

In regard to institutional barriers to rational management, NRMP program design assumed that rational forest management in the Philippines had not occurred because foresters had been prohibited from applying "their skills with professional integrity, guided by what is required in a given situation to conserve the productivity and environmental functions of forests." (C-6) Specifically, the SOW states that industrial foresters had been under pressure by their employers to practice unsustainable forestry and that government foresters did not have the logistical support necessary to practice their profession and were under pressure to submit reports which supported current policy rather than rational management.

To overcome these institutional barriers, NRMP proposed the creation of private forestry institutions which could undertake sound management. These Forestry Service Organizations (FSOs) would, under contract to government or industry, inventory the residual forests, develop forest plans and monitor plan implementation. The FSO structure was supposed to insulate decision making from government bureaucracy and industrial vested interests, and thus allow sound forestry to be practiced.

Unfortunately, the assumption that FSOs would be free of industry or government pressure ignores the basic economic reasons that such pressure exists (if it does) for industry and government foresters. If industrial or government foresters knowingly practice poor forestry it is because they feel their livelihood depends upon so doing. Under the proposed NRMP system, FSOs will still be dependent upon government or industry for their income. As such the only change is the mechanism through which that pressure is applied. Under the old system the mechanism was

future employment. Under the new system the mechanism will be future management contracts.

The assumption that foresters free of government or industry pressure would make the "correct" management decision for each site also ignores the social realities of forest management. Forest management is an art as well as a science and is concerned with social as well as ecological factors. There is no "professional" or scientific model which can make the "correct" decision for a particular site. Rather, a "correct" decision can only be identified through a process which involves the affected parties (government, industry and citizens) in assessment of their needs and the site's ability to provide for those needs. A major failure of the design of NRMP is that it did not address these process concerns.

The SOW required the contractor (DAI) to develop and refine the FSO approach, prepare draft administrative guidelines for selecting FSOs, conduct comprehensive inventories and prepare "conservation and management" plans for 60,000 hectares of residual forest, train DENR and the FSOs in proper forest inventory and management, and insure that the methodologies developed were adopted by DENR. The plans developed under the contract had to: establish baseline data for planning and monitoring plan implementation, computerize that data, quantify timber and non-timber resources, project future resource condition and outputs, specify silvicultural and other treatments, specify infrastructure development (roads and trails), and provide maps of vegetative cover, slope, major physical features, and operational plans, and computerize data.

Because the project design viewed rational forest management as merely applying the proper technological approach, the SOW became encumbered with a level of specificity which focussed the program on technical rather than process issues. For instance, the SOW required the contractor to conduct 100% inventories on 30,000 hectares of trees with diameter at breast height (dbh) of 10 or more centimeters and all commercially viable non-timber species. On the remaining 30,000 hectares these same resources were to be inventoried at a 10 to 25 percent level. The SOW also required that maps at a scale of 1:10,000 be prepared for vegetative cover, slope (with the SOW specifying four specific slope categories), and major features (streams, roads, buildings, etc.). The SOW further required that "operation maps for each management bloc (approximately 10 hectares/block)" be prepared at a scale of 1:2,000 reproducing the information on the 1:10,000 maps in greater detail.

The work plan which DAI prepared for this policy area restated the goal as "Establish and test a practical new system for planning and managing the residual forests." It responded to the general requirements of the SOW in regards to the development of

the FSO system and preparation of site specific management plans, but ignored the specific requirements for inventories. The technical staff DAI pointed out that 100 percent inventory on 30,000 hectares was impractical and unnecessary. (The evaluators concur with this assessment, as we are aware of no forest management system in the world which requires 100 percent inventories.) Alternatively, DAI proposed that the program establish a cost-effective inventory methodology which could be used in management planning.

The specificity of the SOW in regard to inventories and mapping has created tension between USAID and the contractor. Such specificity was not warranted in the SOW, particularly when the contractor was being asked to develop a new approach to management planning. In the absence of information on the best inventory methods (a situation which existed at the time the SOW was prepared and continues to exist today) a more reasonable approach would have been to require the contractor to identify and implement an appropriate methodology.

The tension created by this issue has contributed to the fact that DAI is operating with a conditionally approved work plan. Nonetheless, DAI has moved forward with its proposed approach to developing a rational forest management system for the residual forests. Under the workplan, DAI will develop a generally accepted format for site specific management plans, develop and test guidelines for selecting FSOs, prepare management plans for 60,000 hectares of residual forest, and have DENR use the plans as basis for awarding resource management contracts.

The work is concentrated on three 2,100 hectare pilot sites (one each in regions 2, 8 and 11). At each site three natural resource inventory methods are being evaluated. A methodology for collecting socio-economic data for each site is also being tested. DAI has developed a draft outline for the management plans, which will be tested at the three sites. The technical staff at DAI is attempting to write a management plan for the pilot site in region 11.

Generally, the technical assistance activities supporting the rationalization of residual forest management are behind schedule. Data collection has been completed at only one of the three sites, so the cost-effectiveness analysis of inventory methodologies has not been conducted. The work plan called for completion of the pilot area management plans by April, 1992, but it now appears that they will not be completed until at least the end of 1992. At the time of the evaluation, no specific plans existed for how the management planning will be expanded from 6,300 to 60,000 hectares.

The tranche performance indicators for rationalization of residual forest management are shown in the Policy Agenda Matrix

(see beginning of Section 2). The indicators have been met for the first and second tranches and it appears the indicator for the third tranche will also be met. It is not clear, however, that the indicator measures movement towards rational management of the residual forest. The budget for forest management covers a wide variety of activities, some of which may have little or nothing to do with rational management of residual forests. Winrock International has addressed this problem in its monitoring reports on tranche requirements.

Several issues have affect NRMP's ability to rationalize management of residual forests. Arguably the most important issue is the possible enactment by congress of a total ban on commercial logging. At this point in time it is difficult to assess the eventual impact of NRMP on management of residual forests, because the political uncertainty surrounding the log ban issue. During the last session of Congress a bill banning commercial logging on all forests, including residual forests, almost was signed into law. The bill would probably have passed if the administration had supported it. The same bill may be introduced again. If a ban on commercial logging becomes law, the objective of rationalizing management of residual forests becomes moot. The issue at that point will be only the rationalization of noncommercial uses of the forest. In that event, the relevance of NRMP and DENR management planning will have to be reevaluated.

Serious issues also surround the question of whether the approach being taken by NRMP is embraced by DENR. NRMP approaches forest management through a land based process. Under this approach the natural resources and the socio-economic situation of an area are inventoried, management options are generated and selected, and finally, the appropriate management agreements are developed to implement the management plan. DENR, however, currently manages the forest beginning with the management agreements. Under this system the type of agreement is determined before the area is assessed, and the assessment of an area depends upon the type of agreement being applied for. There are fundamental differences between these two types of management approaches.

The implementation of the technical support activities of NRMP have not contributed to overcoming these fundamental differences. Initial efforts by DAI staff to engage FMB in their work proved unsuccessful. Consequently, the residual forest management activities of NRMP have been managed as a Manila based special project with only minimal contact with the units of DENR which implement forest management. Neither the Forest Management Bureau (FMB), the central staff office primarily concerned with forest management, nor the regional offices, the line offices responsible for residual forest management, have been intimately involved in the activities of NRMP. As a result, there is no

line or staff commitment to or ownership of the NRMP residual management approach.

This lack of commitment can be seen in several areas. For instance, within DENR there are currently three different outlines for residual forest management plans. One was developed with support from the German government as part of a special project. Another was developed by FMB for use in managing residual forests on the remaining TLAs. The third outline was developed by NRMP. At least two of these, the FMB and NRMP outlines, have been adopted by DENR. A recent meeting held to resolve this problem resulted in an agreement that both FMB and NRMP outlines would continue to be used. The FMB outline will be used for TLAs and the NRMP outline will be used for its activities and for TPSAs. However, it is not clear that anyone is interested in applying for a TPSA.

Another sign of the lack of integration is the fact that even while NRMP proceeds with its pilot projects which ostensibly will provide a planning framework for residual forests, the regions are developing regional forest management plans as an outgrowth of the national MPFD. These plans contain management alternatives for residual forests. The planning offices in the regions are not connected with the NRMP process.

Another disturbing sign of commitment in DENR to the activities of NRMP is the lack of interest within the Inventory Section of the Natural Forest Management Division of FMB in the cost-effective analysis being conducted on inventory methods by NRMP. The Inventory Section did not participate in the development of the study outside of submitting comments on an initial proposal. Personnel in the section told evaluators that they did not even know if their comments were acted upon. They also expressed a general disinterest in the study, stating that they had previously looked at alternative inventory methods and had determined that the currently approved 10 percent strip cruise was the best methodology.

Issues also exist with the general approach being taken by NRMP for developing and selecting management alternatives. The management planning efforts of NRMP have focussed almost entirely upon data collection (inventories) and data compilation (management plan outline). Little attention has been paid to how management alternatives will be generated and how decisions will be made.

Most conflicts over the management of public forests have arisen as a result of how decisions are made and not disagreement over the quality of data or how it is compiled. NRMP has not addressed the issue of how decisions will be made and who will participate in the decision making process.

NRMP also has not address how planning areas will be defined. The basic approach being taken by NRMP begins with a planning area, but the program has not established how these areas will be selected -- whether they will be defined by physical, ecological or political boundaries or a combination of all three.

Finally, the activities of this policy action have not been integrated into the other activities of the program. The opportunity exists to locate the expanded residual forest management areas on the borders of critical old growth areas and to involve the community forestry activities in these areas. This would help protect critical old growth and demonstrate how communities can be involved in residual forest management as well as giving an integrated focus to the field activities of NRMP.

- Conclusions:

The residual dipterocarp forests will be the largest source of timber for the Philippines, but their area, stocking density, volume and annual yield is unknown. Likewise the demand for the products from dipterocarp are not well understood. This information is essential if the residual forest is going to be brought under sustainable management.

The physical assumptions underlying the NRMP activities to rationalize management of the residual forests -- that more detailed information is needed on the area and nature of these forests and that management would have to be site specific -- have proven to be valid. However the assumption that the creation of FSOs would lead to professional management appears to be unfounded.

As with its activities under policy action number 5, DAI is operating under only a conditionally approved work plan. Part of the reason for this situation is that the SOW contained an inappropriate level of detail, particularly in regards to inventory requirements. Disagreements about the inventory procedures needed for management planning has caused friction between DAI and USAID which in turn has contributed to the lack of an approved work plan.

DAI is carrying out its activities under this policy action in three 2,100 hectare pilot areas. The inventory and planning methods developed in these pilot areas will eventually be applied to 53,700 hectares of residual forest. At the time of the evaluation, DAI was more than six months behind in its schedule to develop inventory and planning methodologies for residual forest management.

DENR has met the tranche performance indicators for the first two tranches and it appears that it will meet the indicator for the third tranche. It is not clear, however, that the indicator --

increased funding to forest management -- actually measures accomplishments in rational management of residual forests. WINROCK International has adequately addressed this concern in its monitoring reports for the tranches.

The most critical issue facing the management of residual forests is the possible enactment by Congress of a total ban on commercial logging. This issue needs to be resolved so that planning of residual forest management can proceed.

The management approach being taken by NRMP at that currently used by DENR are fundamentally different. The staff and line offices in DENR which are responsible for forest management have not been intimately involved in the development and implementation of the NRMP approach. As a result, it is unclear whether the program is likely to overcome these fundamental differences and gain DENR's acceptance of its approach.

NRMP has focused on the collection and presentation of data. Little time has been spent on designing how decisions will be made and who will be involved in the decision process. Failure to address these process issues could lead to public rejection of the management planning methodology.

As a land based planning approach, the management planning process being developed by NRMP is tied to the determination of planning areas. However, NRMP has not yet addressed how these areas will be defined.

Finally, the residual forest management activities have not been integrated with the other field activities of NRMP -- old growth protection and community forestry. Such linkages could demonstrate the viability of the overall forest management approach being championed by NRMP.

- Recommendations:

- DENR should inventory the size and condition of the residual forest so that it can make reasonable estimates as to what that forest can sustain.

- NRMP should undertake a wood consumption survey and timber trends study to determine the quantity, quality and species of wood used in the Philippines and the quantity exported. (This information is required to determine if the residual forests can meet demand on a sustainable basis.)

- DAI and USAID should reconcile the contract and work plan for management of residual forests.

- DENR should commit to land based planning and management, or at least decide whether it will use a land based or management

agreement driven approach to residual forest management.

- NRMP and DENR should identify the basic planning area for which residual forest management will be conducted.
- NRMP should more intimately involve in its residual forest management activities the DENR staff and line offices responsible for forest management, so that they will develop some ownership of the methodologies being developed.
- NRMP should address the process issues involved with forest management -- How will decisions be made? By whom? The program should investigate the use of processes which involve all of the affected parties (industry, communities, NGOs and government).
- NRMP should integrate its residual management activities with its other field activities -- protection of old growth and community forestry. This should be done during the expansion of management areas.
- DENR and USAID should develop more specific tranche requirements which measure the rationalization of residual forest management. One possible measure could be hectares of forest under rational management as developed by NRMP.

2.7 Policy Action No. 7: Facilitate technology development and transfer in forestry management and preservation plus wood processing.

- Findings:

The Philippines has a well established agriculture and natural resources research network. This network is presently being coordinated and monitored by the Philippine Council for Agriculture Forestry and Natural Resources Research and Development (PCARRD) of the Department of Science and Technology (DOST). The Forestry sector member agencies of this network include the regional offices of the DENR and the Ecosystems Research and Development Bureau (ERDB), the Forest Products Research and Development Institute (FPRDI) of DOST, and State Colleges and Universities. The intent of Policy Action 7 is to improve forestry-sector technology development by: (a) focussing on applied, demand driven research; (b) developing alternative approaches to conducting forestry research; and (c) improving methods for disseminating technologies to end-users. The Technology Development and Transfer (TDT) component supports to these objectives.

To accomplish these objectives, Louis Berger International (LBI), in collaboration with DENR, is charged with eight sub-tasks: (i) identify research gaps and user needs and prepare a

research agenda; (ii) establish a mechanism to implement the initial research agenda; (iii) build a consensus on the initial research agenda and finalize it at a workshop; (iv) identify participating research organizations and fund R&D proposal; (v) transfer technologies to improve wood products industries; (vi) monitor Research and Development (R&D) program and funds; (vii) establish and maintain an R&D network with other national and international entities; (viii) develop and implement an in-country and overseas short-term training plan; and (ix) review the technology transfer plan and make necessary adjustments.

The TDT plan was developed by LBII by conducting a survey of end-users, reviewing and analyzing existing forestry research plans in the research system (DENR/ERDB, FPRDI and PCARRD and private sector research), and through meetings and discussions with users of forestry and forest product research from both the public and private sectors. The TDT Plan attempts to identify user needs and gaps in the research base, and to consolidate these into a research agenda composed of five major areas: Dipterocarp Forests; Wood Utilization and Processing; LUS/LKS Timber Species; and Agro-forestry Development for Upland Dwellers on Public Forest Lands. Within each of these major areas, sub-topics have been identified and arranged according to priorities determined in consultation with the National Agriculture and Resources Research and Development Network (i.e., ERDB, PCARRD, FERDI, TLAs, NGOs and industry).

A technology transfer agenda and a training program have also been developed by LBII under the TDT Plan. The agenda includes activities which facilitate the transfer of technology and adoption of research results by users (TLA holders, wood products enterprises and NGOs). The training program is intended for users of R&D information, the forestry research sector and DENR staff associated with the Policy Studies.

LBII has helped organize and provided advice to the TDT Integrated Research and Development Committee (IRDC). The IRDC is responsible for overseeing the implementation of TDT activities of the NRMP, including review and approval of individual R&D proposals. The IRDC membership includes representatives from public research organizations, private sector trade associations, NGOs and LBII. USAID's representative serves only as a resource person.

A TDT Working Unit (WU) was established to assist the IRDC to execute the TDT Plan. The Working Unit is comprised of the technical staff of ERDB and PCARRD, and LBII. Its purpose is to act as the Secretariat to the IRDC and to monitor expenditures and implementation of research activities and training activities.

The TDT Plan was approved on February 28, 1992 and was presented to the IRDC in March 1992. While the TDT Plan has been generally accepted by the IRDC as a working document, the TDT Program itself is at a standstill. Third tranche benchmarks have yet to be met and it is doubtful they will be met soon. DENR proposed that the GOP research contribution for 1992 include the budget of DOST for forest management research as a basis for the third tranche performance indicator. USAID is considering the proposal.

To date, no research proposals have been approved for implementation, including the first three "fast tracked" research proposals. The current impasse in the TDT program appears to stem, in large part, from the organizational arrangements for this component. LBII original proposal which USAID approved was to subcontract with PCARRD to help evaluate proposals. The TDT research budget is part of LBII's contract, making it responsible for administrative and financial monitoring. The initial plan was for LBII, assisted by PCARRD, to review and approve proposals, administer research funding and monitor project implementation, manage the training component and report to USAID on TDT technical and financial matters.

The IRDC was proposed by PCARRD to "fast track" PCARRD's commodity research teams and ensure participation of the appropriate research organizations. USAID concurred but emphasized the importance of including private sector representation. Internal conflicts began over determining who the lead agency should be for IRDC. Winrock proposed PCARRD to be the lead agency, but DENR decided to make the Directors of ERDB and PCARRD co-chairmen. However, this "solution" has proven unworkable because the co-chairmen have very conflicting views on how TDT should operate and what purposes it should serve. USAID involvement in the IRDC was also viewed by some members as unwarranted.

In part, IRDC was an attempt to respond to a Winrock observation that the TDT was not sustainable. However, the IRDC approach has simply created another level of bureaucracy in an already complex research system. How this contributes to sustainability or facilitates the TDT process remains to be seen.

The organizational problems of the IRDC, in turn, have contributed to TDT implementation problems. As LBII pointed out, the TDT program consists of both research and development activities. The latter focus on the transfer and dissemination of research results to end users. However, the IRDC, consisting of research organizations and representatives of forest industries, lacks the capability for technology transfer. LBII consultants are attempting to strengthen the technology transfer functions of TDT. Their efforts have not been well received by

the IRDC, reflecting the weakness of the current implementation approach in the area of technology transfer.

TDT suffers from several other important problems. A definition of "demand driven" and the end-users of research is needed. While everyone agrees that research should be demand driven, the point is whose demand? For USAID, the forestry industry should have priority, a view shared by the industry representatives on the IRDC but not generally by other members. USAID has also encouraged establishing research priorities which correspond to NRMP's policy agenda.

Winrock's second tranche review stated that end-user participation in shaping the research agenda of PCARRD, ERDB and FPRDI already existed. Winrock considered that end-user participation in the preparation of the TDT agenda was an accomplished fact since this research agenda was considered in the preparation of the TDT plan. This is indeed true for the forest industry but this excludes many other end-users. Additionally, Winrock argues that the survey did not take into account end-users of technology from the public sector. First, it appears that in developing the TDT Research Agenda, it was assumed that there was general agreement among USAID and GOP research institutions on who the end-users of research actually are. However, the evaluation found that some institutions believe that this is not the case.

The end-user problem directly affects the development of TDT's research agenda. Conflicting views regarding using statistical representativeness or estimated economic and environmental impact as the basis for setting research priorities were never adequately resolved. LBII's survey-based process of developing the agenda was helpful. But without an accepted basis for setting research priorities, the result resembles a master wish list from the organizations contacted. The criteria for the selection of research proposals should ideally flow from the prioritization process. Without this, the initial proposal selection process was weakened.

The TDT training plan should flow from the identification of end-users and research priorities. Given the preceding observations, it is not surprising to find that the training plan is not clearly conceptualized with regard to TDT target clientele, their corresponding needs and the establishment of selection criteria for trainees. For example, training activities earmarked for management are considered by some in the IRDC to be outside of the TDT's mandate. One member of the IRDC pointed out that the training plan fails to make a distinction between technical training and training for the transfer of technologies. Another noted that the training plan reflects USAID's "bias" toward industry, citing that for proposed 1993 in-country training, over 77% of training funds will be used for private enterprise training,

while only 23% will be used for research organizations, NGOs and upland community leaders respectively. Concern was also expressed about how training for NGOs and community organization on extension skills and technology transfer to upland communities will relate to on-going training activities of the policy implementation group, particularly the Community Forest Program.

- Conclusions:

Based on the preceding findings, the evaluation team sees little hope for successful implementation of the TDT program as directed. The TDT program is in a basic state of disarray and is unlikely to get better. The innovativeness, flexibility and consensus building originally intended by the PAAD has been lost. In retrospect, the simplicity of LBII's original approach of subcontracting with PCARRD is appealing

The major contributing factors to the impasse in the TDT program are: (a) fundamental organizational problems in the IRDC, and (b) LBII's difficulties in consensus building in the areas of end-user definition, determination of research priorities and proposal selection criteria, and in developing a training plan based on agreed upon criteria. The IRDC creates another level of bureaucracy in an already complicated national research system which will not facilitate TDT but will only make it more difficult to implement. Both USAID's and LBII's emphasis to date has been on products, like the TDT plan, rather than on establishing fundamental agreements on the process, e.g., defining and agreeing on end-users and on prioritization and selection criteria. Without the latter, little or nothing happens and sustainability evaporates. Finally, Winrock's recommendation that control and implementation of the TDT program be transferred gradually to the nation research system is impractical.

- Recommendations:

- Terminate the current approach to implementing the TDT component, including the elimination of the IRDC, and identify an alternative, implementable approach, i.e., return to the original LBII approach and move ahead with finalizing the selection of previously identified research topics.

- USAID and DENR should consider alternative uses for these funds consistent with NRMP objectives, such as Environmental Impact Assessments.

## 2.8 Policy Action 8: Increase Local Community and NGO Participation in Forestry Management

### - Findings:

The Community Forestry Program (CFP) was launched in late 1989 to democratize resource access and privatize forest management for the benefit of upland communities. Organized upland communities (including Indigenous Cultural Communities - ICC) are to be legally empowered to manage and harvest wood from residual forests. NGOs are to be used as the vehicle to provide both community development, organizational and technical assistance to the communities. Approximately 1.5 million hectares, or about one half of the remaining Philippine residual forests, are to be covered by CFP type of operations.

The CFP is one of NRMP's strategies for achieving the policy objectives for resource tenure and improved residual forest management. DAI provides technical support to help DENR to implement the CFP. Lessons learned during implementation are intended to help DENR to refine the CFP.

**CFP Outputs:** To date, DENR has signed fifty-two NGO service contracts, including thirty-two sites supported by the Asian Development Bank (ADB) and twenty sites supported by NRMP/CFP. The number of signed agreements meets the third tranche performance indicator. Other achievements include:

- DAI has assisted DENR to develop its ability to select NGOs for the CFP based on established guidelines. Model DAI-NGO and DENR-NGO Services Contracts have also been developed;
- A plan for the improved management of the Subic Bay watershed has been developed. Terms of reference for the two priority clusters in and around the watershed were also completed;
- DAI and NRMP support staff assisted the CFP Coordinator in designing, organizing and conducting the "Orientation Workshop on Community Based Resource Planning and Management", held in Davao in 1992. Sixteen NRMP/CFP selected NGOs, four implementing NGOs, six CFP regional coordinators and three assistant regional coordinators participated in the workshop.
- A training plan and training modules have been developed for the CFP under the broader policy implementation program.

**The role of NGOs:** As stated above, the mechanism for selecting NGOs for CFP contracts has been strengthened. Consequently, many of the fly-by-night "NGOs" whose primary interest in the CFP program might have in the "extraction" of forest or project resources have been eliminated from consideration.

NGOs responsibilities under the CFP program are demanding. The community development and technical skills of NGOs who have been awarded contracts are reported to be highly variable. Field visits by the evaluation team confirmed this. In their first quarterly Progress report, DAI states that "...very few NGOs have competence in relating the forest with the socio-economic upliftment of the community and resource sustainability".

The NGOs believe that they need clearer operational guidelines for implementing the CFP program, particularly on how to operationalize participatory resource management through community organization and capacity building techniques. DAI again confirms that this is the case for many of the NGOs.

DAI and DENR are trying to improve their assistance to the selected NGOs. However, the NGOs need frequent on-the-ground guidance and advice at this stage. While the DAI consultants working on CFP are all very qualified in their particular area of expertise, only a two out five have extensive community development experience. The ability to assist the NGOs in conceptualizing the CFP process is also critical. Moreover, they are not assigned to a particular region which precludes continuity in backstopping.

NGOs are expected to produce the following outputs: a) documentation of community organizing and educational activities; b) a bio-physical and economic profile of the project sites; c) an annual work and financial plan; d) quarterly physical and financial reports; e) a three year community organizing and training plan; and f) a "pump-priming" activities plan. Winrock reports that the NGOs have complied with the first four expected outputs; however, the bio-physical and socio-economic profiles submitted by some of the NGOs lack the comprehensiveness and detail necessary for effective project management planning.

The social target indicators specified in the services contract also seem problematic. Social targets are currently measured in activity outputs, such as person days of training, number of workshops and number of group meetings. However, these indicators do measure actual community development required to manage the residual forest, diminishing their utility for management and planning purposes. The service contract requirements might also lead NGOs to focus on the targets, losing some of their flexibility, innovation and process orientation.

**Participation:** CFP views participation as assisting local people to define their interests and problems, and to allocate resources to address these self-determined priorities. The intention is to instill individual and group confidence in people's ability to mobilize their own limited resources.

This participatory process seems to have been achieved when the NGOs involved have strong community organization and development skills. On the other hand, Winrock reports that NGOs with DENR contract reforestation experience and few community development skills are likely to view the community as a source of labor hired to do specific tasks in order to fulfill the targets of their contract. Complicating the matter further is the lack of a clear definition of what "local community" means and the relationship of the NGOs that are supposed to have with the community. At one site, the whole barangay was considered as the community. At another site, the NGO took a more target-group approach, limiting action to those who live in or near the forest typically with claims on the land and who are (or were) dependent on the forest for their livelihoods.

The entire village or barangay may not be an appropriate organizational unit for CFP implementation. Larger barangays are often diversified communities with varying self-interests and internal alliances. This undermines the potential for unified action. Some community leaders are reluctant or unable to enforce restrictions to protect trees. Alternatively, some local leaders might see the CFP as a mechanism to increase their power base. In short, such diversity of interests and motivations run contrary to the requirements of CFP. For CFP to be successful, unified actions are needed today for uncertain and delayed benefits in the future.

Two approaches to CFP are currently being used. ADB-supported CFP sites engage in community organizing and "pump-priming" activities (i.e., paying community members for reforestation, timber stand improvement, assisted natural regeneration, agro-forestry and rattan planting activities). However, NRMP's CFP sites do not include pump priming activities. They focus on community organizing, developing schemes for capital formation, and training in forestry techniques and financial management. The significance of not including pump priming activities cannot be determined at this point. There are various conflicting views about the utility of pump priming, but it does appear that such activities are unlikely to decrease illegal logging or other abuses of forest resources.

Wider participation in CFP seems to be contingent on land tenure security. Winrock reported that individuals with land claims within the CFP sites are not interested in participating in the program unless their tenure is secured. Moreover, insecurity of tenure is a major cause of forest destruction, encouraging slash and burn agriculture. Site visits substantiated this. However, the current situation regarding the existing land tenure instruments applicable to CFP is very confused. Which agreement applies under which conditions and whether the agreements correspond to actual land use patterns has yet to be determined.

**Training:** Many of CFP officers interviewed during the evaluation are recent graduates with little experience in community development and social forestry. The various rules and regulations which govern the management of the residual forest, as well as the numerous tenurial instruments, are unclear to them. Community Environment and Natural Resource Offices (CENROs) visited by the team lacked basic information on the CFP program, social forestry and community development.

**Resources:** Funding for CFP coordinators and field staff for travel and per diem is inadequate. Funds are appropriated from other activities or shouldered by the NGOs or DAI. Consequently, CFP staff rely on the NGOs or DAI to provide transportation.

**Regional coordination:** CFP lacks a mechanism for NGOs, community members and DENR staff to compare their respective experiences gained by working with community organization and forest management planning. For example, in Region 11, there are nine different communities being assisted by nine different NGOs with virtually no sharing of information between sites. DAI has initiated activities which should address this need.

**Site selection:** CFP follows specified site selection criteria specified by DAO 123: a) presence of communities nearby or inside public forested areas (preferably old TLAs), b) opportunities for alternative livelihood systems and c) willingness of the local government to support CFP. DAO 123 also stresses the need to integrate local communities into old growth forest protection activities. Initially, this guidance proved difficult to following in the selection of all CFP sites. In part, this attributable to peace and order concerns and to the initial limited availability of qualified communities and NGOs. NRMP management is trying to improve coordination in future site selection. Ten pilot communities have been selected for CFP involving management of old growth and residual forests.

**Donor Coordination:** There are at least five donors involved in community forestry activities. In addition to donor funded activities, DENR has its own Integrated Social Forestry program. While each of these programs follows different tactics and strategies, and focuses on different specific situations (e.g., residual forest management versus denuded public domain lands occupied by smallhold farmers), their goals and objectives are comparable in encouraging community involvement in forest management. Coordination seems to be lacking where the potential for complementarity exists.

**Indicators:** The importance to CFP of community organizing and the process-oriented nature of this is not adequately reflected in the quantitative performance indicators established for policy item 8. Reaching the "magic" number of agreements says nothing about the ability of those community to manage forest resources.

- Conclusions:

Selecting NGO's which are interested in natural resource management work and which pass DENR screening criteria does not assure that their efforts in CFP will be effective. While guidelines and better scopes of work for the NGOs will help them to undertake participatory community development, frequent interaction with the NGOs and on-the-ground guidance and direction is necessary, particularly in the initial stages of NGO activities. Strengthening of NGOs for community forestry activities should be a basic output of NRMP.

Though most NGOs have satisfied basic service contract requirements, these contracts need to reflect: a) the differing capabilities of the NGOs (which often are recognizable only after implementation has started), and b) the process orientation or nature of community organizing in setting targets. Further, community organizing activities should be directed toward encouraging participation in the CFP and treating the community members as partners as opposed to hired labor.

Community organizing and training needs to lead to improved incomes for participants, otherwise the effort is likely to fail. Inclusion of agro-forestry development and cash income generating activities should be given greater emphasis in NRMP's approach (this is not the same as hiring community members to perform these activities). The importance of pump-priming activities need to be better understood in this process. It certainly appears that land tenure security is critical to encouraging greater and broader participation in CFP.

CFP is intended to develop a community-based mechanism to improve management of residual forest resources. Initially, site selection was not tied to proximity to old growth forests. In effect, this separates what should be integrated NRMP activities; i.e., sites should be selected in areas propinquitous to old growth forests to integrate NRMP implementation activities. The same observation is made with respect to residual forest management. NRMP management is aware of this and plans to select sites where such coordination is possible.

Other areas which seem important to future implementation of CFP include: a) better support and training for CFP officers, b) better communication among those working on CFP activities across different sites and c) better coordination among very similar donor-funded community forestry activities.

In retrospect, the CFP component might have been funded as a pilot program not tied to a quantitative performance indicator. This approach might have been more helpful in developing policies and implementation strategies which encourage community-based

forestry management than focusing on quantitative outputs - i.e., the number of agreements signed.

- Recommendations:

- Integrate CFP activities with other NRMP field activities, such as residual forest management and old growth protection so that common sites are used.
- Tailor training and support services to the strengths and weaknesses of individual NGOs as this becomes apparent during the course of CFP implementation. Treat strengthening of NGO's as a basic output of NRMP's assistance in this area.
- Make greater use of short-term consultants with community organizing experience to backstop the CFP program particularly in the initial stages. Short-term consultants should be assigned to a specific region in order to provide program continuity.
- Use social output indicators in CFP contracts which reflects such things as: level of awareness and knowledge about the CFP program, degree to which the philosophy and concepts of the program are practiced, and the ability of participants to perform their respective roles.
- Encourage a more participatory approach in CFP community organizing efforts. Identify how agro-forestry and other income generating activities can be given greater emphasis in NRMP's approach to community organizing. In this regard, DAI and DENR should undertake a study comparing community organization "success" at ADB versus NRMP's CFP sites to evaluate the importance of pump priming activities for the CFP program.
- DENR should simplify and clarify land tenure instruments which pertain to the CFP program.
- Establish a small reference library on social forestry, community forestry, agroforestry, etc. in the CENROs.
- Establish a mechanism to improve communication among CFP sites, such as the Regional Distillation Groups proposed by DAI.
- Establish third and fourth tranche indicators which reduce the number of signed agreements to no more than thirty sites, but which give greater emphasis to improved NGO performance in community organizing and community participation at these sites.

### SECTION 3: PROGRAM MANAGEMENT

The scope of work for this evaluation directs the team to assess the management systems established by DENR, USAID and the technical assistance teams to implement the program. As noted in the preceding sections, policy-related actions and implementation activities are well underway. Two tranche disbursements have been met thus far and progress is being made toward meeting the third tranche benchmarks. The Support Services, Monitoring and Assessment and the Resource Protection components are all functioning. In other words, a program management system has been established which is keeping the overall program largely on track, with a couple of notable exceptions (i.e., TDT and IEC discussed in more detail in Sections 2.7 and 4.2 respectively).

There are several areas where improvements to the management system are needed to prevent what are now manageable problems from possibly interfering with future program implementation. By focusing on the problematic, as opposed to non-problematic, aspects of the program management system, the impression is created that the overall system is not working effectively. Clearly, the accomplishments of NRMP to date shows that this is certainly not the case. The intention is simply to bring to management's attention problems that need resolution. The appointment of a new Secretary for DENR and recent staffing changes in both DENR and USAID offer a good opportunity to address these issues. Specifically, three areas that need attention are: a) clarifying the roles and responsibilities within and among DENR, USAID and the technical assistance teams to improve working relationships; b) institutionalizing NRMP activities for program sustainability; and c) establishing a mechanism that makes NRMP more responsive to the analyses of the Monitoring and Assessment component.

#### 3.1 The Organizational Structure of NRMP's Assistance

##### Findings:

It is important to understand the nature of NRMP's assistance to DENR to formulate and implement policy reforms. At the outset of the evaluation, the USAID Program Officer emphasized that NRMP is program assistance; it is not a project. This is somewhat ironic in that as the evaluation proceeded, NRMP appeared to be as much a project as it is a policy-based sector assistance program, and in some areas, only its project-like assistance (i.e., the technical assistance) is really meaningful to DENR staff. In practice, NRMP's assistance differs mixes these program and project assistance in a heady "development assistance cocktail".

In other sector assistance programs, USAID and its counterpart agency typically have agreed to enacting policy and institutional reforms in a number of selected areas and to achieve specific

policy objectives. Funding is tied to reaching specific benchmarks reflecting progress toward those policy objectives. When those benchmarks are reached, a cash transfer is made by USAID usually to the country's Treasury. This funding is frequently used to generate local currency allocated to the implementing agency to cover the expenses of implementing the policy reforms.

How the implementing agency reaches those benchmarks and what actions it takes to do so is its own responsibility as long as the result is consistent with the content and intent of the benchmarks, and those actions constitute meaningful progress toward the broader policy objective. This assumes that the implementing agency has the institutional capacity to carry out its side of the program agreement. That capacity is often the major justification for using program assistance as opposed to project assistance (which typically focuses precisely on the operations of the implementing agency).

NRMP combines program and project assistance in a way which complicates the management requirements of this assistance (discussed in Section 4.2.2). The four tranches of \$75 million to be made through NRMP have little operational reality to DENR staff in Manila, nor to regional offices and below, largely because there is no augmentation to their budget from the tranche releases. Around the time NRMP was being negotiated, the GOP introduced a new policy which eliminated any augmentation to Departments involved with policy-based sector assistance programs.

NRMP's program assistance has important strategic uses for DENR's senior level management. The previous Secretary described how NRMP assisted his efforts to redirect DENR, obtain higher priority for environmental issues in the overall GOP administration and increase DENR's annual budget by more than one billion pesos over its previous level - less than P2 billion per year to over P3 billion. NRMP gave credence to DENR's efforts to obtain higher priority for environmental management by demonstrating that such issues could attract significant donor assistance.

Beginning in 1987, DENR's new leadership clarified its understanding of what the problems were in the forestry sector and how DENR needed to re-orient its operations accordingly. The Philippine Strategy for Sustainable Development (PSSD) helped to formulate DENR's thinking. This was followed by the Master Plan for Forestry Development (MPFD) which specifies a policy reform agenda, most of which is contained in NRMP's policy matrix. USAID's assistance through NRMP was the first in providing funding to operationalize the MPFD. In short, NRMP supports actions which DENR had for the most part, already decided it wanted to take. It is laudatory that USAID and DENR senior

management were in nearly full concurrence of what policies needed to be changed.

At the operational level, NRMP's policy agenda is not viewed by DENR staff as driving the changes being made, but rather, as supporting the policy directions set by DENR. This should not be misconstrued as a weakness of the program, e.g., that USAID is "extracting" additional policy reforms that DENR had not previously considered. Experience has clearly demonstrated that the latter situation does not lead to sustained policy changes.

NRMP's technical assistance components do have a genuine operational reality in DENR and, as discussed throughout this report, need to be integrated fully into the work of DENR units. The "reality" of these activities results from their support to DENR to analyze policy constraints and options, and to formulate and pilot test policy implementation strategies, accelerating the policy reform process.

Initially, technical assistance was to augment DENR's institutional capacity so that policy benchmarks could be met on a timely basis. However, NRMP's technical assistance differs from the standard project mode in that it covers a range of DENR Bureaus and units. (This contrasts with a standard project which usually focuses on a smaller number of counterpart offices or units through which all or most project activities are implemented.) Consequently, a concerted effort has to be made to engage the appropriate technical counterpart units, including regional offices, because the technical assistance is organized and administered as a separate program under NRMP's sector assistance. In other words, NRMP's technical Support Services are organizationally located outside of and separate from DENR's line technical units (e.g., the FMB) and regional units who need to be directly involved as counterparts to NRMP's technical assistance activities. This also leads to a perception of NRMP activities by certain DENR offices as "not my responsibility" and as only adding to their existing functions and responsibilities.

The organizational location of NRMP's technical assistance poses an important issue with respect to institutionalizing NRMP activities in DENR. The Department has drafted a new Administrative Order which assigns responsibility for NRMP activities to the appropriate technical and administrative offices. However, the draft Order would essentially assign tasks that are in addition to, rather than in place of, existing functions. Action has not yet been taken on the draft Order.

NRMP's organizational structure has also significantly affected the design and operation of NRMP's management systems, as discussed in the following sections.

- Conclusions:

NRMP helps to accelerate DENR's efforts to formulate and implement its policy reform agenda through the provision of technical assistance. Rather than forcing the process (actually an undesirable situation), NRMP facilitates policy reforms and implementation which DENR chooses to undertake. However, the lack of an additional budget to DENR to support implementation of the policies in the field reduces the tangible reality of NRMP outside of Manila. Given the increasing concern over environmental problems in the country and the recent change in administrations, it might be worth investigating the possibility of obtaining additional funding for policy implementation.

The draft Administrative Order integrating NRMP in DENR offices needs to take into consideration what functions also be eliminated in the reorganization. This process must involve the affected Offices to promote ownership and assure coordination with other continuing functions. Otherwise, the Order is likely to reinforce the perception of NRMP as only adding to the responsibilities of the various offices involved.

- Recommendations:

- DENR and USAID should explore the possibility of obtaining additional budget for policy implementation linked to the disbursement of the third and fourth tranches of NRMP, even if it is only a percentage of the tranche.

- DENR and USAID need to develop a convincing case for additional budget based on estimates of the costs involved with implementing the reforms.

- As a basis for arguing for additional budget, and for protecting its current budget levels in the foreseeable future, DENR should consider conducting an analysis showing what the long-term costs to the economy will be if adequate investments in environmental management are not made in the near-term. The policy analysis component of NRMP should provide assistance for this work.

- The draft organizational planning integrating NRMP activities more fully into DENR technical offices needs a thorough review by the offices concerned to identify what current functions can be given lower priority to absorb the new NRMP activities, if this is desired by the Department. The Secretary's support for this organizational plan is obviously first needed.

## 3.2 NRMP's Management System

### 3.2.1 DENR's Program Support Group

#### - Findings:

In response to NRMP's mix of policy-based program assistance and technical assistance to support the policy reform process, DENR established the NRMP Program Support Office (PSO) to represent DENR in all aspects of NRMP. The PSO was established through Administrative Order 84 of 1990. A revised draft Order has been prepared which would more fully integrate NRMP functions into the appropriate DENR technical offices and institutionalize the PSO as DENR's staff responsible for day-to-day management of NRMP.

The PSO currently has a combined staff of twenty-three: eleven professional and twelve support staff, all of whom are limited term, contract employees. The PSO's principal responsibility is to serve as a liaison linking NRMP's technical assistance to the appropriate technical units in DENR. The PSO provides a similar linkage to the regional DENR offices where NRMP activities are being implemented. As the administrative arm for DENR, the PSO is responsible for dealing with USAID reporting and other administrative matters concerning NRMP. This function is intended to facilitate institutionalizing new NRMP activities into the Department.

Technical oversight and approval of NRMP technical assistance components is provided by the Technical Coordinating Committee (TCC) of which the PSO head is a member. Comprised of senior DENR representatives, the TCC is chaired by the Undersecretary for Field Operations who is responsible for DENR's management of NRMP (though the previous Secretary of DENR was the official Program Officer for NRMP).

The PSO is DENR's response to the problem of how to link NRMP's policy and technical services to the operations of the Department. According to PSO staff, they have a broad range of responsibilities, from serving as a support staff to senior DENR officials when requested, to monitoring technical assistance activities to such mundane matters as arranging itineraries for short-term consultants and scheduling meetings. The PSO is also responsible for assuring that the appropriate technical offices and units of DENR, including regional DENR offices, participate in NRMP activities, e.g., actions required to meet the NRMP benchmarks and/or implement policy directives.

As DENR's representative, the PSO participates in matters concerning the technical assistance components of NRMP, including workplans, performance of tasks under the contract, selection of short-term consultants. In practice, this oversight function

pertains more to the Support Services component with less regular involvement in the Monitoring and Assessment and Resource Protection components. Moreover, the technical assistance components are expected to work through the PSO as a conduit into the Department's appropriate technical offices.

In general, the evaluation team found that the PSO plays a useful administrative role in assuring the DENR interests are adequately represented in the various policy-related and technical assistance related aspects of NRMP. In some cases, PSO staff were reported as indeed facilitating linkages with and encouraging the participation of other technical offices in NRMP technical work. In other instances, PSO staff played a direct role in NRMP work (e.g., field work and data collection in the policy studies). USAID reports that the PSO has definitely facilitated meeting its requirements for program monitoring and reporting.

Others reported that the role of PSO was of less utility to their work with the technical offices of DENR. Working relationships with the appropriate technical office were being handled by the technical advisors and their counterparts in those offices. In these instances, PSO staff involvement was viewed as not essential, particularly in when more technical matters were involved. The PSO's role in the implementation of NRMP's field activities is also difficult to discern beyond keeping the DENR/Manila's management informed of field operations.

- Conclusions:

Unlike many other donor-assisted programs and projects, DENR has assured that counterpart staff - technical as well as administrative - participate in NRMP. DENR's technical line and field offices constitute the appropriate counterparts for NRMP's technical assistance activities. The PSO constitutes an appropriate administrative counterpart. The number of staff assigned to the PSO may be large in relation to NRMP's four main technical assistance components, two of which - Resource Protection and Monitoring Assessment require only marginal oversight. The size of PSO is, of course, a DENR decision.

Given the program - project mix of NRMP and the location of the technical assistance components outside of DENR line offices, an administrative unit, like the PSO is needed to meet DENR's management requirements for NRMP. At the very least, the PSO is necessary to assure adequate DENR representation in NRMP's implementation.

The PSO's liaison function is potentially most useful at the outset of NRMP in establishing linkages between NRMP technical assistance components and the DENR technical counterparts and regional offices. These linkages still need to be strengthened

further so that they become established working relationships. However, once these relationships are established, the PSO's liaison role should diminish, especially if the draft Administrative Order is enacted. Otherwise, the Office could become a yet another layer of bureaucracy rather than a constructive facilitator. DENR also needs to consider the longer-term implications of the draft Administrative Order which would institutionalize the PSO in the Department. Specifically, what would be its function after NRMP ends in 1995 should be considered before approving the draft A.O.

The PSO needs to walk a fine line with respect to its involvement in technical issues. Clearly, it needs to be informed of all major technical decisions, but if it enters into technical issues where its staff lacks the necessary expertise, this can be counterproductive. When specialized, technical issues are involved, a constructive role for the PSO is to represent DENR management interests regarding technical decisions and plans, then subsequently, monitor progress toward carrying out the technical work.

For the PSO to function effectively as an administrative unit for NRMP, it needs to be seen as a representative arm of senior DENR management. In fact, all of NRMP's activities, including the PSO, depend heavily on being integral to the new Secretary's vision for the Department. With the appointment of a new Secretary, the PSO will require comparable support to be effective. This was reportedly the case during the past administration.

- Recommendations:

- The PSO structure should be continued and institutionalized in DENR as outlined in the draft Administrative Order on NRMP after resolving the longer-term implications of this action with respect to post-NRMP functions (i.e., after September 1995).
- The PSO should focus on administrative oversight and assistance, represent DENR interests in the implementation of NRMP and respond to USAID, other GOP Departments and other donors requests for reporting and information.
- The PSO should minimize its role in purely technical matters, drawing on the expertise of DENR's technical units, i.e., NRMP's technical counterparts, to avoid duplication of functions.
- The PSO needs to be under the supervision of a senior level DENR manager (i.e., a Chief of Staff or Senior Undersecretary) who has the confidence of and access to the Secretary.
- Once adequate working relations have been established between NRMP technical assistance components and the appropriate

technical and regional units in DENR, the PSO should only monitor the progress of that work.

### 3.2.2 USAID's Management System

#### - Findings:

USAID follows its normal procedure of establishing a NRMP program committee headed by the NRMP program officer and comprising the three NRMP program managers and representatives of support services and other technical offices. The committee meets as necessary to review NRMP progress and address various implementation issues as they arise. Day-to-day oversight of the program and collaboration with DENR is the responsibility of the NRMP program officer and managers. The PSO head is USAID's principal counterpart for operational matters. In short, the equivalent of two full-time program managers (i.e., FSNS) and one program officer (i.e., USDH) work full-time on the administration of the NRMP.

As in any other project or program, USAID is responsible for administrative and financial oversight to assure accountability of funding and that NRMP's activities are directed toward meeting the objectives of the program. In this regard, USAID staff report that the program - project mix of NRMP has been problematic in certain areas. They point to the fact that the aspects of NRMP do not fit the existing guidelines of USAID Handbooks. This complicates determining what their management requirements and appropriate roles are and how to apply certain A.I.D. regulations (e.g., waivers for procurement through NRMP).

The uncertainty about where USAID's responsibilities are and where they stop with respect to administrative oversight requirements appears to be a direct result of the of program - project blend of NRMP. If NRMP is to be managed by USAID as program assistance, then it would focus on the overall progress of DENR in accomplishing the policy benchmarks, the continuing relevance of the policy objectives and their associated benchmarks and the attendant organizational and institutional issues involved. Program assistance would, in principle, extricate USAID from the details of implementation activities.

However, the technical assistance components of NRMP are procured through USAID direct contracts. Administration of these contracts essentially embroils USAID in project-level management requirements. The USAID Program Officer wanted to impress upon the evaluation team that NRMP was program, as opposed to project assistance. Ironically, USAID's actual involvement in NRMP is actually both - program-level monitoring with respect to meeting the policy objectives, as well as project-level management in the oversight of contractor performance.

USAID's management requirements are further complicated by having three separate technical assistance contracts and a cooperative agreement with WWF as opposed to one master contract with a lead firm with sub-contract with other firms. USAID reported that this was a requirement of A.I.D contracting and that a single contract for \$25 million of technical assistance would have been protested by U.S. consulting companies as unwarranted (i.e., the work should be spread among several firms). It is not clear why USAID could not have specified in its Request for Proposals that a consortium of no fewer than four firms should bid on the contract which is commonly done with Title XII institutions in conjunction with consulting firms.

The lack of an overall technical assistance chief of party, as opposed to four "mini" chiefs of party under the current arrangement, contributes to the lack of integration among the technical assistance components the evaluation team observed. Monthly meetings between the chiefs of party are simply not sufficient. The tendency of an advisor is to focus narrowly on his scope of work, that is, after all, what will be judged in assessing his performance. In short, NRMP's contracting arrangements leads to setting people on their individual paths with no one responsible for the integration of these tasks. This also complicates USAID's and DENR's management function.

USAID's involvement in the policy agenda and benchmark process was not questioned or criticized by either DENR or the technical assistance teams. The problematic area primarily concerns its involvement in the Support Service component. USAID was viewed by some as becoming far too enmeshed in the day-to-day details and technical aspects of these services, variously described as "micro-management", "nit-picking" and "getting in over its head" on technical matters.

- Conclusions:

The confusing responsibilities USAID bears under the mix of program and project elements of NRMP accounts for the difficulty staff have in defining their appropriate roles as NRMP managers. Whether the perception of USAID as "micro-managing" is accurate or fair is not the point. The more serious problem underlying these descriptions of USAID's role is that working relations involving NRMP management need improvement due to a lack of clear understanding of roles and responsibilities among the principals.

At this point, there is nothing USAID can do about the structure of contracting for technical services. An overall chief of party cannot be funded through any one contract and represent the interests of all concerned parties. A more practical solution for the integration of contract activities should come from senior level direction in DENR, i.e., the "Program Champion" to whom the PSO reports, as recommended in the preceding section.

The new USAID NRMP Program Officer could also give greater attention to greater coordination among the Support Services and the Monitoring and Assessment Components, as well as the attendant organizational issues.

- Recommendations:

- USAID re-examine the role it has been playing in technical matters and the provision of technical services, particularly with respect to the Support Services component. Any reduction in its level of involvement which does not jeopardize meeting its administrative and general technical oversight responsibilities should be made.

- After the new DENR Secretary assumes office, NRMP should consider funding a brief (2-3 weeks) management assessment of the program conducted by an outside group to understand where problems now exist and what the appropriate roles of DENR and USAID should be vis-a-vis the technical assistance components. This should be a highly collaborative, interactive process with the people involved in NRMP management. This should lead to a two day team building exercise facilitated by the management assessment team. Services should be obtained from a highly experienced local organization, e.g., the Development Academy of the Philippines, which includes one person knowledgeable about USAID management requirements. The outcome of the workshop should be a clear (or clearer than present) specification of roles and responsibilities in NRMP.

- The newly appointed USAID NRMP Program Officer should give greater attention to the integration of technical services across the four contracts so that they are better coordinated and contribute to the overall objectives of the program. (This would include such matters as selecting common locations where activities across the four contracts are concentrated in an integrated package.)

3.2.3 Technical Assistance Management

- Findings:

The technical assistance components are managed on the basis of workplans prepared in response to the terms of reference contained in the individual contracts (a cooperative agreement for WWF). The evaluation was directed to review both the contracts and the workplans for each component. Overall, the team believes that the workplans are responsive to the respective contracts, but we note that DAI workplan has obtained only provisional approval.

The evaluation team was impressed by the technical calibre, appropriate mix and practical experience of short- and long-term contractors that have been obtained thus far in NRMP. DAI, LBII and Winrock use both long-term contractors augmented by short-term staff as needed. Winrock has only one long-term advisor but manages a set of short-term consultants for the eight policy areas of NRMP on a retainer basis (i.e., a specified number of days as needed over the course of the year). WWF has one resident representative managing the debt-swap process and the FPE development assisted by PBSP staff.

It is also important to note the comparatively intensive use of Filipino contractors, minimizing the role of expensive U.S. contractors. This appears to improve working relations within DENR and other GOP agencies as well as accelerate the start-up and implementation of individual assignments because staff are familiar with the people, locations and general mode of operation in the Philippines.

Regarding the workplan process, DAI's current workplan has received only provisional approval. According to the DAI Chief of Party, certain elements of the original terms of reference were simply impossible given available resources. A review meeting was held in August 1991 where all parties recognized problems in the DAI contract and agreed this could be remedied through the DAI workplan. Nothing definite was decided from the meeting other than that DAI would need to propose adjustments for USAID review and approval. DAI submitted a workplan in October 1991 which, as of September 1992, has not received final approval despite several rounds of revisions. DAI finds the situation confusing, frustrating and, unfortunately, indicative of its working relationship with USAID. USAID, finds it equally frustrating and believes that DAI is not being responsive to the terms of its contract nor the interests of USAID and DENR.

The reason for going into excruciating detail on the troubled history of the DAI workplan is that it further illustrates a broader problem affecting the working relationships among DENR, USAID and the technical assistance teams. In the course of the evaluation, working relationships among USAID, DENR and contract teams reflected, in varying degrees, an "us versus them" orientation in their dealings with one another. Note that this was not limited to the DAI contract exclusively, but appears to be a broader problem.

- Conclusions:

For the most part, the technical assistance teams have been responsive to their contract terms of reference. All four technical assistance components have fielded highly qualified individuals, the majority of whom have delivered quality products. Even without an approved workplan, DAI has performed

important and useful services that contribute to NRMP objectives, in particular, the aerial photography work.

The provisional status of DAI's workplan is simply unacceptable given the importance of such plans for program and project administration. The workplan is intended to organize and guide the use of resources and staff time. All parties need to agree to that plan at the outset so there is some basis for monitoring progress and assessing contract performance.

As to who is responsible for bringing the workplan process to closure, the answer is obvious. DAI is the contractor from whom services are being procured. DAI, not USAID, should be investing time and effort in finalizing its workplan. Where differences exist, DAI needs to find the solutions mutually agreeable to itself and USAID. Whatever efforts DAI has taken in the past is a moot point. It behooves DAI to move expeditiously on this matter because the current situation creates the impression that DAI is unresponsive to the interests of USAID and DENR.

Given that USAID recognizes the problems contained in the contract terms of reference, USAID should be prepared to re-negotiate to finalize a mutually acceptable workplan.

The NRMP workplans are five year projections of work to be completed under the contract. Just as with project or program designs, projecting exactly what will be done year by year becomes increasingly difficult the farther forward those projections reach. The same also holds for workplans.

- Recommendations:

- DAI should take action immediately to finalize its workplan within thirty days. USAID needs to revise the original scope of work to modify those elements which are not practical.
- Annual workplans should be required for the technical assistance teams which are consistent with their five year plans but which reflect progress over the preceding year. This should essentially be a brief update, not a major revision.
- The management review and team building exercise recommended above needs to address the "us versus them" problem.

### 3.3 Program Monitoring

#### - Findings:

Program monitoring of NRMP consists of the following activities:

- DENR and USAID routine internal monitoring processes involving their respective program committees (e.g., the PSO and TCC in DENR, the NRMP program committee in USAID). Other than administrative matters concerning the use of NRMP funding (i.e., commodity procurement, contracting for services), the jobs of those in USAID and DENR assigned to NRMP consists largely of monitoring implementation.

- Periodic reviews, both formal and informal, of progress of NRMP elements involving USAID, DENR the contract teams. A formal quarterly review process of NRMP progress has been established and reviews were held in September and December 1991, and in April and July 1992. Winrock prepared reports analyzing progress toward meeting the policy performance indicators for two of these reviews (December 1991 and July 1992). Progress on work through the technical assistance contracts is also discussed. Major annual progress reviews on achieving tranche indicators as a condition for the release of funds are scheduled for the end of each calendar year.

- The Winrock Monitoring and Assessment contract provides up to \$2.7 million for: a) monitoring of progress toward policy indicators and an assessment of whether the indicators have been met; b) verification monitoring to assess the extent to which policy reforms are being implemented in line with intent of such reforms; and c) impact assessment which will attempt to evaluate whether implemented reforms are producing the expected economic and ecological effects, as well as whether they are also producing unanticipated positive or negative effects. As part of its monitoring responsibilities, Winrock participates in the planning of studies and analyses which pertain to the policy indicators. The intention here is to assure that the results of this work meet the requirements of the indicators.

The evaluation obtained no information which would suggest any inadequacy in the internal, routine program monitoring conducted by USAID and DENR. The quarterly program reviews are regarded by some participants as somewhat superficial and would benefit from more rigorous questioning of such matters as the adequacy of progress, or the organizational and technical issues that need to be addressed to achieve future indicators. Attendance at these meetings was also noted as problematic in some instances. For example, representatives from the Forest Management Bureau should be encouraged to attend because of their direct involvement in the activities of the Policy Implementation component of NRMP.

Most critical for sound program management is the work conducted by Winrock's Monitoring and Assessment team. This can be a very thankless task when it results in questioning of the meaningfulness of what is being accomplished, or concluding that indicators have not been reached. But the Monitoring and Assessment team provides a vital check on whether the program is indeed creating a policy environment which will contribute to the objectives of DENR and NRMP.

In this regard, the quality of the team's work has been outstanding. Rather than merely gathering documents and other information that shows compliance or non-compliance with policy indicators, the Winrock team provides careful and insightful analyses of this information. They have shown where weaknesses in the indicators exist and have proposed modifications which would make future indicators far more meaningful measures of progress toward the policy objectives of NRMP. The work of this group surpasses the monitoring of any other sector assistance program of which the evaluation team is aware. It essentially sets a new standard for program performance monitoring.

Despite the widely recognized quality of the Winrock team's work, the evaluation team found a very disturbing situation. It appears that the Monitoring and Assessment team's analysis of the third tranche indicators was given cursory treatment. This is significant because a condition precedent of the program is that the indicators for subsequent tranches would be revised as needed prior to the disbursement of the current tranche. The Winrock team's analysis of November 1991 conducted for the second tranche review pointed out fundamental weaknesses in each of the third tranche indicators. Some adjustments were made, but the revisions do not address the more fundamental weaknesses Winrock noted. Only one benchmark was revised substantially to respond to the problems identified in the November report.

For reasons undocumented (hence, not transparent), the partially revised third tranche indicators were forwarded to USAID as having met the condition precedent. USAID staff recommended this revised set of indicators to Mission management which approved the changes, releasing the second NRMP tranche. DENR and USAID staff reported they too were disturbed and dissatisfied with the outcome of the process. Winrock was at a loss to account for why their analysis was given cursory treatment.

- Conclusions:

There appears to be room for improving the usefulness of the quarterly reviews, focusing them more on critical issues and deciding how to deal with them. Other than their routine monitoring of the program is adequate, as far the team can determine.

A major failure in program management occurred when the Winrock analysis of the third tranche indicators appears to have been given short shrift. This defeats the entire purpose of this critical monitoring function. It also undermines the significance of the program when indicators are established which are less meaningful than they are purported to be and, in fact, are weak measures of progress. Pressure to release the tranche by the end of December - the end of the GOP fiscal year was enormous in 1991. Nonetheless, failing to make justifiable changes to the indicators is not trivial. A mechanism to assure this does not happen again is needed.

- Recommendations:

- Better planning is needed for the quarterly reviews to assure that critical issues are surfaced and discussed, leading to resolution or a course of action to deal with the problems.
- Wider participation in the Quarterly review meetings is warranted, particularly the involvement of technical offices in FMB. The minutes of these reviews should be widely distributed in DENR/Manila and to regional DENR office.
- A written response to all future Winrock analyses of the policy agenda and associated indicators should be required from the PSO and USAID. This response should state which recommendations for changes are accepted completely or partially, and which are not accepted, with credible explanations of why recommendations were only partially accepted or rejected. This response should be cleared in DENR to at least the Undersecretary level and in USAID by the Office Director. Winrock should prepare an assessment of the implications of the decisions made by DENR and USAID that is made part of the NRMP program files.
- The impact studies Winrock is currently planning should include cost/benefit analyses of each policy action, including the costs associated with continuation of these policies and how those costs will be financed.

## SECTION 4: NRMP ACTIVITIES AND ADDITIONAL ISSUES

### 4.1 Resource Protection

#### - Findings:

NRMP initially budgeted \$25 million for the Resources Protection component to support activities to conserve biological diversity and enhance sustainable natural resource management implemented by local and U.S. NGOs. The proposed mechanism for achieving these goals is a series of debt-for-nature swaps to endow the Foundation for the Philippine Environment (FPE). The interest on the endowment will be used for as grants to NGOs undertaking environmental projects.

A cooperative agreement was signed by USAID and World Wildlife Fund (WWF) on April 22, 1991 to provide technical assistance for the establishment of FPE and to complete the first \$5 million debt-for-nature swap. WWF and the Philippine Business for Social Progress (PBSP) subsequently signed a cooperative agreement in July 1991 to provide technical assistance in the establishment of FPE, a non-stock, non-profit institution. PBSP and WWF are also tasked with administering the interim grants program of FPE, designed to fund local NGO programs involving conservation of biological diversity and sustainable natural resources management.

An Interim Board was established in July 1991 and has held twelve meetings over the past year to discuss a variety of issues related to FPE and the interim grants program which focussed on institution building and training of NGOs and project-related grants to NGOs with a proven capability in conservation activities.

During November and December 1991, eight consultations were held with 512 national representatives of 334 NGOs and twenty-four academic institutions from Luzon, Visayas and Mindanao. The purpose of the consultations was to review articles and by-laws drafted by the Interim Board and to answer questions regarding the FPE program, including setting programmatic priorities and the technical details of the debt-for-nature swap.

On January 15, 1992, the FPE was formally registered as a legal entity with the Philippine Security and Exchange Commission. On March 6, 1992, the debt-for-nature swap was completed, generating the equivalent of roughly \$9 million in Philippine pesos for the FPE. Also in March 1992, representatives of the Interim Board and WWF/PBSP participated in a Ford Foundation study tour of seventeen major U.S. foundations (e.g., Ford Foundation, Rockefeller Foundation, Synergos Institute, etc.) to explore issues of foundation governance, programming and management. In May 1992, a workshop was held with interim board members and key

NGO, academic and government leaders from throughout the country to synthesize the learning from the study tour and finalize a process for establishing a regular Board of Trustees, amending the articles and by-laws accordingly. In June 1992, the Interim Board formally elected the regular Board of Trustees. In May and June of 1992, project criteria and proposal formats were finalized, an information campaign was launched and brochures on the grants program were sent to NGOs and others in the environmental community. The first regular Board meeting was held on July 31, 1992 where proposal received to date were reviewed and another round of grants was made.

**Board composition:** The regular Board composition shows the result of a careful process of consultations over the past year with NGOs and other key organizations and individuals in the Philippine conservation and development communities. Final Board composition reflects the major NGO coalitions including Greenforum and CODE-NGO, as well as grass roots groups, the academe, business and the Central Bank/Department of Finance. The Board also has geographical representation, gender balance and reflects the ideological diversity of the NGO community. The character and image of FPE is that of the private sector with an excellent mix of Board members clearly identifiable with the NGO community, and an interim management provided by the well respected and corporate backed PBSP.

**Program direction:** USAID, DENR and DOF have emphasized the need for a proven track record by FPE prior to the release of additional funds for the program. Questions have been raised recently by USAID regarding absorptive capacity of NGOs to utilize the interest on the existing endowment fund created by the first dept swap. The interim board placed initial programmatic emphasis on institution building and training to develop a strong cadre of NGO conservationists capable of implementing a wide range of conservation field programs over time. Given the number of NGOs in the Philippines and the need for increased NGO natural resource management training, the initial emphasis on NGO training, in combination with project-related grants to qualified organizations, should absorb existing FPE funds.

\$13 million is available for the next swap which will bring total USAID funding for the FPE to \$18 million. The interest earnings from this endowment - the peso equivalent of roughly \$36 million annually - should be sufficient to support the program of assistance to NGOs. To ensure that endowment funds are used widely, further development of a stronger and more coherent programmatic direction for FPE is required. WWF has suggested that FPE resources be used in support of the Philippine Strategy for Sustainable Development (PSSD), which goes beyond USAID's more narrowly defined involvement in FPE. The PSSD has been

widely accepted by NGOs; however, affirmation of the PSSD by the incoming DENR Secretary is first required.

Another potential area of focus for the FPE is in the National Integrated Protected Area System (NIPAS) program. The goals and objectives of the FPE are directly complementary to IPAS. Currently, the national park system in the Philippines encompasses 1.3 million hectares in sixty-two mainly terrestrial natural reserves. Many of these reserves exist only on paper. The majority have been severely degraded due to illegal settlement. With funding from the World Bank ENR/SECAL Project (Biodiversity Conservation Component), management strategies are to be developed for ten high priority NIPAS. The IPAS Director expressed considerable interest in increased collaboration with NRMP/FPE in light of: a) the IPAS law requires that management plans be developed for all sixty-two sites by 1995 but World Bank funding is restricted to only the ten high priority sites; and b) several of the high priority sites, as well as other IPAS sites, will contain old growth forest.

**Terms of the next debt swap:** Under current U.S. legislation, USAID is required to get market rates for debt swap transactions and subsequent investments. Based on full redemption received during the original debt-for-nature swap with Haribon, USAID subsequently defined market rates as full redemption for the first swap under NRMP. However, Central Bank regulations changed in the interim between the two swaps and a much lower redemption rate was established. Due to active USAID and DENR pressure, the GOP made a special arrangement for the first NRMP swap to make up the difference between the redemption rate allowed under Central Bank regulations (approximately 67%) and the full redemption rate required by U.S. regulations. As a result of this arrangement, WWF was able to net a 90% redemption rate on the first NRMP swap with the Central Bank keeping 10% as a "fee". WWF argues that they received considerably more than "market rates" through this special arrangement. However, they believe that the Central Bank will not be willing to grant such a high redemption rates in future swaps. As a result, WWF is concerned that USAID and DENR might not be satisfied with the lower redemption rate now set by the Central Bank. Additionally, the 67% redemption rate compares favorably with recent swaps in other countries where the average has been about 75% with a low of 30% and a high of 100%.

WWF is concerned that as the Philippine economy improves, the market return an investor can expect for debt conversions has changed significantly. This has two implications. First, reforms made by the Aquino and sustained by Ramos administrations and the fact that the GOP negotiated a Brady Plan initiative with its creditors have moved Philippine commercial debt up to a range of 58 to 74 cents on the dollar. Secondary market analysts predict that the debt could stabilize as 70 cents by the end of 1992. At high market rates, the costs and benefits of

undertaking a debt swap process would need to be weighed against the costs and benefits of procuring local currency through other means (i.e., direct conversion of dollars).

The general improvement in the Philippine economy has led to a dramatic increase in foreign investments. This has increased competition in the country's quarterly debt auction, thus reducing redemption rates. The average redemption rate of winning bids in the April 1992 auction was only 57.7%.

- Conclusions:

The progress WWF and PBSP have made to date in addressing the objectives of the Resources Protection component, as well as the process used in achieving these objectives is impressive. The process for establishing a foundation in the Philippines responsive to local needs is a challenging one, requiring broad participation. WWF/PBSP appear to be meeting this challenge successfully, laying the groundwork for what has the potential to be a truly sustainable component of NRMP. In the coming months, further development of a stronger and more coherent programmatic direction for FPE is required. The PSSD and the IPAS program represent areas where FPE support appears warranted, and where FPE program direction could be refined to maximize impact.

Current market conditions in the Philippines suggest that the next debt swap be done as soon as possible, before commercial debt rates increase and redemption rates decrease. At high market rates, the costs and benefits of undertaking a debt swap process would need to be weighed against the costs and benefits of procuring local currency through other means (i.e., direct conversion of dollars).

If the earmarked \$13 million were swapped in the near future, the total swapped to date would be \$18 million. The effective endowment would be larger than \$18 million, depending on the discount (e.g., the initial \$5 million swap generated roughly the equivalent of \$9 million in pesos). At interest rates approaching 20% and in light of FPE's current and proposed program, the FPE could be considered as sufficiently funded and perhaps sustainable at this level. Moreover, if the FPE is successful at this level of endowment, securing additional resources from other donors for an expansion of the FPE program might be possible.

- Recommendations:

- USAID should authorize WWF to proceed with the next debt swap as soon as possible, before market conditions negate the advantages of the debt swap process.

- Future USAID support to FPE should be contingent on an evaluation of the program conducted approximately eighteen months after the next debt swap. The evaluation should assess: a) the overall operation of the FPE, b) further absorptive capacity of NGO's and c) the impact of FPE grant funded programs. If the program is highly successful, the evaluation could serve as a marketing tool to attract funding from other donors.

- FPE training activities need to be coordinated with other elements of NRMP (as well as other donor and GOP programs) in order to maximize its utility.

- WWF/PBSP and the FPE Board should consider the PSSD, the IPAS program and NRMP policy reform agenda as a basis for focusing the FPE program.

#### 4.2 Information, Education and Communication

##### - Findings:

At the outset of NRMP it was recognized that strong public support would be necessary to implement the policy reforms imbedded in the program. To create this public support, the program was designed with an Information, Education and Communication (IEC) component. The goal of this component was to provide "sufficient public knowledge, understanding and appreciation of the problems, the available solutions and the specific programs of action." The DAI contract identified mass media and formal and informal education as the vehicles for generating this public awareness and understanding. A realignment of DENR's communication, information, training and education programs to support the NRMP policy reforms was envisioned. The IEC component was to be implemented in tandem with IEC activities of the mass media and NGO communities.

The DAI contract identified eleven tasks which the IEC component would accomplish. These tasks included:

- an assessment of existing private and public IEC activities regarding environmental awareness;
- the development of a new IEC strategy for DENR, focussed on the natural resources sub-sector;
- the development of audience specific communications vehicles;
- the production of media spots and programs;
- the development and presentation of IEC training workshops and "how to" materials for public and private communications specialists;

- presentation of workshops on environmental issues for journalists and community development and environmental NGOs;
- the development of environmental curricula and environmental modules for existing curricula; and
- the publication of an NRMP newsletter.

Acknowledging the importance of the IEC component and its breadth, the original policy implementation contract allocated \$2 million for IEC implementation -- 22 percent of the total policy implementation budget. The IEC component received more funding than any of the other policy implementation components.

The DAI workplan reiterates the need to generate strong public support for policy reform and to refocus DENR's IEC activities. But the workplan does not specifically respond to the eleven tasks identified in the contract. DENR reports that this is necessary while until it finalizes its own framework plan for an "umbrella" IEC program for DENR in which NRMP will fit. The DAI workplan proposes to inventory IEC activities within and outside of DENR, assess IEC needs and respond to those needs. Essentially the work plan identifies a process which will lead to the development of an IEC program, rather than a plan for operating an IEC program. USAID is still awaiting a detailed IEC plan from DAI.

Regarding IEC outputs, the work plan provides for production of a quarterly NRMP newsletter. USAID and DENR were heavily involved in assuring the first two issues were produced. The workplan also lists training modules and publications as eventual products, but does not specify what these modules and publications will be, leaving this determination as an outcome of the IEC process initiated by the work plan.

Unfortunately, even this pared down workplan has not been implemented. DAI has had trouble securing a team leader for the IEC component. To date the only products that NRMP has produced is a general brochure on the program and two newsletters. The assessment of IEC activities in DENR and other government agencies has been restricted to an assessment of these activities within DENR, and has not been completed. It appears, especially to USAID and DENR, that DAI has not given adequate attention to the IEC component.

NRMP has not been generating information for DENR involvement in the public debate being carried out in the press on the future of forest management in the Philippines. Its only concerted involvement with the media has been support for earth day media coverage on the need for protecting old growth forests in Subic Bay and coverage of the awarding of Certificates of Ancestral Land Claims in the Palawan Province and transfer of the maps of

closed canopy forests from USAID to DENR. PSO was heavily involved in these activities.

The debate about logging bans is primarily taking place at an emotional level. Many of the proponents of a total ban are as concerned with what they see as a social inequity as they are with the environmental issues surrounding a log ban. From their point of view, the forests of the Philippines have been exploited for years for the benefit of the few at the expense of the many. Thus the call is for a total commercial logging ban, where "commercial" is apparently a code word for corrupt, big money interests.

Although "equity" is a term frequently heard in the logging ban debate, it apparently is limited to the concept of cutting off wealth rather than redistributing it. The debate needs to be informed about the adverse economic impacts that a total logging ban would have on the economy of the Philippines and particularly upon lower income groups. Such information could move the debate into a broader discussion of forest resource management and use with respect to equity, community empowerment and other "people oriented" issues. Unfortunately, NRMP has not developed or disseminated this type of information.

The impression that the evaluators got from talking to members of the general public and leaders of development and environmental NGOs, as well as reading the coverage in the press, is that the public believes the country faces grave forest management problems and that DENR does not have solutions to those problems. One leader of an environmental NGO stated that he had been told by DENR that NRMP would develop answers to those problems. He lamented the fact that the program had not done so.

Substantial progress towards meeting the goals of the IEC component of NRMP is not being made. Although there are many factors contributing to the lack of activity, one over-riding factor may be the conceptualization of IEC as a single program component. IEC is composed of three very distinct type of activities -- Information, Education, and Communication. Each activity requires a different approach and different set of skills. For instance, the development of an elementary school environmental curriculum is quite a different matter than generating favorable press coverage of a successful community forestry project. Likewise, the transfer of information to practitioners on how to operate a successful community forestry project is quite different than writing a press release about the project.

Because these activities differ significantly, each of the three components of the program needs to be staffed by professionals with widely different skills. Likewise, its management cannot be "captured" by just one of its component parts. This means that

the IEC team leader has to have a broad background and understanding of IEC and that the individual components have to have their own unique staff, strategies and programs.

Finally, although it is important that all of the components of NRMP be integrated into DENR, it is critical that this integration begin from day one for the IEC component. This is particularly true for the communications activities of IEC. In the public arena, DENR, and not NRMP, is the actor. Support for policy reforms cannot be separated from support for and trust of DENR. This means that DENR, not NRMP or USAID, must take the lead in IEC, particularly in its dealings with the public.

- Conclusions:

IEC was identified by NRMP as a critical need for accomplishing policy reforms in forest management. Its importance was reflected in the size of the budget allocation for IEC activities. However, very little IEC activities have occurred under NRMP. DAI has had difficulty securing a team leader for the IEC activities, and the current leader has been on job for less than a month. No IEC strategy or program plan has been approved some thirteen months into the DAI contract.

Because of the lack of an operating IEC program, NRMP is not promoting public knowledge, understanding and appreciation of forest management problems and potential solutions. NRMP is actively involved in assisting DENR in the public debate about these issues, nor is it providing basic information which could inform the debate. It appears that the press and NGO communities believe that neither NRMP or DENR has solutions to forest management problems.

Part of the problem with the implementation of the IEC program lies with its basic conceptualization. IEC is not actually a component of a program, but three components -- Information, Education, and Communication. Each of these components needs its own distinct technical expertise and implementation strategy.

Although all of NRMP's activities need to be integrated into DENR, this is even more important for IEC. The PSO should be more involved in the substantive management of IEC than in the other program components of NRMP.

- Recommendations:

- NRMP should move IEC back into a place of prominence within the program. It should fully staff the program and begin to create public knowledge, understanding and appreciation of forest management issues.

- NRMP should immediately develop information on the potential impacts on the economy and citizens of the Philippines of a total commercial logging ban and get that information into the debate on this issue.

- NRMP should develop implementable strategies each part of IEC -- Information, Education, and Communications -- rather than a single strategy which is applicable to all three parts.

- DENR, as represented by the PSO, should be intimately involved in developing the NRMP IEC component.

#### 4.3 Implications of the Local Government Code for NRMP

##### - Findings:

Under the provisions of the 1991 Local Government Code, an "operative principle" contained in the code concerning natural resource management states:

"Local government units shall share with the national government the responsibility in the management and maintenance of ecological balance within their territorial jurisdiction, subject to the provisions of this code and national policies."

The Code devolves the following forestry management functions to local government:

To municipalities:

"Pursuant to national policies and subject to supervision, control and review of the DENR, implementation of community-based forestry projects which include integrated social forestry projects, management and control of communal forest with an area not exceeding fifty square kilometers; establishment of tree parks, greenbelts, and similar forest development projects."

To provinces:

"Pursuant to national policies and subject to supervision, control and review of the DENR, enforcement of forestry laws limited to community-based forestry projects..."

Funding for these responsibilities will be provided through the local government's share in the Internal Revenue Allotment (IRA), projected to reach forty percent of the total internal revenue collected by the GOP by 1995. The IRA allocated to the local governments is to be sub-divided among provinces, cities, municipalities and barangays. The Code also states that local

government will receive forty percent of gross collections derived by the national government from forestry fees, joint ventures or production sharing agreements and other such fees and revenue-generating arrangements. To the extent that PICOP and other government owned or control corporations generate a profit, forty percent of this revenue is also supposed to be allocated to local governments.

DENR issued implementing guidelines on June 30, 1992. According to the guidelines, local government may impose its own fines on violators of forestry laws in addition to national fines. Local government may also confiscate and dispose of the vehicles and equipment of those violating forestry laws.

Only community-based forestry is devolved by the Code to local governments. At present this covers only the Integrated Social Forestry program (ISF). DENR staff devolved to local government includes only those who work full-time on community-based forestry. This means only the Community Development Officers (CDO) and Community Development Assistants (CDA) are transferred to local government assignments. In Region 11, for example, some 108 CDOs and CDAs have been transferred to local government positions. Somewhere between two to three hundred staff in the regional office, PENROs and CENROs remain employees of DENR. Because the functions of DENR's regional, provincial and community offices are retained by the department, the staff of these offices are not devolved. This means that all planning, technical and supervisory staff remain DENR employees. As DENR staff in Region 11 noted, the Local Government Code directly affects a relatively small part of the Department's forestry responsibilities. DENR officials have met with local government officials to explain changes in responsibilities, staffing, funding, etc.

NRMP provides assistance through the Regional and Provincial Technical Services (RPTS) element to strengthen the capabilities of DENR local offices to provide technical assistance, training and management support. Though not the main purpose of RPTS, these capabilities directly contribute to implementation of the Code. RPTS staff have been assessing the current problems local governments (i.e., provinces) are encountering. They will then assess organizational requirements, personnel systems, forestry planning requirements and capabilities and financial administration requirements. There are plans for coordinating with similar capacity building activities supported by SECAL.

At this time, great uncertainty characterizes the implementation of the Code. A recent assessment of the overall situation reported that "the mood of local government units and local level national government personnel (is one of) confusion, resistance and wait-and-see attitude." In general, local government officials find considerable contradiction and ambiguity in the

guidelines issued. They are especially concerned about the actual IRA they will receive, fearing that they will be given additional responsibilities without the resources to carry them out. They also have been unable or unwilling to establish the Memorandum of Agreement between local government and national agencies on the devolution of functions. Personnel issues, such as pay scale differences and retention of seniority, have not been resolved.

This indicative of DENR's situation. Though DENR has issued guidelines for the transfer of functions, those guidelines leave considerable room for differing interpretations. For example, when illegally harvested forest products are confiscated, it is unclear who retains control over the disposition of those items. It appears that each instance is handled on a case-by-case basis. For example, in some cases, DENR disposes of confiscated items; whereas, in another case, the province used confiscated illegal timber for furniture for its schools. Disposition of vehicles and equipment is equally ambiguous; it seems that whoever leads the raid on an illegal operation gets to keep the confiscated equipment. The problem seems pervasive; newspapers have reported instances of conflict and controversy over this issue at the local level. Similar confusion and conflicting authorities were reported for management of local forests as well under the code.

A very real concern in the current muddled situation is assuring adequate attention to community-based forest management. Not all local governments are likely to give the same priority to forestry management as DENR. For example, some local governments reassigned their "devolved" DENR staff to other functions, such agricultural extension and manning road check points. Furthermore, an Environment and Natural Resources officer is an optional position for all levels of government under the Code.

- Conclusions:

Needless to say, the Local Government Code is currently in a stage of considerable confusion. It is will clearly take time for most of the major problems to be resolved. Some functions and relationships between local government and national agencies will probably never be fully clarified. It is equally clear that the Code has very important implications for DENR's policy reform efforts and NRMP's activities, particularly for its policy implementation support. Reports is clearly offering very timely assistance.

The Code implies that, in regard to community forestry management, the orientation of DENR needs to adjust. Rather than issuing directives to be carried out by its regional, provincial and community offices, DENR needs to provide general guidance and technical assistance adaptable to local conditions and interests. Department policies need to set standards and guidelines which

allow for adaptation to local conditions. Though only community-based forestry has been devolved at this point, it is possible that, if the initial devolution process succeeds, additional forestry management responsibilities might be devolved to local governments.

At this point, it is not clear whether DENR's response to the Code is adequate. Simply devolving CDOs and CDAs to local government to be responsible for community-based forest management overlooks the requirements for planning, supervision and routine monitoring of the work of the CDO's and CDAs. Apparently, it is assumed that the regional offices, PENROs and CENROs will somehow provide the necessary backstopping. RPTS's focus on building local capacities for implementing DENR's forest management policies is well directed but not a solution to the broader problem of supporting LGU's with their forest management responsibilities.

- Recommendations:

- DENR should assess the planning and management requirements necessary to backstop the CDOs and CDAs with community forestry management and clarify how this support will be provided by the regional office or PENRO.
- DENR and USAID should re-assess whether the RPTS effort should be expanded within the three focus regions and/or to other regions. If the need for this assistance expands over the coming months and additional funding is needed, budgets adjustments within NRMP should be considered.

4.4 Donor Coordination

- Findings:

USAID, the World Bank, the Asian Development Bank and the Australian and the German bilateral agencies are funding major projects in the forestry sector. DENR officials reported that they made a concerted effort to coordinate donor assistance during their strategy development work in the late 1980's. The studies and results of work sponsored by various donor agencies generated the information needed by the Department. For example, USAID funded the Sustainable Natural Resource Assessment in 1989 while the DENR was completing its Philippine Strategy for Sustainable Development. The ADB, in conjunction with the Finnish Government, then funded the development of the Master Plan for Forestry Development which drew on the results of the preceding work. The World Bank funded the Philippine Natural Resources Assessment. This work resulted in major investments in the forestry sector and it is clear that a degree of synergism often lacking among donors was operating at this time.

With the completion of the Master Plan, DENR, in effect, allocated portions of the plan among donors interested in providing funding for activities in the forestry sector. For example, reforestation and plantation development were made part of the ADB Forestry Sector loan, while USAID's assistance focused on forest industry de-regulation, protection of the virgin forest, improved forestry management and community based forest management. All of these activities are part of the Master Plan. DENR staff also reported that they have even refused to accept donor assistance when the donor wanted to fund activities that were not consistent with the Master Plan or duplicated on-going activities. This is not a minor action given that the bulk of funding for DENR projects comes from external donors with a relatively small contribution from the GOP budget. Instrumental to donor coordination was DENR's Foreign Assisted and Special Projects Office (FASPO). DENR continues to hold donor coordination meetings which also involve other GOP agencies, NGOs and business representatives.

During the evaluation, the team noted several examples of very good donor coordination, or at least the potential for it. For example, the Australian's work in Region 2 to develop a Geographic Information System will be highly useful for the residual forest planning activities supported by NRMP once all the data become available. The World Bank funded structural adjust loan for the forest sector - SECAL - includes work on prepared local governments to plan and manage community forest resources, a responsibility they will assume under the Local Government Code. NRMP's Regional and Provincial Technical Services component provides comparable assistance in Regions 2, 4 and 11. The ADB is planning to provide funding for demarcation of at least a portion of the old growth forest through a second forestry loan. Moreover, the policy agendas supported by USAID, World Bank and the ADB programs are complementary. USAID also reports the donors consult each other regarding new projects and developments in the sector.

The evaluation was heard reports that attention to donor coordination has recently diminished priority. The evaluation team found examples which suggest that donor coordination is lacking in several areas. For example, NRMP is devoting considerable effort to the development of residual forest management planning, testing alternative methods and assessing cost requirements on a pilot basis. The Forest Management Bureau reports that it has already considered alternative planning and management approaches and is satisfied with its current approach. Meanwhile, the GTZ is funding yet another approach to residual forest management. NRMP's Policy Implementation chief of party reported that he was totally unaware of the GTZ until recently. Another similar example exists regarding community based forestry management. In addition to DENR's Integrated Social Forestry

program, the World Bank, ADB and USAID are funding similar but differing approaches to community forestry.

Donor coordination was apparently weakened when Congress abolished the Assistant Secretary position of the head of FASPO. Though the incumbent continued to work in this capacity under contract (funded by USAID), she had lost her administrative position and authority necessary to maintain donor coordination within the Department. DENR also decided to assign responsibility for each donor program to individual Program Officers. This is reported to have further undermined the ability of the FASPO to perform its previous coordination functions.

- Conclusions:

Donor coordination has apparently become a lower priority in DENR operations due to both external and internal factors. As environment management becomes increasingly important problem in the country, it is likely to attract greater donor attention and subsequent fund for environmental projects. Even at current levels of assistance, better efforts are needed to guide and coordinate donor assistance. This should involve at least two types of coordination: a) the allocation of funding areas for donor assistance, either by type of problem or by geographic coverage; and b) better communication from DENR among donor projects about areas of complimentarily.

The donors themselves, are equally responsible to try to coordinate their assistance in this sector. If not, DENR could be pushed and pulled in different directions as dictated by the particular interests of each individual donor. To some extent, this situation is already apparent with respect to residual forest management and community based forest management.

- Recommendations:

- DENR needs to strengthen its efforts to assure better donor coordination; one option to consider is re-establishing FASPO as a separate office.

- Donor coordination meetings need to include a session on a periodic basis (e.g., semi-annually) which focuses exclusively on assistance for environmental management.

## SECTION 5: LESSONS LEARNED

1. In general, technical assistance projects should not be embedded within policy-based, sector assistance programs.
2. Linkages to appropriate technical counterparts need to be well defined from the outset to assure institutionalization of those activities.
3. Policy-based, sector assistance programs are most effective when they facilitate, rather than force, implementation of a policy agenda developed by the client agency.
4. The implementation requirements of policy reforms should be anticipated prior to enacting the reform - i.e., in NRMP, estimating the cost of actually demarcating the old growth forests so that protection measures can be implemented.
5. Donor-driven schedules for obligating funding can defeat the need to understand the complexity of policy reforms and the scope of actions required to achieve policy objectives.
6. Technical assistance in support of the client agency's policy agenda can be as meaningful, if not more so, as the disbursement of performance tranches in advancing policy reforms.
7. Trying to meet rigid time tables for disbursement of program tranches can defeat the utility of revising performance to make them more meaningful measures of progress and accomplishment.
8. Sector assistance programs require a strategic focus which guides and coordinates the various activities conducted in support of the program - i.e., in NRMP, protecting old growth forests provides the rationale for undertaking all of the various activities supported by the program.
9. Technical assistance activities which are interrelated or complementary should not be divided among separate contracts.
10. In multi-component technical assistance contracts, managers need to assure that all elements receive the attention and priority necessary for their timely implementation.
11. USAID needs to recognize the value of a chief of party who is first and foremost a skilled manager as opposed to a skilled technician. Trying to make managers out of technical specialists is typically a poor substitute.
12. Policy-based, sector assistance programs should establish transparent mechanisms for modifying performance indicators and even deleting policy items which prove to be of marginal utility, i.e., in NRMP, privatization.

**Annex 1 THE NATURAL RESOURCES MANAGEMENT PROGRAM (NRMP)  
MID-TERM EVALUATION**

**I. BACKGROUND**

On September 28, 1990, the Natural Resources Management Program (NRMP) was authorized at \$125 million. Section 5.7 of the Grant Agreement provides for the conduct of a Mid-Term Evaluation of the Program by an independent evaluation Team to assess NRMP's accomplishments and early impacts on the forestry sector, evaluate actual implementation, identify key issues affecting its continued progress and prepare recommendations to improve the second half of implementation of the Program. The U.S. Agency for International Development (USAID) and the Government of the Philippines Department of Environment and Natural Resources (DENR) will sponsor this review.

**II. INTRODUCTION**

The second half of the 1980s has been characterized by a significant shift in the Philippine Government's (GOP's) attitude, policies and commitment to sustain the country's environment and natural resources. As an initial step, the Philippine Strategy for Sustainable Development (PSSD) was adopted as the national policy to guide sustainable economic development. PSSD addresses the direct links between economic development and environmental degradation. The broad PSSD policy statement was immediately followed by the development of a Master Plan for Forestry Development (MPFD). This plan, developed with support from the Asian Development Bank (ADB), serves as the long term strategy for the management, development and protection of the nation's forest resources. Both PSSD and MPFD are based on the premise that successful natural resources management is dependent on a policy climate which encourages people's participation in decisions affecting their access to resources, and strong market-driven private sector engagement.

These major policy developments were partially stimulated through the strong support from among the donor community including the experience of the USAID-supported Rainfed Resources Development Project and Sustainable Natural Resources Assessment Philippines (1990), respectively. As mentioned, the ADB co-sponsored preparation of the MPFD provided the analytical basis for new forest policy initiatives. The World Bank conducted an environment and natural resources sector review which encouraged market-based forest sector reforms and attention to the preservation of unique biological resources. Both the ADB and World Bank efforts led to major loans in this sector (the \$240 million jointly funded ADB/OECF Second Forestry Sector Loan; and the \$258 million World Bank Sectoral Adjustment Loan).

Concurrently, USAID provided \$125 million in grant for the implementation of the NRMP. The program assists DENR with the formulation and implementation of eight key policy changes intended to ensure sustainable management of the Philippines' remaining forest resources and their accompanying biological diversity. Several specific implementation steps associated with these policy reforms are also included in the bilateral grant agreement. The eight policy actions which form the basis for cooperation under the NRMP are as follows:

1. Increase tenure security to encourage private investment in sustainable forest management.
2. Government to collect a substantially larger percent of economic rents of timber harvested on forest concessions.
3. Revoke or amend regulations that restrict entry/exit of firms to and from forest products industries.
4. Encourage private investment and competition in the sector by divesting/liquidating parastatals and/or equity/assets in forest enterprises.
5. Preserve remaining old growth forests and the biodiversity contained therein.
6. Rationalize DENR management of residual forests and provide adequate financial resources to carry out its mandate.
7. Facilitate technology development and transfer in forestry management and preservation plus wood processing.
8. Increase participation in forestry management by individuals, peoples organizations, and non-governmental organizations (NGOs).

The NRMP provides DENR with technical assistance for the further development of these policy reforms and their implementation. Additional to TA and budgetary support for policy reforms and implementation, the NRMP supports an independent TA team that provides continuous monitoring and assessment of policy reform performance.

#### **Significance**

Considerable progress has been made on both regulatory and implementation steps associated with all eight policy reforms during the NRMP's first 18 months:

- o New legislation was enacted in October 1991 (Policy Area 2) which mandates the GOP to collect 25 percent of the market price of logs as forest charges.

- o To encourage greater private sector participation (Policy Areas 3, 4 and 7), DENR has issued an Administrative Order (AO) which provides tenurial rights and security of investments (Policy Area 1) as well as the partial elimination of restrictions on the free entry and exit of forest-based enterprises (Policy Area 4).
- o Logging in old growth forests has been banned through the issuance of another DENR AO, effective January 1, 1992 (Policy Area 5); all logging operations are now to be conducted only in residual forests.
- o Using the NRMP authority for a \$25 million debt-for-nature swap, the Foundation for the Philippine Environment has been established (with an initial \$5 million swap), and has begun supporting community-based approaches for improved natural resources and biodiversity conservation (Policy Areas 5 and 8).
- o Another AO (Policy Areas 6 and 8) was issued providing for small scale, labor intensive, selective harvesting of mature stands in the country's remaining residual forests.
- o Independent forest resource assessors are now being trained to support the market-based allocation of management agreements for residual forests (Policy Area 6).
- o DENR is making steady progress in involving forest based communities under livelihood programs (Policy Area 8) through the testing of new small-scale community forest management units.

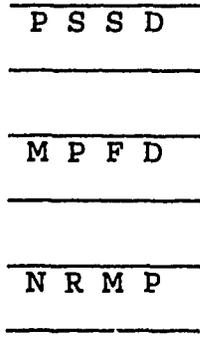
Thus, it appears that an impressive list of accomplishments has been compiled during the NRMP's relatively short tenure. It is appropriate, therefore, to assess this progress to identify the extent to which broader policy changes have been translated into field-level benefits, and to identify specific issues which should be addressed to maintain the program's momentum. Though the various cooperating institutions involved with the NRMP each have prepared extensive reports on its implementation, there is a need for a comprehensive and unified review. This mid-term evaluation is expected to last for six weeks beginning mid-July 1992.

### III. General Framework

The policy-based Natural Resources Management Program (NRMP) is USAID/Manila's first major initiative on sustainable natural resources management. NRMP aims to assist the Government of the

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Philippines (GOP) formulate and implement specific policies to enhance the management of the country's tropical dipterocarp forest and to improve the efficiency and productivity of the wood processing industries. As illustrated below, it is the first approach to operationalize the strategies embodied in the PSSD. Likewise, NRMP is the USAID/GOP's first attempt to implement the MPFD. NRMP is a hybrid Program-Project initiative consisting of a policy and performance based- budgetary support complemented to a limited extent by projectized Technical Assistance (TA) activities. Since its inception in September 1990, other donors have launched programs and projects aimed at operationalizing other aspects of the MPFD while complementing the NRMP.



Policy Reforms	Resources Protection	Policy Monitoring & Evaluation	Support Services
			Pol Studies Pol implementation

**IV. OBJECTIVES**

This mid-term Program Evaluation of the NRMP will be both process and impact-oriented, with the following major objectives:

1. To determine the NRMP's impact(s) on the forestry sector; particularly in the attainment of the PSSD and the MPFD objectives for the management, development and protection of the forest resources including the biological diversity therein and in the development of an efficient forest product industry;
2. To determine the extent to which the DENR is adopting and

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implementing agreed upon policy objectives under NRMP; and determine the continued relevance and appropriateness of the policy agenda.

3. To review and assess the process of program implementation and management and make recommendations for enhancing implementation performance.

## V. GENERAL SCOPE OF THE REVIEW

### Approach

The NRMP mid-term evaluation will cover the period starting from the initiation of the Program in September 1990 until the time of this review. It will be conducted by multi-disciplinary team of consultants who have not served under the NRMP.

The Evaluation Team will employ several methods to accomplish the scope of work. Extensive written materials have been produced by USAID, DENR, donors and other institutions describing the forestry sector as well as NRMP progress. These documents should be reviewed prior to the Team's start-up. Interviews will comprise an important source of information. DENR staff, NRMP consultants, donor agency representatives, other program collaborators such as the private sector led wood industry associations, environmental NGOs and selected communities are essential sources of information. The Evaluation Team will undertake field visits to collect additional information; verify earlier findings and assess the direct effects of policy changes. This process will commence with a one-day workshop to be held in the Philippines.

The Evaluation Team will respond jointly to the questions and issues presented in the SOW. Working under the general guidance and supervision of the Team Leader (Program Management and Systems Specialist), each team member will be required to address a particular set of concerns. The overall results and findings of the Team's efforts will be integrated into one Evaluation Report a suggested outline of which is presented in Section VIII.

The DENR and USAID will each assign an individual to serve as full-time institutional contact and resource person to the Evaluation Team. Access to senior management of DENR and USAID will be facilitated to assure the fulfillment of the terms of reference.

### Terms of Reference

The team will focus its analyses on the eight policy agenda items. To this end, the Team will organize its work around four major tasks as follows:

**Task A: Sectoral Impacts**

This task is aimed at determining and assessing the effects/impacts of the NRMP supported policy reforms on the forestry sector as previously determined by the NRMP's Policy Monitoring and Assessment component. Given the premises of the PSSD and the MPFD, is the NRMP influencing the transfer of stewardship of the country's forest resources from a public to a private sector led effort? Also, how can the complementarity between the NRMP and other donor initiatives be enhanced?

The specific questions to be addressed under this Task include but should not be limited to:

1. How does NRMP fit within and impacts the natural resources sector, particularly in relation to other donor-supported natural resources management initiatives (e.g., ADB, World Bank)? If impacts are still undiscernable, are there any trend(s) of effects that should be noted? Would these trends be permanent/transitory?
2. Based on the identified trends what are the likely environmental, economic and institutional impacts of the policies under the NRMP?
3. Are NRMP's initiatives leading to greater public awareness and understanding of the complexity of forest management issues and environmental degradation? Also, from the public's perspective, is DENR fulfilling its mandate to efficiently administer the nation's forest resources. Is there any evidence of desired behavioral change on the part of the public towards the environment?
4. To what extent is the private sector and the NGO responding to NRMP's efforts at promoting greater investments in forestry and protection of the national biological diversity?

**Task B: Accomplishment of Agreed Upon Policy Reform Agenda**

To assess overall progress made by the DENR in establishing and carrying out the agreed upon policy reform agenda, the following questions which include (but are not limited to the list below) should be addressed:

1. How valid are the original NRMP assumptions, given the changes that have occurred in the sector (e.g., implementation of R.A. 7161, logging ban on old growth forests, increase in stumpage fees, etc.) since the NRMP began?
2. Are the current performance benchmarks the most appropriate for assessing progress in attaining policy objectives and overall program goals?
3. NRMP provides budgetary support for successful implementation of policy reforms. How well has this mode worked so far and how can it be improved during the second half of the NRMP? What evidence is there that the NRMP is actually expediting GOP policy reforms beyond what probably would have been achieved without the Program? How has this funding mode helped (or hindered) the process of policy reforms in the forestry sector.

Other issues that the team should review are illustrated as follows:

4. As regulations for entry and exit are not currently perceived as significant barriers for the private sector led forest products industries, should Policy Action No. 3 (Revoke or amend regulations that restrict exit/entry of firms from forest products industries) be revised to focus on other constraints to investments in these industries?
5. In view of the limited impact that the sales of government-owned forestry assets may have on the efficiency in forest products industries, should Policy Action No. 4 (Encourage private investments and competition in the sector by divesting/liquidating parastatals and/or GOP equity/assets in forest enterprises) and its associated performance indicators be revised? Efforts could be redirected to help improve the efficiency of PICOP, the only large currently operating forest industry owned by the

government; or focused on privatizing PICOP; or reallocated toward Policy Action No. 3 (proposed to be as modified) to improve regulations affecting the forest products industries. Which of these alternatives will be the most appropriate?

6. Should the Technology Development and Transfer (TDT) component focus on forest products utilization and the transfer of existing technologies and provide

little or no support to forest/timber production research?

7. The TDT component aims to encourage greater private sector participation in the development and transfer of forestry technologies. Is the extent of private sector participation under the TDT component sufficient? How should this participation be improved?

8. Given the premises of the NRMP for encouraging private sector led investments in the forest products industry and in view of the continuing public debate on the total vs. selective commercial log ban issue, what measures might be developed to mitigate possible effects in the event that a total log ban is legislated?

#### Task C NRMP Program Implementation

To assess the process by which the NRMP is implemented and managed (as a Program type of initiative) and recommend improvements to enhance Program management and implementation.

Assessment under this Task should be focused on key players i.e., the DENR, USAID, the private sector, the NGO community, and the TA Teams. NRMP Program components (i.e., budgetary support, resources protection, support services should also be analyzed.

Under this Task, the specific questions include but should not be limited to:

#### DENR and USAID Management of the Program Implementation

1. Do the scopes of work adequately address the Program's goals and objectives given the constraints and opportunities arising during program

implementation?

2. How effective has the implementation process been managed by the DENR? How effective are the agencies' Program management structure?

3. How effective have DENR and USAID managed the TA Teams to maximize their contributions?

4. Have DENR and USAID adequately monitored the implementation of the Program? Have the results of these monitoring activities been adequately utilized to improve program implementation?

5. How effective/useful have the progress reviews (semi-annual and annual) conducted by USAID and DENR been? Have the results of these activities been disseminated to the proper staff/office/agency for their information and/or appropriate action?

6. What is the extent of involvement of DENR staff in the Program implementation process? To what extent is the institutional "phasing in" taking place within DENR? What percentage of the DENR's regular staff (including those in the regional offices) is involved? What is the quality of the involvement of DENR personnel? Are there people who should be involved but are not included? What level of involvement should they have? In what stage of the process should they be involved?

7. What has been the extent of documenting various implementation approaches? Are there ways to improve the documentation process?

8. Given the current economic, institutional and policy changes in the Philippines, are the concerned institutions able to effectively fulfill their functions to implement the NRMP? What variables, both external and internal (i.e., NEDA, DBM, Congress, USAID) affect the GOP/DENR's ability to implement Program activities particularly at the regional, provincial and community levels? For example, how effective are the administrative changes (including staff and financial transfers) in supporting decentralized development activities as called for under the New Local Government Code?

### Technical Assistance to DENR

1. How effective have the TA Teams and their sub-contractors mobilized for and accomplished their respective SOWs?
2. How effective are the organizational and management structures and consultants mix of the four TA Teams in achieving the objectives and goals of the various sub-tasks? Are outputs being delivered in a timely manner?
3. Have the TA Teams' interactions between and among themselves and with DENR, other donor-funded natural resources management programs, and USAID been effective?

### Implementation of the Resources Protection Component

1. To what extent has this component progressed towards defining its directions, priorities and implementing strategies? Do the currently defined directions adequately address the objectives as defined in the Program Agreement of this component?
2. A new foundation has been established to administer proceeds from a completed \$5.0 million Debt-for-Nature Swap transaction. Is the foundation working at an optimal level to ensure that starter projects are supported in an expeditious manner?

### Lessons Learned

1. What lessons might be learned for future Programs of a similar nature?
2. Is the NRMP Program-Project mix (and support mechanisms) working?

### Sustainability

1. To what extent has the Program strengthened DENR's capability to plan and administer natural resources management interventions in the forestry sector (e.g., administration of NGO and Forest Service Organization (FSO) contracts)?
2. Is the Program's administrative structure in synchrony with the Department's administrative

structure for fostering the institutionalization of NRMP Program activities within the DENR?

3. Concurrently, to what extent is the Program encouraging greater participation of the NGO and private sector in natural resources management?

4. Are there mechanisms sufficiently in place to ensure that improvements in the public-private sector capability will be sustained after Program life? What further actions are necessary?

**Task D**      Program Directions

On the basis of the foregoing Tasks (A, B and C), recommend ways by which NRMP might achieve greater impact in the forestry sector for the remaining two and a half years of implementation. The questions that Task D should address might include but should not be limited to:

1. In the light of the current sectoral changes and developments, what revisions in the Program direction should be made?

2. What is the likelihood of achieving the remaining targets including those under the Resources Protection and Support Services components for 1993 and for the rest of the LOP? Are there changes in management approaches that should be made to achieve these? How should these changes be made?

3. Given current developments in the sector, are changes warranted in the NRMP policy agenda to accomplish the NRMP goals relating to sustainable management of the Philippine forest resources and biodiversity and efficient forest products industry?

**VI. THE EVALUATION TEAM'S COMPOSITION AND SPECIFIC TASKS**

The Evaluation Team will comprise five persons including a Program Management and Systems Specialist who will also serve as the Team Leader. The four other specialists will cover the fields of Forest Industries, Natural Resource Community Management, Environmental Management; and Natural Resource Economics.

Each Team member is expected to focus on a particular set of policy reforms with the goal of: (a) determining the sectoral impacts of these reforms, (b) the continuing relevance of associated policy benchmarks and (c) actual progress in implementing these reforms. Team members will identify gaps and opportunities and suggest appropriate changes in Program direction. Specifically, the Team Leader, the Natural Resource Economist and the Environmental Management Specialist will lead Tasks C, B and A, respectively.

Pursuant to the Provisions of the Buy America policy of the Agency, this mid-term evaluation will be implemented by a U.S. based prime contractor independent of the existing TA Contractors. To the maximum extent possible, the Prime Contractor should hire local consultants who have not served under the NFMP.

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**Annex 3 to Policy Action 1: Increase tenure security to encourage private investment in sustainable forestry management.**  
By: Keith Openshaw

**- Introduction:**

To satisfy local demand for wood and other forest products, the bulk of the supply has and will come from the indigenous tree resources of the Philippines. Due to a number of factors including, poor management practices, a rapid population increase, a drive to earn foreign exchange and insecurity of tenure on forestry concessions, many of the dipterocarp forests have been mined instead of managed. This has resulted in the forest cover shrinking from about 50% in 1940 to approximately 24% in 1990, with many areas of the remaining forests being understocked and in a poor state of management. The intention of the new policy thrust is to encourage sustainable forest management by providing long-term tenure security to timber concessionaires and local people. At the same time there are other government policies which are trying to slow down the conversion of forest land to agriculture, by increasing unit agricultural production, giving tenure security to farming families, improving education, increasing farm gate prices and increasing the availability and knowledge of family planning practices.

**Available Area of Dipterocarp Forest**

The government has banned logging of trees in virgin forests and in all areas above 1000 meters, on slopes of more than 50% (23 degrees) and in mangrove areas, so the potential area of residual dipterocarp forests that can be managed is a maximum of 5.7 million hectares (19% of the land area) although some estimates put it as low as 4.7 million hectares (16% of the land area), Table 1.

In addition, there are forest plantations of timber and pulp wood trees, coconuts, rubber and other woody biomass crops that are/or could be used for industrial wood products. There are also many small parcels of woodlands in agricultural areas and scattered trees and shrubs on farms which supply fuel, poles and some timber products to rural and urban people. But the bulk of timber products have and will come from dipterocarp forests, hence the concentration of this initiative on these areas.

Table 1 gives an estimate of the forest areas of the Philippines in 1990 with an approximate division of other land use types.

Table 1. The Philippines 1990: Land Classification  
by Land Use Types<sup>3</sup>

Units millions of hectares

	A	B
Natural Forest areas		
Pine	0.1	0.2
Mossy forests	0.2	0.2
Virgin dipterocarp areas	0.9	1.0
Closed residual dipterocarp areas <sup>1</sup>	(0.9)	(0.9)
Open residual dipterocarp areas	(4.8) 5.7	(2.6) 4.7
Marginal dipterocarp areas	incl. above	(1.2)
Mangroves	0.2	0.1
Sub total	7.1	6.2
Extensive Cultivation		
Open in forest	0.0	-
Grass land	1.8	1.5
Mixed grass, brush, mixed crops	10.2	9.2
Sub total	12.0	10.7
Intensive Cultivation		
Coconut plantations	1.1	)
Mixed coconut/croplands	3.7	)
Other plantations with or without crops <sup>2</sup>	0.5	) 12.2
Cropland	4.4	)
Sub total	9.7	12.2
Other Areas		
Fish ponds, lakes and other land	0.7	)
Unclassified	0.6	) 1.0
Sub total	1.3	1.0
<b>TOTAL</b>	<b>30.1</b>	<b>30.1</b>

Note:

- 1) This estimate of closed residual dipterocarp forest has been made from the latest aerial survey undertaken by the Development Alternatives International team (DAI). It estimates that there about 1.8 mill ha of closed forest of which up to 0.9 million ha is virgin.
- 2) In column B, this includes forest plantations estimated to cover 0.48 million ha (Table 4.4 Forestry Master Plan)
- 3) The de jure land classification of the Philippines is 15.9 million hectares of forest land (53%) and 14.2 million hectares (47%) of alienable and disposable land plus miscellaneous land.

Source; Column A. World Bank (1989) Philippines Environment and Natural Resources Management Study updated and modified. The World Bank Washington Column B. Forestry Master Plan (1990) Table 4.4, adjusted. DENR. Manila.

Current Demand for Sawlogs and Peeler Logs.

If the 4.7 million to 5.7 million hectares of residual dipterocarp forests were fully stocked and managed on a sustainable basis could they supply most of the demand for wood and other forest products to meet local and export requirements? Table 2 gives the estimated consumption and export of industrial wood products by category with their supply source.

Table 2. Philippines 1990 Production, Import, Consumption and Export of Industrial Wood Products

Table 2a

Roundwood

Units thousand cubic meters round

	Product- ion	Import	Consump- tion	Export
Sawlogs & veneer logs	2157	325	2381	101
Pulpwood	335	0	288	47
Other indust- rial roundwood	2502	40	2542	0
<b>TOTAL</b>	<b>4994</b>	<b>365</b>	<b>5211</b>	<b>148</b>

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Table 2b. Finished Products, Waste and Other Industrial Roundwood

Units thousand cubic meters

	Product- ion	Imports	Consump- tion	Exports
Sawnwood	841	1	765	77
Wood-based panels	488	0	265	233
Wood pulp	301	77	378	0
<b>Sub total</b>	<b>1630</b>	<b>78</b>	<b>1408</b>	<b>300</b>
Sawmill, panel mill and pulp- mill waste	1187	0	(1187)	0
Other industrial roundwood	2502	40	2542	0
<b>Sub total</b>	<b>3689</b>	<b>40</b>	<b>3729</b>	<b>0</b>
<b>TOTAL</b>	<b>5319</b>	<b>118</b>	<b>5137</b>	<b>300</b>

Note:

<sup>1</sup>/For roundwood, production plus imports = consumption + exports: it is assumed that the change in stock is zero from year to year.

<sup>2</sup>/The total production of roundwood plus imports of roundwood are equal to the total production of finished products, plus the imports<sup>1</sup> of other industrial roundwood:  $4994 + 365 = 5319 + 40$  (thousand m<sup>3</sup>). The imports of finished products - 78,000 m<sup>3</sup> - have been excluded from this total as they are additional imports. On the consumption side the quantity of waste, 1187000 m<sup>3</sup>, has been bracketed as it is potentially available for use as fuel, in particle board and fiberboard manufacture or as a feedstock for pulp production.

<sup>3</sup>/Production and imports of paper and paperboard have been excluded from the above statistics. In 1990, 175,000 tons of paper and paperboard were produced from 192,000 tons (378,000 m<sup>3</sup>) of wood pulp and 229,000 tons of paper were imported.

<sup>4</sup>/Most of the pulpwood is plantation grown and over 75% of other industrial roundwood, - (used for rural housebuilding and fencing posts etc.) - comes from trees outside the forest or is plantation

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grown wood.

<sup>2</sup>In addition, FAO estimates the 1990 consumption of fuelwood and charcoalwood to be 33.6 million m<sup>3</sup> of wood but most of this wood came from trees outside the forest or from sawmill waste.

Sources: FAO, 1990 Yearbook of Forest Products Sousan J 1991.  
Philippines Household Energy Strategy: Fuelwood Supply and Demand. World Bank/ESMAP Study. WB Washington.

According to table 2, the 1990 production of roundwood from the tree resources of the Philippines is about 5 million m<sup>3</sup> of wood. However, most of the pulpwood is plantation grown and much of the other industrial roundwood (rural housebuilding poles and fencing posts etc.) comes from trees outside the forest. Therefore, the amount of roundwood coming from the dipterocarp forest as per table 2 may be about 2.5 million m<sup>3</sup>. On the other hand, from experience in other countries and from reports about illegal logging in the Philippines, there is under-recorded wood coming from forestry concession areas and un-recorded wood from non-concession areas. Thus the actual production of roundwood from dipterocarp forests in 1990 may be of the order of 4 million m<sup>3</sup> to 5 million m<sup>3</sup>. The only way to determine with some accuracy the annual amount, kind and source of wood consumed in the Philippines is to undertake a wood consumption survey and timber trends study; without such information drawing up plans to meet future wood requirements is relegated to guesswork.

#### Future Demand for Sawlogs and Peeler Logs

Assuming that the 1990 production of industrial roundwood from the dipterocarp forest is of the order of 4 to 5 million m<sup>3</sup>, then estimates can be made of future consumption of industrial roundwood. These figures can then be compared to sustainable production to see if managed dipterocarp forest can meet present and future supply. Thus it can be determined if the policy initiative of encouraging sustained management is justified.

The population of the Philippines is increasing at about 2.3% per year, and the economy is growing at an estimated 4% per year. Thus average per capita income is increasing at just under 1.7% per year. The demand for sawnwood and board products increases at about the same rate as the increase in per capita income, therefore, by the year 2000 the demand for these products, which mainly come from dipterocarp forests, in terms of roundwood equivalent will be between 5.9 mill m<sup>3</sup> and 7.4 million based on a 1990 consumption of 4.0 million m<sup>3</sup> and 5.0 mill m<sup>3</sup> respectively. For each baseline figure, demand will increase at 4% per year, but as can be seen, in the first case the overall increase is 1.9 million m<sup>3</sup> and in the second case it is 2.4 million m<sup>3</sup>. This points to the importance of obtaining accurate baseline data.

In summary the estimated 1992 demand for wood from dipterocarp forests' assuming a 4% increase in demand per year, is of the order of 4.3 million m<sup>3</sup> to 5.4 million m<sup>3</sup> and this may grow to between 5.9 mill m<sup>3</sup> and 7.4 mill m<sup>3</sup> by the year 2000..

#### Sustainable Supply of Wood from Residual Dipterocarp Forests

Today the area of dipterocarp forests which is officially available to meet the estimated present and future demand is between 4.7 million ha, and 5.7 million ha, including about 0.9 million ha. of closed canopy residual forest, with the remainder being open canopy residual forest (table 1). According to the latest figures for allowable cut from the remaining timber license agreements, (TLA) the allowable cut is given as 0.9 million m<sup>3</sup>. There is some confusion over the number of existing TLA's and three numbers have been given namely 27, 33 and 40. Similarly the stated areas of these TLA's ranges from 1.3 million ha to 1.8 million ha. including some virgin forest areas (estimated to be 15%) and some areas more than 1000 meter in elevation or greater than 50% slope.

An inventory has been done on a small area of TLA's, and some figures are used in the Forestry Master Plan, but this plan does not give any stocking or yield figures. It states the 1990 allowable cut from dipterocarp forests for sawlogs and peeler logs. This is given as 2.5 million m<sup>3</sup>.

Using either of the above figures, there is a significant gap between allowable cut and demand, inferring that the forest capital, which should be about 40 times the allowable cut, is being eroded, thus the forests are being mined not managed.

However, other estimates have been made as to the standing stock and annual yield which give a more favorable picture. Detailed measurements of dipterocarp forests in Malaysia have been undertaken (Kato et al 1968). From these data, closed dipterocarp forest are estimated to contain 475 tonnes of woody biomass per hectare and open dipterocarp forest 300 tonnes per ha. It must be stressed that these figures are total woody biomass including all ages of trees and shrubs and all the wood of trees. Tree volume or weight should be at least 70 percent of this total and stem volume to merchantable height should be about half this figure namely 35% of total weight. Using this figure, and assuming 1 tonne is equivalent to 1.4m<sup>3</sup>, the potential standing merchantable volume in dipterocarp forest is about 230m<sup>3</sup>/ha for closed residual areas and 150m<sup>3</sup>/ha in open residual area with approximately 75m<sup>3</sup>/ha in marginal areas (table 1). Table 3 gives an estimate of standing stock and yield from these three types of residual forests in the Philippines.

Table 3. The Philippines 1990: Estimated Merchantable Stem Volume and Annual Yield Residual Dipterocarp Forests

	Estimate A (Table 1)			Estimate B (Table 1)		
	Area mill ha	Standing Stock mill m <sup>3</sup>	Yield round	Area mill ha	Standing Stock mill m <sup>3</sup>	Yield round
Closed forest	0.9	207	5.2	0.9	207	5.2
Open forest	3.6	540	13.5	2.6	390	9.8
marginal forest	<u>1.2</u>	<u>90</u>	<u>2.2</u>	<u>1.2</u>	<u>90</u>	<u>2.2</u>
Total	5.7	837	20.9	4.7	687	17.2

If Kato's figures can be applied to the residual forest of the Philippines then the standing stock of merchantable stemwood should be of the order of 690 to 840 million m<sup>3</sup> and the annual yield approximately 17 to 21 mill m<sup>3</sup>. Of course not all of this wood is of commercial species and some wood is above the legal cutting elevation of 1000 m<sup>3</sup> or in slopes greater than 50 percent (23 degrees.) Again some trees may at present be too remote to make it economical to extract them, but allowing for all these provisos, then at least 60 percent of the above annual yield figures should be available. Thus 10.3 mill m<sup>3</sup> to 12.6 mill m<sup>3</sup> should be available each year for sawlogs and peeler logs, enough to meet the demand for dipterocarp wood up to 2000 if the area is properly managed!

The above figure is equivalent to about 2.2 m<sup>3</sup>/ha per year or 77 m<sup>3</sup> every 35 years, the period for the "Philippine Selective Logging" cycle. This figure is about 15% more than the much quoted periodic yield figure from dipterocarp forests of 67 m<sup>3</sup> per 35 years or 1.9 m<sup>3</sup>/ha/year. If the latter figure was applied to the area in table 3 then the annual yield of merchantable and accessible stemwood would be between 9.0 million m<sup>3</sup> and 10.9 million m<sup>3</sup>, still enough to meet the demand for dipterocarp wood to the year 2000. Again the total yield would be some 15 mill m<sup>3</sup> to 18 mill m<sup>3</sup> with a standing stock of 600 mill m<sup>3</sup> to 720 mill m<sup>3</sup>.

These last two estimates are far in excess of the annual allowable cut of 0.9 mill m<sup>3</sup> or the Forestry Master Plan figure of 2.5 million m<sup>3</sup>. Of course the 0.9 mill m<sup>3</sup> refers to an area of about 1.3 million ha, but even allowing for the area difference they are between 33% and 40% of the "measured" allowable cut of 1.9 m<sup>3</sup> per ha per year (67m<sup>3</sup>/ha per 35 year cycle). Again, this

points to the vital importance of obtaining accurate figures on area, standing stock and yield.

If the figures in table 3 are accurate, then the emphasis should be on preserving and managing the residual forests to meet present and future requirements of sawlogs and veneer logs. On the other hand if the Forestry Master Plan figures or the current allowable cut allocation reflects the sustainable supply of sawlogs and veneer logs from residual dipterocarp forests, then there will have to be a massive plantation effort to make up the short fall of sustainable supply.

**- Conclusions:**

Since the logging ban on old growth (virgin) forests, the supply of dipterocarp species will have to come from residual dipterocarp forests, (if the ban is successful). The area of residual forest is not accurately known but could be somewhere between 4.7 million ha. and 5.7 million ha. One priority task is to map this forest type and designate which areas within this type should not be cut, such as steep slopes, and areas above 1000m, otherwise the bulk of the area should be available to supply wood to the industry.

The current demand for dipterocarp logs may be between 4 million m<sup>3</sup> and 5 million m<sup>3</sup> although FAO production statistics indicate that officially it is about 2.5 million m<sup>3</sup>. A wood consumption survey and timber trends study should give a more accurate picture of the source and type of timber species used; this is essential if meaningful planning is to be undertaken.

To back up a consumption survey, an inventory of the dipterocarp forests is needed; this will not only give the growing stock and annual yield, but the stocking density and age class distribution. Using figures from Malaysia it appears that there should be sufficient annual growth to meet present and future supply on a sustainable basis. However, the current allowable cut of less than 1 million m<sup>3</sup> of dipterocarp trees is well below the demand. This is causing illegal logging, unnecessary forest destruction and revenue loss to the government. It is in the best interest of the country and the industry to map, inventorize and legally log the residual dipterocarp forest so that they can be managed in a sound and sustainable manner.