

Task Order No. 833  
USAID Contract No. PCE-I-00-96-00002-00

**Final Report of the  
Indonesian Natural Resources Management Program Components  
Implemented through the Environmental Policy and Institutional  
Strengthening Indefinite Quantity (EPIQ) Contract:  
May 1997 to October 1999**

David S. McCauley  
International Resources Group, Ltd.

**October 1999**

**Environmental Policy and Institutional Strengthening Indefinite Quantity (EPIQ) Contract**  
*Partners:* International Resources Group, Winrock International, and Harvard Institute for International Development  
*Subcontractors:* PADCO; Management Systems International; and Development Alternatives, Inc.  
*Collaborating Institutions:* Center for Naval Analysis Corporation; Conservation International;  
KBN Engineering and Applied Sciences, Inc.; Keller-Bliesner Engineering;  
Resource Management International, Inc.; Tellus Institute; Urban Institute; and World Resources Institute

## Table of Contents

	<b>Page</b>
Table of Contents	i
Glossary	ii
Forward	iv
<b>1. Introduction</b>	<b>1</b>
1.1 Background and Natural Resources Management Program Structure	1
1.2 NRM/EPIQ Roles and Activities	1
1.3 Implementation Schedule	4
1.4 Organization of the Final Report	5
<b>2. Summary of Activities Undertaken by Component</b>	<b>6</b>
2.1 Policy and Planning	6
2.2 Protected Areas Management	11
2.3 Forest Management	15
2.4 NRM-Wide Program Support	23
<b>3. Achievements Review</b>	<b>30</b>
3.1 Structure of Performance Objectives and Monitoring System	30
3.2 Quantitative Measures of Performance	30
3.3 Quantitative Achievements Summary	37
3.4 Financial Summary	39
<b>4. Conclusions and Recommendations</b>	<b>40</b>
4.1 Policies and Plans	40
4.2 Improving Management of Protected Areas	42
4.3 Forest Management Policies and Practices	40
4.4 NRM Secretariat and Program-wide Functions	42
 <b><u>Appendices</u></b>	
1. Reports and Other Deliverables	44
2. Training Activities	47
3. Sub-Awards	48
 <b><u>Figures and Tables</u></b>	
Figure 1. Organization of NRM Program Components	2
Table 1. USAID/Indonesia NRM Results Framework and Indicators	30
Table 2. Summary of NRM/EPIQ Performance Measurements	37

## List of Abbreviations/Acronyms

APHI	<i>Asosiasi Pengusaha Hutan Indonesia</i> , Association of Indonesian Forest Concession Holders
BAPEDAL	<i>Badan Pengelolaan Dampak Lingkungan</i> , Environmental Impact Management Agency. (Regional offices <i>Bapedalda</i> )
BAPPENAS	<i>Badan Perencanaan Pembangunan Nasional</i> National Development Planning Board
BCN	Biodiversity Conservation Network, a BSP component
BPS	<i>Biro Pusat Statistik</i> Central Bureau of Statistics
BSP	Biodiversity Support Program (a global USAID-funded conservation activity)
CI	Conservation International, a U.S. based international NGO
CIFOR	Center for International Forestry Research, Bogor, part of the CGIAR system
DoFE	Department of Forestry and Estate Crops ( <i>Departemen Kehutanan dan Perkebunan</i> ) Also referred to as <i>DepHutBun</i>
DFID	Department of Foreign and International Development (U.K.)
DJPHP	<i>Dit. Jend. Pengusahaan Hutan Produksi</i> Directorate General of Production Forest Utilization, Department of Forestry and Estate Crops
DIP	<i>Daftar Isian Proyek</i> , List of Approved Projects
DNS	Debt for Nature Swap(s)
DUP	<i>Daftar Usulan Proyek</i> , List of Proposed Projects
EA	Environmental Assessment
EPIQ	Environmental Policy and Institutional Strengthening Indefinite Quantity (EPIQ) Contract of the USAID Global Environment Center
FKKM	<i>Forum Komunikasi Kehutanan Masyarakat</i> (Forum for Communication in Community Forestry)
FORDA	Forestry Research and Development Agency, Dept. of Forestry and Estate Crops
GOI	Government of Indonesia
HPH	<i>Hak Pengusahaan Hutan</i> , Forest Exploitation Concession
ICEL	Indonesian Center for Environmental Law, an Indonesian NGO
ICRAF	International Center for Research on Agroforestry (part of the CGIAR system)
IPB	<i>Institut Pertanian Bogor</i> , Bogor Agricultural Institute
IR	Intermediate Result, a second level, operational objective to guide USAID-funded assistance implementers
IRG	International Resources Group, Ltd. (NRM/EPIQ prime contractor)
IMF	International Monetary Fund
ITTO	International Tropical Timber Organization
KEHATI	Indonesian Biodiversity Foundation
KEMALA	<i>Kelompok Masyarakat Pengelola Sumberdaya Alam</i> , the BSP community forestry program in Indonesia
<i>krismon</i>	<i>krisis moneter</i> (financial/monetary crisis; beginning about September 1997)
LEI	<i>Lembaga Ekolabel Indonesia</i> , Indonesian Ecolabeling Institute
MEFP	Memorandum of Understanding on Economic and Financial Policies, the IMF-led 50-point Indonesian reform program, signed in January, 1998
NGO	Non-Governmental Organization

NRM	Natural Resources Management, the subject and the USAID funded program
NRM/EPIQ	Natural Resources Management Program/Environmental Policy and Institutional Strengthening Indefinite Quantity Contract Task Order for Indonesia
NTFP	Non-Timber Forest Product
PAM	Protected Areas Management, an NRM/EPIQ Team
PCC	Project Coordinating Committee
PKA	<i>Pelestarian dan Konservasi Alam</i> Preservation and Conservation of Nature (Directorate-General of Forestry for; replaces old PHPA as of 1998)
RARE	TBD
RP	Results Package, a USAID implementation mechanism
SFM	Sustainable Forest Management
SBKSDA	Sub-office ( <i>kabupaten</i> level) of Directorate General PKA, DoFE
SK	<i>Surat Keputusan</i> , Ministerial Decree
SO	Strategic Objective, a primary level, operational objective to guide USAID funded assistance implementers
TNC	The Nature Conservancy, a U.S.-based international NGO
TO	Task Order (under the EPIQ Contract)
UGM	Gadjah Mada University, Yogyakarta
UI	University of Indonesia, Jakarta
URI/CRMP	University of Rhode Island/Coastal Resources Management Project (aka <i>Proyek Pesisir</i> in Indonesia)
USAID	United States Agency for International Development
WALHI	Wahana Lingkungan Hidup Indonesia, Indonesian Environmental Forum
WWF	World Wildlife Fund – United States (prime grantee for BSP)
YWWF	Yayasan World Wide Fund for Nature, replaced WWF/Indonesia, as of 1998

## *Forward*

Indonesia is undergoing a remarkable political and economic transition after more than 30 years of authoritarian central government rule. Although the latter part of this period saw some progress being made in improving policies and institutions for environmental and natural resources management, in general, scant attention was paid during the Suharto years to either economic or ecological sustainability. As a result, the environmental legacy of the Suharto era is marked by the rapid loss of Asia's last remaining tropical rainforests and their globally significant biological diversity, by the depletion and degradation of this island nation's coastal and marine resources and by largely unchecked urban and industrial pollution.

The Natural Resources Management (NRM) Program, a cooperative venture of the U.S. Agency for International Development and the Government of Indonesia, has attempted to check these tendencies and devise alternative policies and institutions to satisfy the economic needs of the country without sacrificing environmental health, productivity and its natural heritage. This program began with a first phase in 1991, and it was continued through the efforts described in this report beginning in mid-1997 and ending in late 1999.

This latter period of NRM Program implementation was premised on the need for greater decentralization of management authority for natural resources. The expectation was that having the rights and responsibilities for the management of forests, fisheries and protected areas closer to the ground would result in greater attention to their sustainable contributions to the local economy. However, this period also coincided almost precisely with the worst recession in Indonesian history amidst a regional economic crisis. The financial upheaval combined with pent up social frustrations to spell the end of the Suharto era and to mark a transition to a new political and economic regime—culminating in the election of President Abdurrahman Wahid and Vice President Megawati Sukarnoputri in October 1999.

The social and governmental disruptions associated with the economic crisis and Suharto's fall created significant difficulties for NRM Program implementation. But it also opened wide doors to policy and institutional reform that had previously been tightly shut. As shown in this report, considerable progress was made over this two-year timeframe in establishing the basis for truly decentralized and more sustainable management of Indonesia's still rich—though depleted—natural resources base.

This report describes the overall structure of the NRM Program but provides detail on only those activities and results implemented and accomplished through the Environmental Policy and Institutional Strengthening Indefinite Quantity (EPIQ) Contract. EPIQ is a mechanism established for this type of work by the USAID Global Environment Center, and USAID/Indonesia used it for this purpose in organizing major portions of the NRM Program.

The report contains four sections covering: an *Introduction* to the NRM Program and NRM/EPIQ inputs; a *Summary of Activities Undertaken by Component*, that provides further detail of both inputs and outputs; an *Accomplishments Review*, that quantitatively compares the results achieved with the specific indicators identified in the EPIQ Contract; a final chapter providing *Conclusions and Recommendations* with special attention to the implications of this experience for future USAID natural resources management assistance to Indonesia. While this report contains no separate *executive summary*, the interested reader can easily gain an overview of NRM/EPIQ work and accomplishments by reviewing the beginning of the Introduction chapter, the end of the Accomplishments Review chapter and the entire chapter on Conclusions and Recommendations.

The author wishes to thank the entire NRM/EPIQ team for their inputs to the report. The Chief of Party, Jim Tarrant, provided overall guidance for its preparation and husbanded the resources of the team needed to get the information required for its completion. First cuts at the text of individual component descriptions contained in chapter two were provided by Reed Merrill (Protected Areas Management), Juan Seve and Tim Brown (Forest Management), Tim Brown (Policy and Planning), and Jim Tarrant, Andy Curtin and Suhaesi Basari (NRM Secretariat). With inputs from all NRM/EPIQ team members, Andy Curtin also provided the data needed to complete the chapter on Accomplishments Review. Pradeep Liyanamana, who served as the NRM/EPIQ US-based program support manager, gave inputs and encouragement throughout the exercise. Lastly, thanks must go to the USAID/Indonesia team who provided the oversight of this work. This was led by David Heesen and Holly Ferrette but also included strong inputs from Agus Widiyanto and Ketut Djati. With such a complex program to describe there are certainly many omissions and possibly errors or misperceptions, and the author retains full responsibility for these while again expressing appreciation for the inputs and patience of all who have assisted in the preparation of this report.

**Final Report of the  
Indonesian Natural Resources Management Program Components  
Implemented through the Environmental Policy and Institutional  
Strengthening Indefinite Quantity (EPIQ) Contract:  
May 1997 to October 1999**

**I. INTRODUCTION**

**1.1 Background and NRM Program Structure**

This document provides a summary report of key activities and accomplishments associated with the first phase of work under the Natural Resources Management (NRM) Program as implemented through the Environmental Policy and Institutional Strengthening Indefinite Quantity (EPIQ) Contract Task Order (NRM/EPIQ) during the period of May 3, 1997 through October 30, 1999. The NRM Program is a cooperative activity of the US Agency for International Development's Indonesia Mission (USAID/Indonesia) and the Government of Indonesia (GOI) designed to improve the contributions of natural resources to Indonesia's development by promoting policies and practices for decentralized and sustainable management of forests, protected areas and coastal resources.

The overall NRM Program structure—as revised and adapted during the NRM/EPIQ implementation period (see Figure 1)—comprised six components (with the primary implementing NRM “Partner(s)” given in parentheses):

1. NRM Secretariat Support (EPIQ)
2. Policy and Planning (EPIQ)
3. Forest Management (EPIQ)
4. Protected Areas Management (EPIQ, YWWF, TNC, CI)
5. Coastal Resources Management (URI—Coastal Resources Management Project)
6. Biodiversity Conservation Institutional Development (BSP/Kemala, YWWF, TNC, CI)

**1.2 NRM/EPIQ Roles and Activities**

Under the umbrella of the overall NRM Program, the NRM/EPIQ Task Order was created to accomplish three “intermediate results” linked to USAID/Indonesia's Natural Resources Management Strategic Objective (SO3) of: ***decentralizing and strengthening natural resources management***. These IRs were to be achieved through implementation of two associated “results packages” (RPs) of activities (each with associated budgets, indicators and time-bound targets). Though in practice NRM/EPIQ activities were organized according to components 1-4 above, the Task Order was used to implement two SO3 RPs: *Forest Resources and Protected Areas Management (RP1)*; and *Natural Resources Management Secretariat (RP4)*. In brief, the four NRM Program components for which NRM/EPIQ took the lead can be characterized as given below.

## **NRM Secretariat Support**

The scope and functions of the NRM Secretariat were adjusted from the first NRMP phase (1991-1996) to encompass the broader mandate of a “central coordinating body” and “program implementation support unit” for all parts of the NRM Program. The NRM Secretariat housed all Partners in one location to facilitate information sharing and teamwork. Three NRM Secretariat elements were created to accomplish these objectives.

**Program Coordination and Support Services.** As stated in the EPIQ Task Order Statement of Work, the “coordination” function included: (1) facilitating information sharing and team work among NRM Partners, GOI counterparts, and USAID; (2) identifying and recommending key activities supporting program objectives; (3) supporting the activities of USAID-provided technical assistance in specific ministries and field sites; (4) coordinating annual implementation plans for each of the program components; (5) assisting all component teams to develop analytical policy networks within cooperating ministries; and (6) ensuring that NRM activities are demand driven and that results are disseminated to appropriate groups. The Secretariat served as a central meeting point for all parties involved in the NRM Program to help achieve synergy and overall integrity of the Program, and it provided supplemental administrative and logistical support to the Jakarta staff of all NRM Partners to expedite and facilitate their work. This included (according to demands) arranging for and supervising the provision of common office utilities and services, computer interfaces, telephone/fax services, copying, publication, editorial and translation services, reception, travel arrangements and other logistical support as needed by NRM/EPIQ and other NRM Partners.

The Secretariat also served as the NRM home for a field-based team of natural resources management planning (Provincial Liaison) specialists who supported program-wide field activities in five target provinces—West Kalimantan, East Kalimantan, North Sulawesi, Central Sulawesi and Irian Jaya (a sixth province, Maluku, was dropped due to civil strife). The development of NRM/EPIQ annual work plans also was managed through this Secretariat element as were NRM/EPIQ’s mid-term Self-evaluation Report and this Final Report.

## **Communications and Information Management**

This element focused on functions (1), (4) and (6) as given in the Program Coordination section above relating to the Secretariat’s monitoring, evaluation, reporting and information dissemination roles. Under this element, the NRM Performance Monitoring System was developed and implemented. This tracked the results produced by all NRM components and reported these to USAID and the GOI. NRM/EPIQ assisted USAID/Indonesia in meeting its monitoring and reporting requirements of USAID headquarters in Washington, DC by gathering relevant NRM Program implementation data on activities and outputs through reporting sessions, field surveys, and results tracking. NRM/EPIQ designed and instituted information networks to share lessons learned from USAID-financed natural resources management activities. This included development of a printed NRM Program Newsletter, Website, E-mail NRM newslines, and other information dissemination services. NRM/EPIQ also organized occasional program-wide workshops, seminars, roundtables, and training activities—in Jakarta and elsewhere—to

disseminate lessons learned on sustainable and decentralized natural resources management policies and practices.

### **Policy and Planning**

The Secretariat also served as the platform for policy analyses required by the GOI and NRM Partners to support efforts to decentralize natural resources planning and management. The Secretariat element dealing with policy and planning centered on this function, particularly relating to functions (2) and (5) as described in the Program Coordination section above. This element was established primarily to assist BAPPENAS with the analysis of policy options relating to the devolution of resource management authority to communities, governments, and organizations at the local and regional levels and was responsible for developing and implementing an appropriate agenda for NRM policy analysis and related institutional development.

### **Forest and Protected Areas Management**

These two sets of activities—combined in the Task Order Statement of Work (under RP1), but implemented as discrete components—focused on the analysis of issues and problems relating to the management of Indonesia’s rich heritage of forest resources as well as both forest and coastal/marine ecosystems covered by the national system of parks and protected areas. The USAID SO3 program is driven by the desire to establish effective and sustainable policies and practices to conserve the biological diversity associated with these ecosystems. As stated in the RP1 Inception Report and embodied in the SO3 Strategic Objective Agreement (SOAG) between USAID and the GOI, the purpose of this component was three-fold: (1) to enhance the human and financial resources required for protected area management; (2) to encourage the appearance of sustainable community-based forest management; and (3) to expedite the adoption of more sustainable management practices within natural production forests. This document went on to suggest that these purposes should be pursued through support for: (1) the development and documentation of successful field demonstrations; (2) the development of an enabling policy environment conducive to broader public participation in forestry and protected areas management and to the adoption of “best practice” natural resource management techniques; and (3) the corollary development and dissemination of information among stakeholders, including those regarding “best practice” natural resource management techniques and organizational approaches.

In practice, the NRM Program treated these activities as two separate components: Protected Areas Management (working primarily with the Directorate General for Forest Protection and Nature Conservation (DJPHPA and later DJPKA); and Forest Management (working primarily with the Directorate General for Forest Utilization at the Ministry of Forestry (DJPH and later DJPHP). They may be described briefly as follows:

***Protected Areas Management.*** The objective of this component was to enhance the human and financial resources available for sound protected area management in Indonesia. NRM/EPIQ undertook—in cooperation with DJPKA—policy and institutional strengthening activities as well as

selected field activities that complemented those of other NRM Partners. NRM/EPIQ worked with officials of PKA to design and implement training and technical support to help protected area managers interact and collaborate more effectively in forming partnerships among government bodies, communities, academic organizations, non-governmental organizations and private sector firms/associations having a stake in the management of parks and protected areas. A number of sub-awards were issued to international and Indonesian conservation NGOs for work on new practices for decentralized parks and protected areas management. Technical support also was provided to assist PKA in completing a thorough assessment of the sources and uses of financial resources available to finance the management of protected areas and to develop new revenue generation approaches. A particularly innovative mechanism pursued in this regard was the potential use of debt-for-nature swaps (DNS) as a means to enhance revenues available for biodiversity conservation in Indonesia's parks and protected areas.

***Forest Management.*** A range of activities were carried out in response to opportunities to improve policies and practices for management of forest areas managed by both commercial concessions and communities. Policy reform agendas were developed and pursued in cooperation with GOI counterparts, and limited field activities were implemented—primarily through a small grants program and cooperation with other NRM Partners (see below)—to explore policy constraints or to test the efficacy of proposed new policy approaches. The objective of working with logging concession holders was to expand the use of “best practice” sustainable forest management techniques in commercial forestry. As will be shown, NRM/EPIQ worked on two fronts: (1) carrying out and disseminating the results of policy studies on forest resources management; and (2) pilot testing of activities promoting reduced impact harvesting techniques and waste reduction. This latter element built upon previous work conducted during the earlier phase of USAID/NRM work, and NRM/EPIQ activities were used to assist cooperating private entities and GOI bodies in identifying new practices and resolving institutional and policy constraints to sustainable forest management. A close working relationship was established with the World Bank and International Monetary Fund (IMF) as the GOI moved forward with forestry sector policy and institutional reforms in the aftermath of the financial crisis beginning in late 1997. A correlative objective was to encourage the wider acceptance of community-based approaches to forest management, promoting the use of “best practices” for forest management by local communities. NRM/EPIQ provided support to community-based forest management initiatives of both the GOI and as promoted by communities themselves, often in cooperation with non-governmental organizations and other NRM Partners. NRM/EPIQ made strong efforts to work with officials of DJPH and other relevant parties to assist in program design, in soliciting and reviewing policies, and preparing proposals for project proponents—as well as the subsequent monitoring and evaluation of community-based forest management activities in the field. However, the GOI's efforts in this area were very slow to develop during the NRM/EPIQ implementation period.

### **1.3 Implementation Schedule**

#### **Timetable and Exogenous Forces Affecting Implementation**

The NRM/EPIQ Task Order envisioned an implementation schedule broken into several discrete time

periods—though the implementation and reporting schedules did not always coincide. Activities were divided into annual planning and implementation periods corresponding to the Indonesian Fiscal Year (IFY) that begins on 1 April and ends 31 March. However, as indicated in the section on results tracking, monitoring periods used under the Task Order corresponded to a different calendar, namely the US Government Fiscal Year (USFY) that begins on 1 October and ends 30 September. When combined with the start and end dates of the Task Order, use of the IFY for the EPIQ/NRM planning calendar created three implementation periods:

- **May 1997–March 1998:** First Period (mobilization and inception);
- **April 1998–March 1999:** Second Period (first full year); and
- **April 1999–October 1999:** Third Period (final seven months and transition to next phase).

These implementation periods were, in turn, strongly affected by a range of significant political events in Indonesia that were outside of the program’s influence. The following historical developments were of particular importance:

- **September 1997–October 1999:** Period of financial and monetary crisis (*krismon*) associated with the collapse of the Rupiah and the descent of the economy into deep recession.
- **March 1998:** Appointment of the last government led by President Suharto, and GOI-IMF agreement on the first in a series of conditions for an international economic bailout (including several environmental and natural resources policy and institutional reforms).
- **May 1998:** Escalating student protests, birth of the “reformasi” movement, and Jakarta riots lead to the evacuation (for two months) of USAID/Indonesia and all NRM expatriate staff as well as the resignation of President Suharto and appointment of President Habibie and his new government.
- **November 1998:** Special Session of the People’s Consultative Assembly, amid riots, establishes a timetable for elections and other aspects of the country’s democratic transition.
- **June 1999:** National elections for Parliament members to join appointed members of a new People’s Consultative Assembly in electing a President for a new five-year term.
- **October 1999:** People’s Consultative Assembly meets and elects President Abdurrahman Wahid and Vice President Megawati Sukarnoputri; the fourth government during NRM/EPIQ implementation is formed.

### **Effects of Political and Economic Change on Implementation**

These political developments associated with Indonesia’s democratic and economic reforms often severely restricted implementation of NRM/EPIQ activities. The onset of the *krismon* period and *reformasi* era fundamentally altered the political economic dynamic in the country as well as the opportunities for NRM/EPIQ achievement of its objectives. While in some cases this influence was positive, the associated civil and government disruptions largely served as constraints to smooth implementation.

The policy reform agenda at the heart of the NRM/EPIQ Task Order relates to the introduction of

improved policies and practices for the decentralized management of key natural resources. This was assisted by the increased openness to policy change of the final Suharto Governments in reaction to the *krismon* and IMF-led conditions. There were several fundamental shifts in forestry policy, breaking down the plywood and rattan cartels and otherwise opening the forestry industry to market forces.

However, the dislocations associated with the increasingly volatile atmosphere in Indonesia—culminating in the May 1998 riots, the evacuation of USG personnel and contractors/grantees, and the resignation of President Suharto—created significant constraints on implementation of planned NRM/EPIQ activities. Though less disruptive, the subsequent uncertainties in government policies and programs during the remaining implementation period of the NRM/EPIQ Task Order also posed constraints. Nevertheless, the increased openness afforded public policy debate and created strong demand for greater regional autonomy and decentralization associated with the *reformasi* movement were positive reinforcements to NRM/EPIQ work and objectives. Some of these factors are dealt with in more detail in subsequent sections of this report, but their greatest significance lies in the influence these events had in creating a more positive overall atmosphere for policy and institutional reform during the latter stages of NRM/EPIQ activity implementation. This also bodes well for future NRM Program interventions during the next phase.

#### **1.4 Organization of the Final Report**

The summary review of activities and accomplishments begins with an overview of work implemented through the NRM/EPIQ Task Order. Highlights are provided of activities and significant results associated with each of the four main NRM/EPIQ components: Policy and Planning; Protected Areas Management; Forest Management; and Secretariat NRM-wide support functions. This is followed by a review of achievements tracked against the targets projected in the NRM/EPIQ Task Order. These indicators relate closely to the IRs embodied in USAID/Indonesia's SO3 Results Framework. A final section of the report presents lessons of relevance to the next phase of NRM implementation drawn from experience with each of the NRM Program components for which NRM/EPIQ took lead responsibility. It also serves as an overview and summary chapter reiterating the major accomplishments during the NRM/EPIQ implementation period. Annexes list the reports and other deliverables produced, training activities sponsored and sub-awards given.

## **II. SUMMARY OF ACTIVITIES UNDERTAKEN**

### **2.1 Policy and Planning**

Work carried out under the NRM Program's Policy and Planning component supported cross-cutting policy analysis and institutional development activities. The group also provided economic and quantitative policy analysis services to other components and partners of the NRM Program. The group originally worked in three main areas: (1) spatial/land use planning; (2) economic valuation; and (3) economic impact assessment, primarily with BAPPENAS and its provincial government counterparts. To respond to political and economic changes facing Indonesia, the Policy and Planning component team also initiated activities related to the emerging issues of community based natural resource management rights and decentralization of government functions and revenues.

Charged generally to consider the effects of planning and economic policies on natural resource management and outcomes, the policy group strived to remain responsive and timely in the face of rapid economic and policy changes affecting a range of natural resource sectors. During the Task Order period, dynamic political and economic changes transformed the policy landscape in Indonesia: the financial crisis contributed to a political crisis, a change in government and a rethinking of all structures of government. The Policy and Planning component team responded to these changes by shifting emphasis and refocusing activities, first by conducting a major study on the natural resources impacts of the economic crisis in 1998. After the political events of May 1998, the Policy and Planning component team also initiated activities related to community-based resource management and land use issues, coordinated closely with work carried out under the Forest Management component. During development and passage of the important decentralization laws (Laws 22/99 and 25/99 on the governance and financing of newly decentralized political structures) in the first half of 1999, financial analyses and, later, field assessments were initiated to evaluate the impacts of the laws—especially in relation to resource revenues and the role of regional governments in managing natural resources. In all, five main policy and planning areas (three “original” and two added as events unfolded) comprised the core of work under the component and are summarized below.

#### **Provincial Spatial Planning and Decentralized Natural Resources Management**

Activities in spatial and land use planning aimed to improve natural resources management planning on two levels: improving the Provincial Planning Boards' (BAPPEDAs') oversight of the spatial planning process; and increasing local/people's participation in that process. Through participatory workshops and training activities, the NRM Program advanced provincial ability to create more integrated and responsive land use plans. This work was coordinated through the NRM Provincial Liaison Offices and, increasingly, with Partners BSP/Kemala and URI/CRMP.

In 1998, NRM/EPIQ conducted preliminary legal, institutional, and capacity studies and developed a plan for participatory, collaborative work with BAPPEDAs in managing a more open planning process. Legal and institutional analyses were shared with stakeholders in individual meetings with involved NGOs and presented at an international conference on regional economics and development. Training,

workshop, and participation improvement activities (developed through interviews with the BAPPEDAs and their planning stakeholders) were implemented in several provinces in 1999. Steps were taken toward development of inter-disciplinary working groups within the targeted provincial governments that could develop integrated NRM plans, initiate participatory processes, and improve guidance on land use planning issues. A key activity in this area was the conduct of participatory workshops built around proposed land use changes or development threats to protected areas or community livelihoods. For example, the workshop on a proposed park designation in East Kalimantan and a proposed forest concession in the Togeian Islands generated considerable interest and insights.

### **Economic Valuation of Natural Resource Products and Services**

The NRM Program used environmental resource valuation at several sites as part of a wider effort to improve understanding of: values and services produced by protected areas, alternative development scenarios and the value streams they generate, and the use of environmental valuation concepts in regional development planning. Through the development of case studies, valuation methods were applied in a participatory setting (relating to provincial land use planning) as a contribution to critical development and resource allocation decisions (e.g., conversion of forest to plantation vs. preservation in a multiple use setting). The Policy and Planning component strived to apply resource valuation methods that could be readily communicated to and understood by provincial government officials, community leaders, and business people. The emphasis on participation ensured that stakeholders (especially communities) came to understand the economic value of their own activities and developed the tools and language to demonstrate this value to government decision makers.

In 1998, case studies were initiated in the Togeian Islands of Central Sulawesi and the Sembuku-Sembakung area of East Kalimantan. In 1999, case studies were initiated in Gunung Gede Pangrango National Park, Bunaken National Park (updating prior work by NRMP), and in the Balikpapan Bay area in collaboration with NRM Partner CRMP. For all of these cases, work was coordinated with partner organizations in the local area as well as interested provincial government agencies. Towards the end of the NRM/EPIQ Task Order, the NRM Program developed a three day introductory training program on environmental valuation, incorporating case study results as examples and interactive learning modules. This program provided a strong base for extended training to be implemented under the next phase of NRM/EPIQ activities.

### **Economic Policy Analysis**

The NRM Program's initial focus for economic and quantitative policy analysis related to the impact of and response to the IMF package of reforms, especially those affecting natural resources management and the forestry sector. The NRM Program engaged with the Ministry of Forestry and Estate Crops, the donor community, academics, and NGOs to analyze and understand the proposed reforms to develop an integrated program supporting their implementation. As the financial crisis deepened, we took on a broader analysis (at the request of BAPPENAS) of the impacts of Indonesia's economic crisis on the natural resource sectors of the economy. This study looked at the issue from macro, sectoral, and provincial perspectives and incorporated economic analysis, mapping, survey data, field

reports and contributions from all components of the NRM Program. The results were shared widely in academic conferences, institution-specific presentations, and in several publications (see, e.g., Report No. 20 listed in Annex 1). These efforts have resulted in the NRM Program's establishing wider academic networks, links to the national policy making community and input to the program plans of other donors.

### **Community-Based Natural Resources Management**

The reform era in Indonesia (for the second half of 1998 onward) presented new opportunities for policy analysis on community-based forestry and land use issues due to improved openness and access for alternative views in the policy process. Coordinated through NRM's Forest Management component, the NRM Program initiated dialogues with and provided support to the Forum Komunikasi Kehutanan Masyarakat (FKKM), the Consultative Group on Indonesian Forestry (CGIF), BSP/Kemala partners, academic institutions, and several ministries on policy issues related to land management and allocation and on community-based natural resources management (CBNRM).

Community resource rights issues cut across many of NRM's activity areas. Through spatial planning and land use activities, the Policy and Planning component supported the NRM Program's wider interest in evaluating regulatory reform proposals and related discussions. In late 1998, the NRM Program sent GOI and NGO participants to an international workshop on "Devolution of Forest Management Responsibilities." In 1999, NRM supported (with others) national workshops to discuss land and forest management issues and revision of the Basic Forestry Law. These efforts culminated in presentations by NGO representatives before the national parliament (DPR). The NRM Program also initiated an analytical/comparative study of four field cases of CBNRM, which was completed near the end of the Task Order period.

### **Decentralization's Effect on Natural Resources Management**

The decentralization and autonomy initiatives passed by the GOI in May 1999 will have an important impact on natural resources management at every level. Law No. 22/99, concerning regional governance structures, delegates many authorities to the provincial and *kabupaten/kota* governments while reserving certain functions within the central government. With respect to natural resources management, environmental preservation and conservation—all of which are affected by land use allocation and agricultural development—there are overlapping authorities among the various levels of government. Law No. 25/99, concerning financial balance between central and regional governments, redistributes tax revenues derived from natural resource development and extraction.

To interpret the impact of these laws and provide information to stakeholders, the Policy and Planning component developed several important studies and initiated a series of related activities. First and foremost, NRM developed an analysis, entitled "Indonesia: Central and Local Government Budget Allocations, With Some Natural Resource Implications," which analyzed GOI revenues and allocations to provinces, highlighted post-crisis issues and changes, illustrated the distribution of resource wealth across provinces and provided a firm basis for informed debate on this issue. The study results were

shared widely in the academic, policy, and USAID community in a briefing form, and have been widely quoted in the national and international press.

Another important contribution in this area was a major policy paper prepared for BAPPENAS Deputy V for presentation at the Energy and Natural Resources Conference (ESDAL) in August 1999. That paper, entitled “Regional Development Policy and Strategy for Natural Resource Utilization in the Framework of the Fiscal and Autonomy Decentralization Laws” provided an overview of the challenges facing planners and managers of natural resources in the decentralization era. The paper also made the case that natural resources deserve special consideration in the decentralization framework and that many issues remain to be resolved.

The NRM Program also initiated field visits and concept papers to further flesh out the issues of decentralized NRM from the perspective of regional governmental agencies and to help establish a framework for economic and policy analyses that could contribute to the next round of regulation and legislation that further specifies decentralization and NRM policy. These are recommended to be continued in the follow-on NRM/EPIQ Task Order period.

### **Overall Assessment of Accomplishments and Lessons**

The Policy and Planning component had a number of important successes over the life of the NRM/EPIQ Task Order, and the NRM Program is expected to build on these achievements and networks during the next implementation phase. At the broadest level, the Policy and Planning component team, working with collaborators inside and outside the NRM Program, was able to:

- Build on reform era issues to expand and solidify NRM Program rationale in relation to the central issues of participation, governance, and access to resources;
- Create conceptual and collaboration links across program areas to establish an integrated and useful, cross cutting policy agenda;
- Integrate environmental economic valuation concepts into decisions about spatial planning and with protected areas management activities, both in Central Sulawesi and East Kalimantan;
- Inform forestry policy through economic impact analysis, also providing insight into land use policy and community access and tenure issues; and
- Establish opportunities for increased participation and networking at the provincial level in the spatial planning process.

At the technical level, the Policy and Planning component produced reports, analyses, briefings, and support to collaborating institutions that helped to:

- Define and analyze national level economic trends and issues related to NRM (e.g., MEFP/IMF policy reforms, crisis impacts on natural resources and decentralization and natural resources);
- Crystalize brief summaries of policy issues related to forestry, MEFP, etc. (e.g., for CGIF, World Bank and USAID);
- Build working relations with academic and think tank-type institutions (e.g., IRSA, UI-LPEM, CEES), as well as the policy community in the various donor organizations, as well as BAPPENAS; and
- Establish flexible, timely responses to rapid reforms in forestry and land use and to design activities to engage GOI and NGOs in dialogue on CBNRM and land tenure (e.g., Davao study tour, *Adat* Rights Conference).

The work conducted under the Policy and Planning component provides a strong foundation for further efforts during the next NRM/EPIQ implementation phase. It is hoped that many of the lessons learned can be applied to improve the quality of analysis and institution strengthening and to widen the range of audiences benefiting from the results of policy and planning activities.

## **2.2 Protected Areas Management**

The NRM/EPIQ Program's Protected Areas Management (PAM) component comprised a set of inter-related activities implemented in collaboration with the Department of Forestry and Estate Crops' Directorate General for Nature Preservation and Conservation (PKA), NRM partners and many other institutions from Indonesia's conservation community. These activities provided an opportunity for PKA to work with new and existing partners on implementation of innovative and participatory conservation management approaches in the field as well as supporting policy analysis and development. In both developing and implementing PAM activities, emphasis was placed on the management process rather than product. A strong link was made between fieldwork and policy initiatives, so that experience gained from the field was used to support various policy initiatives at the central level to overcome obstacles identified in the field, strengthen management capacity at all levels and promote broader adoption of successful decentralized conservation initiatives.

During the NRM/EPIQ Task Order period, the PAM component focused on four distinct yet interrelated activity themes: (1) building effective partnerships; (2) strengthening conservation awareness and the role of protected areas in regional development; (3) strengthening financing for protected areas management; and (4) human resources development and institutional strengthening for protected areas management. Each of these activity themes was supported by a number of inter-related sub-tasks. While tempered by reduced government budgets for park management due to the on-going economic crisis as well as a dilution of central government authority. NRM/EPIQ inputs contributed significantly to more participatory conservation management practices in the field supported by similar policies at the national level. Brief descriptions of each of the four activity themes and supporting sub-tasks are presented below.

## **Building Effective Partnerships**

Effective management of Indonesia's vast protected areas system—housing globally significant biological diversity—is a great responsibility requiring a wide array of technical skills combined with adequate financial resources. While PKA is charged with the overall management of Indonesia's protected areas system, this organization cannot be expected to carry-out all aspects of protected areas management on its own. Furthermore, the new decentralization policies demand greater regional government involvement in protected areas management. NRM/EPIQ rooted its practical and policy-oriented technical assistance in what has come to be called the “PKA-Plus” approach, in which PKA recognizes the limits on its specific management expertise and identifies and builds strategic partnerships with other institutions that have complementary expertise or resources that can contribute to better biodiversity conservation in Indonesia. NRM/EPIQ's work in developing and supporting a range of collaborative management approaches has made significant impacts on field-based conservation as well as on supportive policies promoted at the national level. NRM/EPIQ worked with PKA and others to identify and develop two main kinds of partnerships, private sector partnerships and community partnerships.

**Private Sector Partnerships.** NRM/EPIQ demonstrated that private sector partnerships can contribute significantly to protected areas management in Indonesia by increasing technical and financial resources available for conservation. Such partnerships also can be used as efficient and cost-effective management mechanisms. For example, partnerships with timber concessionaires operating around a national park can provide a park manager with a forum to discuss annual logging plans and discourage encroachment. NRM/EPIQ focused on establishing model examples of private sector partnerships in three locations, combining technical assistance, workshops and training, and documentation of lessons learned.

West Kalimantan's *Bukit Baka Bukit Raya National Park* and a number of timber concessions operating adjacent to this park have established a partnership that provides a cost-effective management mechanism for monitoring concession holders' compliance with annual harvesting plans and discourages encroachment into the park. Currently, this partnership addresses boundary disputes and clarification over resource rights. As the partnership matures, it is anticipated that the timber concessions may assume greater responsibility in buffer-zone conservation and development activities with local communities through the provision of technical and/or financial support. This partnership can serve as a model for many other National Parks surrounded by timber concessions. In the near future, efforts need to be made to ensure replicability of the Bukit Baka Bukit Raya partnership model, primarily through documenting and then sharing the lessons learned from this experience through various means.

The hotels and diving companies operating in and around *Bunaken National Marine Park* rely on the preservation of a healthy national park, and are now working together as the North Sulawesi Watersports Association (NSWA) to support conservation of the Park as well as other important dive sites in North Sulawesi. NRM/EPIQ worked with Bunaken National Park managers and NSWA to strengthen this partnership through the implementation of mutually beneficial activities such as:

developing consensus on a “dive operators set of best practices/code of conduct”; implementation of a mooring buoys program (in cooperation with local communities); establishment of a collaborative patrolling program; and the development and dissemination of conservation awareness materials including a bilingual (Bahasa Indonesia and English) book on The Natural History of Bunaken National Marine Park.

*Kutai National Park*, located in East Kalimantan, remains one of the most threatened parks in Indonesia and lost considerable biodiversity conservation values as a result of forest fires in 1997 and on-going encroachment that has surged over the past few years. The organization Friends of Kutai National Park, supported by NRM/EPIQ, is Indonesia’s first example of a private-sector partnership for conservation and offers a potentially excellent model for generating financial resources and providing technical assistance to protected areas. Prior to making Friends of Kutai a model, however, attention needs to be given to its institutional strengthening. Great strides have been made in building the capacity of Friends of Kutai over the course of NRM/EPIQ’s first implementation period, including regular technical meetings, increased financial contributions from corporate members for park management and activities, and design of a foundation (*yayasan*) structure to increase transparency and accountability. Despite the continuing and severe threats to the park and its biodiversity, Friends of Kutai remains an important partnership model that could have further impact through the wider inclusion of park management stakeholders, including community leaders and local government officials. Still, given the damage to Kutai National Park over recent years, it may be more advantageous to focus on the replication of the Friends of Kutai organizational model to other, more intact, protected areas rather than to sink additional resources into such a severely damaged park. Friends of Kutai offers a great partnership example for co-management of protected areas management in Indonesia and throughout the world. Unfortunately, it seems to have offered too little too late to reverse the trends and establish a framework for effective conservation of Kutai National Park.

**Community Conservation Agreements.** NRM/EPIQ also promoted partnerships between park managers and local communities through the development of Community Conservation Agreements (CCAs). Linking community development endeavors and resource tenure arrangements with commitments to conservation management support, CCAs demonstrated a substantially increased value of buffer-zone development activities in terms of overall strategy for protected areas conservation. Various models of CCAs have been developed and approved in and around a number of protected areas in Indonesia, including Kerinci Seblat, Danau Sentarum and Lore Lindu National Parks. NRM/EPIQ worked to draw lessons from these experiences as well as to develop inexpensive models for easy replication. NRM worked with community groups, NGOs and park managers to develop CCAs in Bunaken National Park and Morawali Nature Reserve, as well as to strengthen CCAs in the Besoa Valley enclave of Lore Lindu National Park. Additional focus at the national level supported the adoption of CCAs as an accepted practice in overall PKA protected areas management policy.

### **Strengthening Conservation Awareness and the Role of Protected Areas in Regional Development**

An important lesson learned during the first phase of NRM/EPIQ implementation has been that field-

level impacts require a greater understanding of and commitment to conservation on the part of the many stakeholders involved in protected areas management. NRM/EPIQ demonstrated that such understanding and commitment should be built on a foundation of pride in the national heritage, and that conservation of protected areas should be understood in terms of its overall contribution to economic development. Social marketing techniques and public information campaign strategies were used to strengthen conservation education and awareness. Biodiversity and other natural resources valuation was used as a tool to establish an appreciation of the benefits derived from conservation of natural areas by speaking the language of economic development. Activities were designed to build pride in Indonesia's natural treasures as well as to convey the importance of protected areas in terms of their contributions to social and economic welfare. NRM/EPIQ's work with social marketing techniques has resulted in what the Department of Forestry & Estate Crops called "a new paradigm for conservation awareness", while demand for natural resource valuation training initiated by the NRM Program has come from all over Indonesia.

**Conservation Education and Awareness.** Working in collaboration with the RARE Center for Tropical Conservation, NRM/EPIQ introduced the use of social marketing techniques such as market research and targeted campaign messages and strategies to support improved conservation. In a pilot workshop in North Sulawesi focusing on Bunaken National Park, a range of government officials and NGO representatives developed hands-on experience on planning and implementing conservation awareness campaigns. This integrated training program included market research techniques, assessment of target audience, establishment of campaign themes and goals, working with school children, puppet shows, school songs, painting billboards, and putting conservation messages in religious sermons. The workshop resulted in immediate conservation awareness work in Bunaken National Park, Tangkoko Nature Reserve and the Sangihe-Talaud proposed protected area in North Sulawesi. Building from this success, additional workshops have been recommended for West Papua (Irian Jaya) and East Kalimantan during the next phase of NRM/EPIQ activities.

A follow-up workshop in West Papua would also build on NRM/EPIQ-sponsored work supporting conservation education and awareness programs for Cyclops and Yutefa Bay Nature Reserves. These activities were implemented as a partnership between PKA's regional branch (SB-KSDA Jayapura), Kemala-partner YPLH-Cyclops and WWF-Jayapura. Originally designed to target school children, the campaign was broadened to reach the general public of Jayapura. Through the development and distribution of awareness materials as well as the production of conservation awareness events, this campaign helped build an essential understanding of and pride in the unique natural resources found around the provincial capital.

**Educational Materials.** NRM/EPIQ also developed and distributed a variety of important conservation education materials, focusing specifically on marine protected areas management and highlighting Bunaken National Park. Working in collaboration with The Nature Conservancy, NRM/EPIQ developed and disseminated a coral reef management flipchart and users guide now commonly used by park rangers, NGO field workers, community organizers and school teachers in coastal communities both within and beyond marine protected areas across Indonesia. As mentioned, NRM/EPIQ developed and distributed the bilingual Bunaken National Park Natural History

Guidebook, which describes ecological, cultural, economic and conservation management characteristics of Bunaken National Park. This has become a model for field guides for protected areas in Indonesia, and should spur the development of similar guides for both terrestrial and marine protected areas. Finally, NRM/EPIQ sponsored an environment and art competition in order to develop a pool of local artists to facilitate the development of conservation awareness materials in NRM/EPIQ field sites. The art competition provided a forum for participants to better understand and appreciate the protected areas in their region. Collections of winning posters were displayed in calendars, cards and many other NRM publications.

**Protected Areas in Regional Development.** While conservation awareness boosts pride and interest in nature protection initiatives, influencing government policy also requires demonstrating the economic value of conservation in regional development. NRM/EPIQ PAM and Policy and Planning teams worked together to facilitate the development of economic valuation case studies for the proposed Togeian Islands marine protected area in Central Sulawesi, Bunaken National Park in North Sulawesi, as well as Gunung Gede Pangrango National Park in West Java. Park areas were shown to generate a wide range of demonstrable economic benefits, from important hydrological functions of watersheds to coastal erosion protection. These case studies showed that natural resource valuation can serve as an important heuristic tool for engaging other government agencies and local institutions in better understanding the role of protected areas in terms of regional economic development. Economic valuation studies offer a unique mechanism for discussing conservation and protected areas management in a more common “economic development language”—so important in local government offices where economics clearly takes precedence over conservation. The case studies were further developed into a series of teaching modules to be used for regional training programs in NRM/EPIQ focus provinces. Under the guidance of the Policy and Planning component team, these training materials were tested in a resource valuation training program in West Papua, and additional training activities are recommended for the next NRM/EPIQ phase.

### **Strengthening Financing for Protected Areas Management**

Effective conservation management of protected areas is expensive, and GOI has not provided adequate routine budget any expenditures for this purpose. NRM/EPIQ worked with PKA to both improve decision-making on financial resource allocations as well as to increase long-term funding for conservation management of the country’s protected areas system. This was achieved through two inter-related activities.

**Improving Financial Resource Allocation.** NRM/EPIQ worked in close collaboration with PKA to design and develop an interactive national parks finance database. The database has been designed to assist PKA in better managing its financial resources. It was designed to encourage improved information gathering and management necessary for better, more analytical decision making regarding the distribution of financial and technical resources among the various parks based on the premise that the most resources ought to be invested in a manner that achieves the greatest conservation benefits. Created in Microsoft Access, the database now is used by park managers and PKA officials for developing annual budgets. In the future, it is anticipated that this database will be made available to

park and other field-based PKA managers over the World Wide Web. The database incorporates traditional GOI revenue and expense items as well as tracking mechanisms for partner financing and other innovative financing mechanisms, and it builds off of and links to other NRM/EPIQ conservation finance work.

**Increasing Conservation Funding through Debt-for-Nature Swaps.** NRM/EPIQ demonstrated that there is great potential to increase financing for protected areas management in Indonesia through the utilization of debt-for-nature swaps (see Report No. 16 listed in Annex 1). While debt-for-nature swaps and other innovative conservation financing mechanisms have long been used in other countries, PKA was previously unaware of how to effectively access them and the political establishment generally mistrusted and misunderstood the purpose and functions of such mechanisms. Hence, during the first NRM/EPIQ implementation period, the PAM component team facilitated a feasibility study of debt-for-nature swaps in Indonesia and socialized the concept to a range of stakeholders through a series of workshops. After much debate, GOI formally demonstrated its interest in pursuing debt-for-nature swaps through restructuring sovereign debt, made evident in its letter to the US Treasury to seek eligibility under and participation in the facilities offered through the newly-passed U.S. Tropical Forest Conservation Act. The Indonesian media also has shown interest in this work, as more than five major publications ran debt-for-nature swap stories during the period of this debate. Given the current economic crisis in Indonesia, debt-for-nature swaps are particularly attractive mechanisms capable of combining debt reduction, increased conservation financing, and the conservation of natural resources threatened by an export-led economic recovery though much prior work on financial restructuring needs to be done.

NRM/EPIQ provided significant leadership in facilitating the development of a Washington-based debt-for-nature swap advisory group comprising senior conservation finance advisors from Conservation International, World Wildlife Fund and The Nature Conservancy as well as a Jakarta-based debt-for-nature swap steering committee comprising the executive or country directors of Conservation International, KEHATI, YPAN and YWWF. The advisory group and steering committee have contributed to increased collaboration among these leading international and local conservation organizations and help to ensure the sustainability of NRM/EPIQ's ground-breaking work. They are expected to continue to focus on debt-for-nature swap opportunities from both sovereign and private-sector debt restructuring.

### **Human Resources Development and Institutional Strengthening for Improved Protected Areas Management**

NRM/EPIQ also supported the development of a broad range of management skills needed for improved biodiversity conservation in the country. While the emphasis has been on building human resources for Indonesia's entire protected areas system, special attention was given to developing relevant skills at the field level and in specific locations. In line with the "PKA-Plus" approach, much of the capacity-building effort focused on human resource development for traditional management activities as well as for identifying and facilitating effective partnerships necessary for accessing and then managing additional technical resources.

**Human Resources Development.** The PAM component's human resource development efforts built on NRM/EPIQ's initial assessment of human capacity and institutional resources needs. This study examined existing human resources in natural resources fields and matched them to necessary management resources. The study then went on to propose specific training activities necessary to overcome natural resources management gaps. Particular emphasis was given to developing the human resources necessary to manage human threats to protected areas in a proactive manner. NRM/EPIQ activities included field-based, on-the-job training, often in collaboration with NGOs and community representatives, as well as support for involvement in relevant national and regional training programs stressing participatory approaches to protected areas management.

In response to a gap identified in the initial training needs assessment, NRM/EPIQ focused considerable attention on building skills for field-level marine protected areas management. As a directorate of the Department of Forestry and Estate Crops, PKA has far stronger human resources for management of terrestrial than it does for marine protected areas. Thus, PKA required specific attention to build field-based skills for marine protected areas management, and Bunaken National Marine Park provided an excellent site for developing and testing a series of training modules in this field.

**Institutional Strengthening.** During the first year of implementation, NRM/EPIQ worked with PKA to facilitate Indonesia's first National Park Managers Workshop. This provided an opportunity for park managers to share experiences, influence national conservation policy through an open expression of their views and develop new skills in participatory approaches to protected areas management. This gathering proved very successful and resulted in important policy shifts favoring increased autonomy for National Park managers as well as support for a range of participatory approaches to conservation management. Recognizing the significance of the new laws on decentralized government administration and fiscal autonomy (Laws 22/99 and 25/99), follow-up workshops were revised to include broader stakeholder representation under the title of National Parks in Regional Development workshops. With representatives including park managers, local government officials, NGOs, company representatives and community organizations, these workshops were facilitated by a working team from PKA, Bappenas and Bangda, and aimed at developing inputs for implementation guidelines regarding the institutional and financial aspects of National Park management in the new era of decentralization. NRM/EPIQ facilitated a workshop for eastern Indonesia in North Sulawesi. PKA and other donors will facilitate similar workshops in other regions in Indonesia, while NRM/EPIQ may facilitate a final workshop for Kalimantan during the next implementation phase.

NRM/EPIQ also demonstrated the value of the Institutional Development Framework (IDF) for organizational management and results monitoring. The IDF is a diagnostic tool that can be used by an organization to assess the adequacy of its organizational structures and broader management maturity. It also generates a quantitative score based on this rating that can be used as an indicator of organizational capacity if tracked over time (see the Management Indicators sub-section below). Scoping exercises using the IDF were shown to be very useful for identifying and facilitating attention to the full range of responsibilities of National Park management units. The IDF process was refined through its application in a number of National Parks across Indonesia. NRM/EPIQ then worked with

PKA to make final revisions and to develop a formally approved set of user guidelines so that the IDF process could become institutionalized as an approach for improving National Park management in Indonesia.

Finally, NRM/EPIQ facilitated a wide range of informal PKA working groups to discuss relevant topics in protected areas management, and to then develop working papers to be produced and disseminated to a wider audience. Topics included: economic valuation of protected areas; innovative conservation financing approaches; guidelines for multipurpose protected areas management; the role of partnerships in protected areas management; the role of community conservation contracts in buffer zone development; and human resource development to better link people and parks.

### **2.3 Forest Management**

The Forest Management component consisted of two elements that organized activities according to their principal target audience and partners to: (1) encourage the further development of sustainable community-based forest management; and (2) support and expedite more sustainable management practices within national production forests. Field work under this component was mainly supported through small grants to Indonesian NGOs. These grants and associated technical assistance developed examples of partnerships between local government, the private sector, NGOs and communities, worked to assure adequate financial and human resources for natural resource management and promoted the adoption of "best practice" forest product harvesting and processing techniques. The Forest Management component went through three—somewhat overlapping—implementation phases that were a result of both internal mobilization as well as external events affecting implementation.

The *first phase* extended from August 1997 to April 1998, during which time the component lacked a full-time Forest Policy Advisor and Indonesian Specialists—relying instead on short-term consultants (both Indonesian and expatriate) and activities that built from the previous NRMP program. Most notably, work continued on: reduced impact harvesting (RIH); reform of rattan regulation; institutional and outcome-based policy lessons learned; and a number of initiatives to address the causes and impacts of the devastating forest fires that dominated forestry sector attention at that time. NRM/EPIQ was also an active member of the Consultative Group on Indonesian Forestry (CGIF)—a forum established by MOFEC for dialogue between the GOI and the donor community on forest policies and practices. A strong collaborative relationship was also maintained with the Center for International Forestry Research (CIFOR), located in Bogor.

The principal Ministry of Forestry and Estate Crops (MOFEC) counterpart for this sub-component during the NRM/EPIQ Task Order implementation period was the Sub-directorate for Foreign Technical Cooperation of the Program Development Directorate within the Directorate General for Production Forestry (PHP). This unit's priorities for NRM/EPIQ were primarily to begin a full-scale pilot community forestry effort and, to a lesser extent, to begin new work on RIH. The first activity was far beyond the budgetary capacity or two-year timeframe for NRM/EPIQ. By way of example, the GTZ Social Forestry Development Project in West Kalimantan, which follows a similar donor-funded model, took seven years just to get its target community organized while spending a much larger budget

than that available to NRM/EPIQ. Hence, NRM/EPIQ focused its activities on the RIH work while initiating a number of grants to support community forestry efforts primarily by Indonesian NGOs. The PHP counterpart also largely discouraged cooperation with other parts of MOFEC, so that most policy-related activities were forced to take place outside of the Ministry or through the CGIF.

In addition to MOFEC-related activities, NRM/EPIQ began a number of new initiatives with other partners. These included core support for the development of the Indonesia Ecolabeling Institute (LEI) that focused on timber certification, analysis of the causes and impacts of the forest fires, and considerable work on the forest policy reforms embodied in the Memorandum on Economic and Financial Policies (MEFP) of the GOI and IMF. This is discussed further below.

The *second phase* of Forest Management component implementation extended approximately from February 1998 until September 1998. This phase was marked by forest policy work mainly with the CGIF, World Bank and IMF, other bilateral donors and NGOs but only a limited amount of direct and regular cooperation with PHP. This was due to the political economic crisis occurring during that period, the evacuation of NRM expatriate staff from mid-May to mid-July and the inability of the long-term Advisor to start full-time until early September. In addition to policy activities during this period, the Forest Management component hired all of its long-term Indonesian staff, began close cooperation with the Communications Forum for Community-Based Forestry (FKKM) and assisted the Independent Committee on Forestry Reform (see below).

The *third phase* of the Forest Management component's implementation was the one-year period between September 1998 and September 1999. With the presence of a full-time advisor for most of this period, and a relatively greater degree of political stability, cooperative activities with MOFEC increased significantly. Also, NRM/EPIQ was fortunate to recruit experienced and capable Indonesian forest management specialists. Much of the work on RIH regulation and codes of practice was done during this period as well as further policy work on institutional reform within MOFEC and a series of studies on economic and structural trends and changes in the industrial forestry sector. In the community forestry field, NRM/EPIQ's activities were dominated by its support for the FKKM, which became very active in legal reform, as well as its support for a relatively large number of forestry-related field support grants to NGOs working in this field. The main accomplishments achieved in the three key areas of RIH promotion, broader forestry policy reforms and community-based forest management are summarized below.

### **Reduced Impact Harvesting**

There were four significant activities and associated accomplishments with respect to the promotion of wider use of RIH practices in Indonesian forestry:

- Best practice documentation and training in the development and use of cruising and skid trail mapping techniques, primarily with the forest concessionaire Alas Kusuma Group (1997–1998);
- Support to CIFOR in the development of its pilot RIH research site in Malinau, East Kalimantan

(1998);

- Adaptation and further development of the FAO Code of Timber Harvesting Practices to become the Indonesian Principles and Practices of Timber Harvesting, officially endorsed by MOFEC (1998–1999); and
- Two major RIH-related guideline documents completed and endorsed by the Ministry, and a successful workshop that triggered follow-up training activities by the industry (1999).

While NRM/EPIQ does not propose to do any significant further work on RIH during the next implementation phase, MOFEC and industrial partners intend to use the demonstrated practices documented by NRM/EPIQ to expand RIH application. These include putting them to use immediately in seven concessions surrounding Kerinci Seblat National Park. The Association of Indonesian Forest Concession Holders (APHI) sought NRM/EPIQ's advice on how to proceed toward implementation of improved harvesting practices during September, 1999 and specific concessions have sought NRM/EPIQ's guidance on how to analyze logging costs as a basis for implementing improved practices.

### **Forestry Policy**

A significant part of the NRM/EPIQ interaction with MOFEC and the CGIF took the form of policy work—research, analysis, synthesis, dialogue, formulation of draft proposals, policy advocacy and review of legislation. Some of this has been described in the Policy section above. Other specific activities and associated results included:

- Policy dialogues and a major workshop on coordination and integration of regulatory reforms in the rattan trade and processing sectors between the Departments of Trade and Industry and MOFEC, in cooperation with GTZ (1998);
- Policy memoranda on implementation of specific forestry-related MEFP reforms, notably the Reforestation Fund and the resource rent royalty (PSDH), for World Bank/IMF and MOFEC (1998);
- Policy analysis and support for the recognition of community managed, traditional buffer zone forests in East Kalimantan with CIFOR and YWWF (1998);
- Support for NGO participation in policy and institutional reform discussions prior to and during the period of the Independent Reform Committee on Forestry, including a comprehensive forestry multi-stakeholder dialogue in Samarinda (1998) and a dialogue process that continued with a similar workshop in early 1999 in Jakarta (directed at influencing the development of a World Bank Forestry Structural Adjustment Loan);
- Support for policy analyses on the causes and impacts of the forest fires of 1997–1998, including a paper prepared for the IDRC-led Environmental Economics Program for Southeast Asia (EEPSEA), and others done in collaboration with the Indonesian Center for Strategic and International Studies and YWWF, with additional information support provided to USAID/Washington, the U.S. Department of State, the U.S. Forest Service and the U.S. National Oceanographic and Atmospheric Agency (1997–1999);
- A comprehensive forestry sector policy paper was completed for MOFEC—the purpose of which

was to bring a unified policy framework to the issues being debated by a wide group of analysts within and outside of MOFEC—covering 9 themes: legal framework, land use planning, deforestation/degradation, concession management, reforestation, trade, community forestry, economic incentives, and environmental aspects (1999);

- A discussion paper on decentralization and community forestry was distributed using the French case as an example (French and Indonesian overall administrative structures are similar) leading to a planned extension to incorporate U.S. and Canadian experiences for the MOFEC task force on decentralization (1999);
- A number of studies on the economics of the forest products industry were initiated and are expected to be continued during the next phase of NRM/EPIQ implementation, including: analyses of tax and revenues on the structure of the industry, on the impacts of price and regulatory changes on supply and demand for wood products, and the implications of privatization of state-owned forestry enterprises (1999);
- NRM/EPIQ actively supported public participation in debates on a number of pieces of forest legislation and regulation, including measures on community based forestry, a new basic forestry law, regulations on the size and ownership structure of concessions, forest auctions and forest taxation (1998–1999);
- Support for the development of the Indonesian Ecolabeling Institute’s (LEI) program of timber certification, including funding for core management, provision of a series of short-term consultants to finalize standards for certification criteria into the National Bureau of Standards, development of social criteria for timber certification, a series of training workshops for field certifiers, and travel and funding support for negotiations between LEI and the Forestry Stewardship Council on mutual recognition of Indonesia’s and the international community’s certification processes; LEI has now been internationally and domestically recognized as one important alternative for promoting transparency and accountability in the timber industry (1997–1999); and
- The Forest Management component team also conducted a field visit in Samarinda and Kabupaten Pasir (East Kalimantan) to obtain additional inputs for analysis of current issues of the rattan industry at the farmer and trader levels, forming the basis of a paper on “Analysis of Current Policies and Deregulation Measures on the Sustainability of the Rattan Industry.”

### **Community-based Forest Management**

NRM/EPIQ also provided critical policy and program support to groups pushing forward with new approaches to involving and empowering communities in forest management. The following five community-based forest management (CBFM) activities and associated results are indicative of that effort:

- NRM/EPIQ provided critical management support, liaison and analytical services to FKMM, the principal forum on communications and information dissemination for community forestry, consisting of government agencies, forestry-related NGOs and the industry representatives and supported by both NRM/EPIQ and the Ford Foundation (1998–1999);
- Intermittent technical support was provided for a CBFM field site managed by Harvard University

(Gunung Palung, West Kalimantan), mainly to NGOs helping to organize the participating communities (1998–1999);

- A study on lessons from experience in CBFM in Indonesia was completed by Prof. Hasanu Simon of Gadjah Mada University, focusing on four themes: historical perspective, livelihood analysis, cases studies on utilization, and options for future action;
- An E-mail list serve on community forestry was begun in cooperation with CIFOR subsequently absorbed by a larger similar list serve organized by FKKM (1998); and
- A series of networking activities were conducted to develop a common view on community based forestry management with other donors and NGOs (1997–1998).

### **Information Dissemination and Policy Support**

As noted previously, work with MOFEC on fundamental forestry policy issues—despite the urgency created by the political transition and economic crisis—proved frustratingly difficult for all donor-funded projects during the NRM/EPIQ implementation period. The approach taken during the previous NRMP period had been to engage in gradual, informal dialogues on a few issues in which some consensus and regulatory change could be promoted. However, real forestry policy making remained outside of any formal departmental process and largely outside of MOFEC itself.

Within this context, NRM/EPIQ took advantage of every possible opportunity to work with other donors interested in forestry policy (e.g. DFID and Ford Foundation) and provided policy and regulatory memoranda to the Independent Committee on Forestry Reform (Komite (*sic*) Reformasi), briefings and memoranda for Ministers Djamaluddin and Muslimin Nasution, for the World Bank/IMF MEFP teams, for the CGIF and for BAPPENAS. NRM/EPIQ also provided periodic briefings on forestry related topics to the American Embassy, USAID/Washington and international organizations.

The working relationship established with CIFOR was particularly fruitful. NRM/EPIQ and CIFOR worked together on activities relating to: forest fires; RIH/RIL research and training; MEFP and other forestry economic reforms; and community forestry and land tenure, including recognition of *adat*-based, community buffer zone management. CIFOR has taken over from the NRM Program the responsibility for promoting RIH in the Indonesian forestry industry, and the establishment of this approach and its institutionalization represent one of the NRM Programs most significant accomplishments. Nevertheless, cooperation with CIFOR has been inherently limited because of the multi-country focus of this international organization (under the Consultative Group for International Agricultural Research) that limits the attention they can give even to their host country Indonesia.

## **2.4 NRM-Wide Program Support**

### **Secretariat Program Facilitation**

As noted in the first section of this report, the NRM Secretariat played a number of critical support and coordination functions for all NRM Program partners. Most of these are discussed below and include:

(1) facilitating information sharing and team work among NRM Partners, GOI counterparts, and USAID; (2) identifying and recommending key activities supporting program objectives; (3) providing and supporting technical assistance in specific ministries and field sites; (4) coordinating annual implementation plans for each of the program components; (5) assisting all component teams in developing analytical policy networks within cooperating ministries; and (6) ensuring that NRM activities are demand driven and that results are disseminated to appropriate groups. The NRM Secretariat also fulfilled a program facilitation function, to “provide support services to all NRM partners to facilitate more effective and efficient achievement of NRM's strategic objective and intermediate results.”

The information coordination and sharing function—along with reporting of results to USAID and the GOI—is discussed below under the Communications and Information Management sub-section. The policy support functions were described in the sections above covering the Policy and Planning, Forest Management and Protected Areas Management components.

The NRM/EPIQ Secretariat program facilitation team’s activities are organized into three areas: management, grants and training, and provincial liaisons. NRM/EPIQ manages the Secretariat to create opportunities for improved efficiency, cost effectiveness, and collaboration for results among all NRM Program partners. These Partners all EPIQ consortium members plus the non-EPIQ lead organizations responsible for NRM component implementation. As noted, these include BSP/Kemala, URI/CRMP, Biodiversity Conservation Network, YWWF and TNC. Close working relationships were also maintained with other NGOs, GOI bodies and the donor community.

During the course of the Task Order period, the three main NRM Program partners—EPIQ, BSP/Kemala and URI/CRMP—grew to such an extent such that their physical support and office needs could not be adequately served by staying in the original Menteng office, so the entire program was moved to a new location in South Jakarta in the Ratu Plaza building. This move took place at the very end of the NRM/EPIQ Task Order period with the expectation that the NRM Program would be continued for an additional two years based out of the new offices.

### **Sub-Awards**

Three types of sub-awards were issued through the NRM/EPIQ Task Order in support of NRM Program objectives. A small grants program targeted NGOs with programmatic interests complementary to the work of the NRM components. Sub-contracts with NGOs were used to carry out more directed activities often involving a combination of technical assistance, research and the advocacy of innovative measures to promote improved management of natural resources at the regional level. Finally, purchase orders were used for quick turn-around financing of other products to complement technical assistance or other sub-awards. In total, \$671,488 was expended for thirty (30) sub-awards broken down as follows (figures based on Rp.8000 = US\$1):

- **Small grants:** 12 with a value of \$428,503;
- **Sub-contracts:** 2 with a value of \$136,894; and
- **Purchase orders:** 16 with a value of \$106,091.

The total amount expended was less than originally planned, but NRM/EPIQ still became a major grant-giving organization in Indonesian conservation and rural resources management during the implementation period. Factors that affected the decreased value of sub-awards included: the huge devaluation of the Rupiah against the Dollar allowing NRM/EPIQ to get more than three times the local currency value compared to original estimates; the virtual exclusion of Maluku Province from NRM programs due to security concerns; decreased grant lengths due to administrative and political constraints; and a reallocation by USAID of Conservation International's financial support from the NRM/EPIQ sub-contract to a separate cooperative agreement with this organization.

The *Small Grants Program* provided supplementary and flexible resources to the technical assistance and training activities organized through all NRM components. The grants were aimed at encouraging organizations that are currently undertaking or could replicate activities directly contributing to NRM component workplans. The program originally included the following four grant types:

- **Long-term institutional support grants** (up to two years) supported sectoral or cross-sectoral objectives (e.g., community forestry; performance-based evaluation; or environmental education);
- **Short-term implementation grants** intended to help NRM/EPIQ and NGO partners achieve mutual short-term objectives (e.g., training, field research, workshops, or *krismon* responses);
- **Special purpose grants** designed to channel funding for activities or organizations not originally part of the NRM/EPIQ workplan but relevant to the overall NRM Program; and
- **U.S.–Indonesian partnerships** for training or research intended to develop sustainable links between American and Indonesian organizations involved with natural resources management.

A total of twenty-one (21) organizations contributing to various NRM components—and all working in one or more of the five focus provinces—were pre-selected for USAID's approval as grantees. Only twelve (12) organizations were eventually approved by USAID and NRM/EPIQ for funding with activities to be carried out between October 1998 and October 1999. However, only 3 grantees were approved in time so that they could carry out their activities beginning in October 1998 with the remainder receiving USAID's approval only in May 1999. This left the grantees with very limited time to carry out their program activities. All grants issued fell into either the short-term implementation or special purpose categories. Despite the time constraints, eight grantees fully completed their proposed activities during the NRM/EPIQ Task Order period while the other four completed up to 90% of their proposed activities. These limitations presented considerable constraints for NRM/EPIQ and the grantees alike.

Various other factors contributed to the delayed start of the NRM/EPIQ small grants program. The key staff position was not filled until approximately a year after NRM/EPIQ had been in operation. It took the Specialist some time to initiate grants solicitations and to coordinate with other NRM components in setting grants criteria and preparing public announcements. A lack of human resources and coordination among those who were supposed to have been involved during the pre-award evaluation and program monitoring processes made the program appear “too centralized” and added to the difficulties encountered in managing the program.

Only two of the originally planned four grant types were actually used. Time constraints precluded

issuance of longer-term grants—though it is recommended that follow-on grants be issued to several of the grantees during the next NRM/EPIQ implementation period. The U.S.–Indonesian partnership grants (which are conceptually quite different from the conservation partnership concept developed under the PAM component) were intended to strengthen the long-term capacity of collaborative policy, research and training networks comprising U.S. and Indonesian government agencies, universities, private sector institutions and non-governmental organizations. The concept grew out of a desire by USAID at the time of the design of NRM/EPIQ to help establish continuing U.S.–Indonesian linkages that would be sustained after USAID/Indonesia and the NRM program closed in 2003. In the event, the political and economic crisis of 1997-1999 both made it difficult to establish such links in the short run and also led to USAID/Indonesia’s adopting a longer-term vision of the need for development assistance to Indonesia.

Despite the challenges in implementing the grants program, the twelve grants awarded by NRM/EPIQ—with an average approved budget of \$38,974—went to a range of local NGOs who made significant contributions to improved local management of natural resources (see the summary information on each given in Annex 3). The grantees were based in the following locations: Jakarta and Bogor (with nationwide program activities); Pontianak; Palu; Kolonodale; Ujung Pandang; Merauke; and Jayapura.

*Sub-contracts* were let with two organizations: Conservation International (CI) and the Wildlife Conservation Society (WCS). Though not in the form of sub-contracts, key staff members from RARE (Paul Butler; \$16,606) and the Center for International Environmental Law (Owen Lynch; \$4,415) also worked as NRM/EPIQ consultants, and institutional overheads were paid by IRG—providing access to the organizations as if a sub-contractual relationship had been established. All four organizations worked primarily in support of the objectives associated with the Protected Areas Management component. Though sub-contracts were signed with CI and WCS totaling some \$419,868 in value, actual expenditures were only \$136,894. This was primarily because USAID allocated a separate grant to CI outside of NRM/EPIQ that displaced certain activities previously planned to be carried out through the EPIQ mechanism—though they were still largely implemented and done within the NRM Program framework. The two sub-contracts are summarized in Annex 3.

As noted, *Purchase Orders* also were used to obtain products in support of the NRM Program not as quickly or appropriately filled through the use of technical assistance and other types of sub-awards. A summary listing—providing their purpose and the associated results—of all program-oriented purchase orders is given as part of Annex 3. In total, 16 purchase orders were made with a value of \$106,091.

## **Training**

The NRM team worked closely with NRM partners, USAID, selected GOI counterparts (especially through the PAM component) and other donors to identify relevant short-term non-degree, participant training and study tour opportunities. NRM/EPIQ undertook a considerable number of informal training activities, mainly with Indonesian NGOs but also with MOFEC personnel. More formal short courses in the Asian region or Indonesia were fewer in number. Many NGOs actually required more “generic”

training in basic management and financial systems as well as effective communication, reporting and advocacy rather than technical training in natural resources issues. A cross-section of NRM/EPIQ-sponsored training activities is given in Annex 2.

### **Provincial Liaison Offices**

NRM/EPIQ established five Provincial Liaison Offices, staffed by Provincial Liaison Specialists (PLSs), in the capitals of West Kalimantan, East Kalimantan, Central Sulawesi, North Sulawesi and Irian Jaya (West Papua). Establishment of a sixth Provincial Liaison Office in Maluku was placed on indefinite hold and never materialized due to security concerns following civil strife in the province.

The Provincial Liaison Offices became valuable resources for the entire NRM Program. These offices are located nearby or within provincial government offices, usually the provincial planning agency, as a focal point for counterpart relations with key agencies of the local government. The offices were equipped to serve as a base for NRM Program consultants and staff working in the provincial capitals.

Through this decentralized structure and presence, NRM/EPIQ was able to identify successful field approaches, provincial strategies, and effective/efficient resource management practices that can be brought from the field to the center for wider application and dissemination. These offices promoted information exchange, integration of activities, cross-fertilization of good ideas from one place to another, and wider participation in NRM decision-making process. The PLSs also contributed to development and implementation of longer-term NRM Program strategies for each of the five key provinces that served as the basis for recommended activities during the next phase of NRM/EPIQ implementation. The routine roles of the Provincial Liaison Specialists were to:

- Facilitate implementation and targeting of technical assistance from the NRM Program components and partners to specific sites and agencies at the provincial level;
- Assist provincial government and local partners (e.g., NGOs) in implementing their own plans and ideas through specific, strategic inputs (coordinated through NRM Secretariat), in practice closely related to grants administration and selection and management of short-term trainees from the regions;
- Build capacity, document successful models, and improve NRM practices at the provincial level, with the capacity of the liaisons to undertake this role varying more or less directly with the number of workplan activities and NRM field sites in the region—the most active liaisons were in North Sulawesi, East Kalimantan and Papua Barat (Irian Jaya);
- Communicate, facilitate, and coordinate across program elements, sectors, agencies of government, and local stakeholder groups;
- Provide opportunities for communication across provinces and to the center, both by disseminating NRM-developed products, and by collecting information developed by others; and
- Assist in identifying and linking provincial lessons learned to policy analyses and inputs, with lessons from field-based activities an important input for policy making, especially in a few provinces—notably West Kalimantan and North Sulawesi. In the case of West Kalimantan, the PLS provided important facilitation work for policy makers interested in using the results of activities outside of the NRM Program as well as activities within the program.

For NRM Program partners, including EPIQ, the PLS structure greatly increased communication and responsiveness at the provincial level to government, regional NGOs, local communities and other stakeholders. It provided a strategic base for future decentralization and reform initiatives that arose from the political process. This was especially the case for West and East Kalimantan and North Sulawesi. For the GOI, this structure provided an opportunity to expand its scope of activities and contacts, to improve collaboration with other agencies or organizations (especially the local NGO and university communities), and to identify and realize training opportunities (mainly those funded through EPIQ).

### **Communications and Information Management**

During the NRM/EPIQ implementation period the NRM Secretariat was charged with information sharing among its partner organizations. This included: coordination; tracking performance results and relating them to NRM workplans and financial plans; conducting analyses; reporting on program progress; developing and maintaining the NRM Website and other news sharing; and maintenance of databases to support policy formulation.

The NRM Secretariat responded by developing a Communications and Information Management (CIM) team tasked with three related core activities that include the above-mentioned information gathering (communication) plus the establishment and maintenance of a computer network for the EPIQ team and collection of information on NRM Program results achieved each year by all Partners for reports to USAID/Indonesia and the GOI (Information Management).

The focus of the CIM team's activities changed over the task order period, in part due to changes in the political and economic climate in Indonesia but also because of the adjusting needs of the NRM program partners and demands within the NRM/EPIQ component teams. In the start-up phase, a local area computer network was established for the EPIQ team, basic publications were developed, vendors selected and staff hired. The second year included an intensive print production phase where advisors and consultants reflected the rapidly changing policy and governmental positions in reports, conferences proceedings and other publications. The CIM team desktop published NRM reports and journals and distributed them to the appropriate audiences.

**Print Communications.** During the task order period, the CIM team used various tools to communicate between the NRM partners and outside audiences. Expanding on tools already established under the previous phase of USAID NRM assistance (NRMP), four editions of the NRM Program's newsletter were produced by the CIM team. The newsletter reflected activities and success stories from all NRM Program partners including EPIQ, BSP, CRMP, TNC, WWF, CI and BCN. Each organization contributing an article was given equal treatment with regard to space allocation, use of logo and headlines. Great care was taken to proof all the articles and maintain a high level of quality. For the last edition under the first NRM/EPIQ Task Order period, the newsletter was redesigned to reflect a more modern look, however, it is still recognizable as an extension of the *NRM News* first published in 1993. While a fax survey of readers yielded a low response rate, some useful information

from this exercise showed that the newsletter was responsive to their informational needs. Other reader survey methods will be carried out during the next EPIQ/NRM implementation period.

The CIM team also plans to increase the rate at which the newsletter is produced while still maintaining the policy of trying to go beyond reporting on only NRM Program activities and discussing the implications of NRM findings and perspectives on current issues. The April 1999 newsletter on the economic crisis is a good example of this type of reporting, with the target audience continuing to be Indonesian natural resource managers, government officials and members of environmental organizations.

The CIM team in the NRM Secretariat also was active in the desktop publishing of NRM Program Technical Reports, Discussion Papers, Working Papers and Workshop Proceedings. More than 41 papers in these four categories were produced under this task order (see Annex 1 for a summary of NRM/EPIQ publications, though this listing does not differentiate by the four categories). Particularly complex and/or noteworthy were the development of a five-volume resource management reference guide and a first-of-a-kind assembly of Indonesian environmental laws, regulations and decrees. The CIM team was involved in editing, translating, laying out and designing covers for all of these reports.

**Electronic Communications.** The CIM team developed an important new tool to communicate time-sensitive information through creation of *NRM Headline News*—a weekly E-mail information network. *NRM Headline News* reflects ongoing or upcoming activities among partner organizations by providing one-page set of numbered headlines with full stories below. The stories include program news, success stories and relevant clippings from the local and international press. The final issue of *Headline News* under the NRM/EPIQ implementation period, its 60<sup>th</sup> edition, was broadcast to more than 130 subscribers connected directly to the NRM Program, USAID/Washington, and in several donor organizations. This newsletter has proven helpful in keeping in touch with the NRM Program's remote sites as well.

In the future, *NRM Headline News* should address more specifically the planning and implementation schedules of partner organizations. More time and effort is also recommended for obtaining time sensitive information from NRM Partners as well as EPIQ staff. The CIM team also is developing a strategy to make the E-mail service a coordinating link between and among partners to enhance efficiency and synergy of all of NRM efforts.

The NRM Web page ([www.nrm.or.id](http://www.nrm.or.id)), although needing revision to reflect an even stronger emphasis on decentralization, remains the best and most comprehensive source of current information about the program. It also is easily navigable. The official launch of the Web page was delayed until fairly late in the Task Order period, but it is expected to expand considerably during the next NRM/EPIQ implementation period. In addition, it is recommended that the Web page be marketed to other sites so that people seeking information on what is being done to improve management of the natural environment in Indonesian will find their way to the NRM Web page.

**Management Indicators.** Through the joint effort of USAID's REM/SO3 Office and the CIM team,

program partners were brought together in January 1998 to gain consensus on objectives and performance indicators for the NRM Program. The agreed-upon indicators have endured the many programmatic changes over the course of 20 months of implementation.

These indicators were entered into to a database to track and report on annual progress by NRM Partner or by indicator. Although the first attempt at this system required intensive checking and verification by all NRM Partners, the following year's reporting process went smoothly. The results monitoring system remains in place for use during the next phases of NRM Program implementation, and USAID/Indonesia (as shown in the next section) has set targets to 2003.

The CIM team was able to help the partner organizations to understand the process and easily file their results each year. As the scope of the overall NRM Program moves away from affected land area (hectares) as a measure of impact to tracking changes in policies and institutions, other social indicators such as surveys must form the basis for results monitoring. Of special note in this regard is the CIM team's work with the Institutional Development Framework (IDF) organizational diagnostic tool, described in the section covering the Protected Areas Management component's activities. Prior to the initiation of NRM/EPIQ activities, USAID had already supported use of this management tool (through BSP) by NGOs and other organizations to evaluate the maturity of their organizations. The NRM Program later adopted it as a key management tool capable of generating an objective indicator of institutional progress. It is interesting to note that word-of-mouth has widened its use beyond the NRM Program. The CIM team assists NRM partners institutional analysis applying the IDF through an Indonesian training and facilitation firm, which the CIM team trained in the use of the IDF. Through this organization, any NGO can now receive high quality assistance in using this self-evaluation tool and can receive training in how to help others. The IDF is being widely used in many settings and has been shown to be flexible and adaptable. As shown in the next section, the results of the IDF analyses are used as an important indicator of progress in capacity building of key NRM organizations.

### III. ACHIEVEMENTS REVIEW

#### 3.1 Structure of Performance Objectives and Monitoring System

Two sets of indicators have been used in monitoring NRM/EPIQ’s accomplishments. The first set comprises ten Contract Performance Objectives (CPOs) and associated targets given in the Task Order Statement of Work. The second set is embodied in a matrix of eighteen Results Indicators (see Table 1 below) used by USAID/Indonesia as part of the Mission-wide results tracking framework. Each year all NRM Partners including NRM/EPIQ compile and submit the results they have achieved under all applicable indicators according to the SO3 Results Framework given below. Since the NRM/EPIQ Task Order specifically calls for reporting according to the CPOs and not the SO3 Intermediate Results (IRs), no attempt has been made here to further relate the results reported to the SO3 Framework. But the correspondence between eight of the ten NRM/EPIQ CPOs and six of the eighteen SO3 IRs is indicated clearly in the table.

**Table 1. USAID/Indonesia NRM (SO3) Results Framework and Indicators**

IR 3.1 Improved forest resource management	IR 3.2 Improved protected areas resource management	IR 3.1 Improved coastal resource management
3.1.1 Number of targeted institutions exceeding 2.5 on the Institutional Development Framework	3.2.1 Number of targeted institutions exceeding 2.5 on the Institutional Development Framework	3.3.1 Number of targeted institutions exceeding 2.5 on the Institutional Development Framework
3.1.2 Number of advances along Policy and Enabling Condition Index <b>[CPO No. 5 and CPO No. 6]</b>	3.2.2 Number of advances along Policy and Enabling Condition Index <b>[CPO No. 4]</b>	3.3.2 Number of advances along Policy and Enabling Condition Index
3.1.3 Area of USAID -assisted sites in which forest resource practices or processes are being tested <b>[CPO No. 2 and CPO No.3]</b>	3.2.3 Area of USAID-assisted sites in which protected-area resource practices or processes are being tested <b>[CPO No. 1]</b>	3.3.3 Area of USAID-assisted sites in which coastal resource practices or processes are being tested.
3.1.4 Number of site-specific management plans/agreements between stakeholders that are GOI recognized and under implementation <b>[CPO No. 8]</b>	3.2.4 Number of site-specific management plans/agreements between stakeholders that are GOI recognized and under implementation <b>[CPO No. 7]</b>	3.3.4 Number of site-specific management plans/agreements between stakeholders that are GOI recognized and under implementation
3.1.5 Number of publications, articles and audio-visual materials documenting NRM lessons learned that promote replication of NRM best practices	3.2.5 Number of publications, articles and audio-visual materials documenting NRM lessons learned that promote replication of NRM best practices	3.3.5 Number of publications, articles and audio-visual materials documenting NRM lessons learned that promote replication of NRM best practices
3.1.6 Number of individuals participating in USAID-assisted training and workshops (gender disaggregated)	3.2.6 Number of individuals participating in USAID-assisted training and workshops (gender disaggregated)	3.3.6 Number of individuals participating in USAID-assisted training and workshops (gender disaggregated)

#### 3.2 Quantitative Measures of Performance

The following performance review proceeds systematically through the ten CPOs given in the NRM/EPIQ Task Order Statement of Work, comparing actual achievements with targets. It should be noted that the estimated results relate only to those changes associated with NRM/EPIQ interventions. The Task Order leaves open the possibility of counting results tied to the activities of other NRM Partners as well (given that NRM/EPIQ played a strong facilitating role for all NRM Partners), and

indeed, these have been compiled and transmitted annually to USAID/Indonesia and the GOI through NRM/EPIQ's NRM-wide results monitoring effort. However, the figures given here do not include the contributions made by other NRM Partners, so these results should be considered conservative estimates of total NRM/EPIQ impact.

In each case actual and cumulative results are compared to baselines. Summary background information is also provided on the reasons behind the results recorded. The NRM-wide targets set for the next four years are also provided in the text as a reference. A detailed break-down of the figures presented and an analysis of these results—as well as a full explanation of the measurement methods used—may be found in the two annual NRM Program Results Monitoring Reports prepared by NRM/EPIQ in cooperation with all NRM Partners and submitted to USAID/Indonesia and the GOI in October 1998 and 1999.

**Contract Performance Objective No. 1** (corresponding to IR indicator 3.2.3): *Area of USAID-assisted sites in which protected areas resource practices or processes are being tested.* Baseline: 58,200 ha of national park/protected area.

Year	Target	Cumulative Target	Actual	Actual Cumulative	Actual vs. Target Percent
Baseline*	58,200	58,200	58,200	58,200	--
1997/1998	210,000	268,200	169,000	227,200	85%
1998/1999	200,000	468,200	257,762	484,962	104%

\*) All figures in hectares.

NRM/EPIQ was able to achieve 104 percent of the target for this Performance Objective. These results are primarily accounted for by the following: work in buffer zones surrounding Morowali National Park and Bunaken Marine National Park; participatory rural appraisals and follow-up actions in Lore Lindu National Park and Bunaken Marine National Park; and partnership development for improved conservation of Bukit Baka–Bukit Raya National Park. In addition to these NRM/EPIQ activities, BSP/Kemala has supported work in 58 protected area sites around the country during this time period, especially relating to the introduction of community mapping as an improved practice for engaging local populations in identifying and acting upon strategies for improved conservation (not recorded here). The NRM-wide targets set by USAID/Indonesia for the future call for a further increase of 400,000 hectares after two years and 600,000 hectares after four years (2002/2003) for a total of 1,068,200 hectares of protected areas where new practices or processes being tested nationwide.

**Contract Performance Objectives No. 2 and No. 3** (corresponding to IR indicator 3.1.3): *Area of USAID-assisted community (No. 2) and concessionaire (No. 3) forest management sites in which forest resource practices or processes are being tested.* Baselines: 900 ha of community-based forest management area; and 8,100 ha of concessionaire-managed natural forest production area.

Year	Target	Cumulative Target	Actual	Actual Cumulative	Actual vs. Target Percent
Baseline*)	9,000	9,000	9,000	9,000	--
1997/1998	9,000	18,000	15	9,015	50%
1998/1999	900	18,900	37,120	46,135	244%

\*) Baseline = CPO #2 plus CPO #3; all figures in hectares.

NRM/EPIQ had a high rate of success in furthering the spread of improved forest management practices as measured by this indicator. This two-part indicator combines CPO Numbers 2 and 3 relating, respectively, to management experiments with community and concession forests. While work in this area got off to a slow start, this was more than compensated by the rapid progress made in the 1998/1999 implementation period—with total area covered equal to 244 percent of the target. The bulk of these results came from NRM/EPIQ cooperation with private concession holders adopting and further adapting Reduced Impact Harvesting methods developed and promoted through the NRM Program. There were also some limited results with community forestry including direct NRM/EPIQ cooperation with an experimental site in West Kalimantan. The NRM-wide targets set by USAID/Indonesia for the future call for a further increase of 15,000 hectares after two years and 35,000 hectares after four years (2002/2003) for a total of 53,900 hectares of forest lands where new practices or processes are being tested nationwide. With 46,135 hectares already covered, the target may need to be reevaluated.

**Contract Performance Objective No. 4** (corresponding to IR indicator 3.2.2): *Number of advances along policy and enabling conditions index based on actions undertaken by the national government agency responsible for forest and protected areas management each year with the Contractor's assistance to enhance the human and financial resources available for Indonesia's system of national parks. Baseline: 0 significant actions.*

Year	Target	Cumulative Target	Actual	Actual Cumulative	Actual vs. Target Percent
Baseline*)	0	0	0	0	--
1997/1998	13	13	11	11	82%
1998/1999	13	26	30	42	156%

\*) All figures from the Policy and Enabling Conditions Index.

The indicator for this CPO makes use of a “Policy and Enabling Conditions Index” developed by USAID/Indonesia to track progress on GOI actions undertaken to enhance the human and financial

resources made available for the management of Indonesia’s national parks (figures are rounded to nearest unit). Applying this measure, good progress was made over the two-year monitoring period, with the actual number of “advances” exceeding the target by 56 percent. This is primarily accounted for by PKA decisions allowing wider use of partnership arrangements for protected areas management as well as increased official openness to engaging communities living in or adjacent to protected areas. The NRM-wide targets set by USAID/Indonesia for the future call for a further increase of 17 advances after two years and 27 advances after four years (2002/2003) for a total of 53 advances in policy and enabling conditions for improved protected areas management over the six-year monitoring period.

**Contract Performance Objectives No. 5 and No. 6** (corresponding to IR indicator 3.1.2): *Number of advances along policy and enabling conditions index based on actions undertaken by the national government agency responsible for forest management each year with the contractor's assistance to promote (No. 5) the appearance of community-based forest management and (No. 6) less damaging practices at the time of timber harvest by concessionaires at natural forest production sites. Baselines: 3 significant actions; and 2 significant actions.*

Year	Target	Cumulative Target	Actual	Actual Cumulative	Actual vs. Target Percent
Baseline *)	5	5	5	5	--
1997/1998	46	51	66	71	139%
1998/1999	54	105	33	104	99%

\*) Baseline = Contract Performance Objective 5 + Contract Performance Objective 6: Figures from the Policy and Enabling Conditions Index.

Progress in this area of policy reform was on track with expectations, with the number of advances as measured by the Policy and Enabling Conditions Index (as in CPO 4 above) nearly equaling the target of 105 during the two-year NRM/EPIQ implementation period. Positive changes recorded by this measure include both national and site-specific forestry sector policy reforms acknowledging limited community-forestry rights as well as changes in the system of royalties, taxes and other incentives affecting commercial forestry. The NRM-wide targets set by USAID/Indonesia for the future call for a further increase of 40 advances after two years and 75 advances after four years (2002/2003) for an ambitious total of 180 advances in policy and enabling conditions for improved forest management over the six-year monitoring period.

**Contract Performance Objective No. 7** (corresponding to IR indicator 3.2.4): *Increases in the number of memoranda of understanding or other joint agreements between GOI park and protected area management units, local communities, governments, and organizations, as well as private firms and associations which permit these groups to assume supplementary roles in protected area financing and management. Baseline: 9 agreements.*

Year	Target	Actual *)	Actual	Actual vs.
------	--------	-----------	--------	------------

		Cumulative Target		Cumulative	Target Percent
Baseline	9	9	9	9	--
1997/1998	9	18	4	13	72%
1998/1999	6	24	6	19	79%

\*) This indicator is tracked through the NRM National Park Database developed as a result of a survey; figures represent numbers of agreements.

While the actual number of joint agreements achieved fell short of the target, the 10 agreements reached represent significant advances in introducing new and more collaborative approaches to protected areas management. Partnership management agreements were recorded in Morowali, Bunaken and Kutai National Parks and Cyclops Nature Reserve, among others. More rapid progress is anticipated in the near future as the “partnership” approach gains credibility and cash-strapped National Park managers seek help. The NRM-wide targets set by USAID/Indonesia for the future call for completion of a further 11 agreements after two years and 21 agreements after four years (2002/2003), for a cumulative total of 45 memoranda of understanding or other joint agreements for improved protected areas management over the six-year monitoring period.

**Contract Performance Objective No. 8** (corresponding to IR indicator 3.1.4): *Increases in the number of memoranda of understanding or other joint agreements between the national government agency responsible for forest lands management and proponents of community-based forest management programs which permit the initiation of pilot-level community-based forest management activities that include the harvesting and initial processing of timber. Baseline: 1 agreement.*

Year	Target	Cumulative Target	Actual	Actual Cumulative	Actual vs. Target Percent
Baseline*)	1	1	1	1	--
1997/1998	4	5	3	4	100%
1998/1999	4	9	3	7	78%

\*) Figures refer to numbers of agreements.

Although targets were modest in this area, NRM/EPIQ still was not quite able to reach the projected number of agreements to support pilot-level community-based forest management activities. This was, in part, hampered by the political changes occurring in Indonesia during the implementation period. Progress achieved was primarily in West Kalimantan, where a forest concessionaire and the provincial government both initiated actions to support new community-based forest management efforts. Grants under NRM’s BSP/Kemala program showed greater success in this field, and opportunities now seem good for more rapid progress in promoting concrete examples of community-led sustainable forest management efforts. The NRM-wide targets set by USAID/Indonesia for the future call for completion of a further 11 agreements being concluded after two years and an 21 agreements after four years

(2002/2003) for a cumulative total of 30 memoranda of understanding or other joint agreements for improved community-based forest management over the six-year monitoring period.

**Contract Performance Objective No. 9** (corresponding to IR indicator 3.2.4): *Increases in donations from local organizations, private sector firms and other associations that can be used to finance national park management. Baseline: Rp.500,000,000 (based on 1997 survey).*

Year	Target (1000s Rps)	Cumulative Target	Actual	Actual Cumulative	Actual vs. Target Percent
Baseline*)	500,000	500,000	500,000	500,000	--
1997/1998	1,000,000	1,500,000	1,500,000	2,000,000	150%
1998/1999	1,250,000	2,750,000	1,250,000	3,250,000	118%

\*) This indicator is tracked through the NRM National Park Database.

The agreed baseline for this Performance Objective was linked specifically and exclusively to NRM/EPIQ Protected Areas Management component work supporting conservation financing for Kutai National Park in East Kalimantan. Fulfillment of the target is based on contributions to Friends of Kutai by eight mining, oil and forestry companies. The PAM component team worked with these companies, through Friends of Kutai to help generate these funds—especially after the devastating fire of 1997–1998 that left much of Kutai National Park damaged. The Rp.1.5 billion in 1997/98 private conservation contributions alone represent four times the state budget for the park’s management, and the cumulative revenues represent 118 percent of the target. Further targets have not been set for this indicator since it falls outside of the SO3 Results Framework monitoring system. Nevertheless, the NRM National Park Database has been used to support a successful policy dialogue on the need for increases in both public and private financial resources for park conservation in Indonesia.

**Contract Performance Objective No. 10** (corresponding to IR indicator 3.2.1): *Increases in revenues generated by individual national park management units through entrance and user fees, concession fees and the like, and a higher proportion of these revenues being used to finance national park management. Baseline: Rp.696,000,000 (based on 1997 survey).*

Year	Target (1000s Rps)	Cumulative Target	Actual	Actual Cumulative	Actual vs. Target Percent
Baseline	696,000	696,000	696,000	696,000	
1997/1998	1,086,000	1,782,000	1,782,000	2,478,000	139%
1998/1999	1,065,000	2,478,000	1,065,000	3,543,000	143%

\*) Increase in revenue generated by individual national park management units is captured by the NRM National Park Database developed as a result of an NRM/EPIQ-sponsored survey.

This indicator measures national park revenues transferred to the central treasury from two types of user fee collections: tourism concession and park entrance. Despite the downturn in the economy, targets

were exceeded by 43 percent, and this is an indication of the success achieved through NRM/EPIQ's efforts to encourage DG PKA to increase its income sources from protected areas by implementing existing and new regulations. In total, tourism concession fees were received from 3 national parks in both years of measurement. However, the number of national parks transferring funds to the national treasury from entrance fees increased from 15 in 1997/98 to 21 in 1998/99. As in the case of Performance Objective Number 9, USAID/Indonesia has not set any further targets for this indicator as it lies outside of the Mission's IR Framework.

### 3.3 Quantitative Achievements Summary

As indicated in Table 1 below, very strong progress was made during the life of the NRM/EPIQ Task Order in achieving most of the Performance Objectives given in the Statement of Work. Results associated with an expansion of improved practices for protected areas and forest management (CPOs 1 and 2/3) exceeded targets, with the area of forest management practices being tested more than double expectations. As measured by policy and enabling condition advances on the USAID Index, considerable progress also was made—exceeding or just meeting targets—in reforming the rules and regulations governing national park and forest management (CPOs 4 and 5/6). While the number of agreements reached as measures of improved protected areas management and community forestry management in both cases fell short of the targets (CPOs 7 and 8), there was still considerable improvement. Finally, the measures of financial support and revenue generation for national parks management (CPOs 9 and 10) indicate that in both cases NRM/EPIQ was successful—targets were exceeded—in generating, respectively, increased private and public funds for conservation in targeted areas. As previously noted, these results do not take into account the considerable achievements directly attributable to work carried out by NRM Partners but facilitated by NRM/EPIQ as part of the broader NRM Program.

**Table 2. Summary of NRM/EPIQ Quantitative Performance Measurements**

<b>Contract Performance Objective</b>	<b>Contract Target</b>	<b>Level Achieved</b>	<b>Percent</b>
CPO 1: Protected Areas Practices	468,200 ha	484,962 ha	104%
CPO 2/3: Forest Management Practices	18,900 ha	46,135 ha	244%
CPO 4: National Parks Management Policies	26 advances	41 advances	156%
CPO 5/6: Forest Management Policies	105 advances	104 advances	99%
CPO 7: Protected Areas Management	24 agreements	19 agreements	79%
CPO 8: Community-based Forest Management	9 agreements	7 agreements	78%
CPO 9: National Parks Financial Support	Rps.2.75 billion	Rps.3.25 billion	118%
CPO 10: National Parks Revenue Generation	Rps.2.48 billion	Rps.3.54 billion	143%

## IV. CONCLUSIONS AND RECOMMENDATIONS

This final section of the report briefly presents some lessons and insights drawn from experience in implementing the NRM/EPIQ Task Order that may be applicable to the next phase of NRM Program work. It is organized into sub-sections according to the NRM/EPIQ-implemented program components and their major elements. In each case, conclusions and recommendations are drawn from specific experience and results in program implementation. Suggestions for the future place the NRM/EPIQ experience in the context of the new natural resources management challenges facing Indonesia in the *reformasi* era.

### 4.1 Policies and Plans

#### **Analytical Work**

Over the period of NRM/EPIQ implementation, work under the Policy and Planning component has built a sound body of analysis of natural resources management issues related to impacts of the economic crisis, legal and policy reform in the *reformasi* era, and fiscal and governmental decentralization. These analyses have helped to establish collaborative links across NRM components and an integrated, cross-cutting NRM policy agenda. For the future it is recommended that policy analysis continue to improve stakeholders' and managers' understanding of NRM issues, contribute to dialogue among GOI and non-government constituencies, and build more pluralistic regional NRM planning processes. Some examples of successful policy work from the first NRM/EPIQ implementation period:

- Economic valuation results are being integrated into decisions about spatial planning and protected areas management activities, both in Central Sulawesi and East Kalimantan;
- Analysis of the impact of the economic crisis has informed forestry policy and provided insights into land use policy and community access and tenure issues;
- Economic analysis and valuation work have both provided a base for future work on improved regional planning and a better understanding of decentralization issues, especially in East Kalimantan and North and Central Sulawesi;
- Spatial planning efforts have built opportunities for increased participation and networking both within and outside the government at the provincial level;
- Forestry sector work has served as a useful and important focal point for cross cutting policy analysis related to both land use policy and analysis of the economic impacts of socio-political change; and
- Analysis of decentralization laws has clarified key provisions, raised awareness of their natural resources management implications and provided a base to improve communications and relevance

at the regional level.

NRM/EPIQ's timely reactions to emerging issues of economic and political change have helped to define issues and develop a more coordinated policy response. After the economic crisis and IMF intervention in early 1998, NRM/EPIQ analyzed economic trends, defined natural resources management issues and clarified donor loan conditions in forestry and other sectors. Following the change in government in May 1998, our flexible response to forestry and land use issues resulted in crucial GOI-NGO dialogue in many venues (e.g., CGIF, Davao, and FKKM). In the future increased efforts are recommended to engage GOI officials and NGO counterparts in policy work, translate general economic analyses into specific policy recommendations and communicate results to a wider and less technical audience. Following on recent efforts in North Sulawesi and East Kalimantan, it is further recommended that more technical assistance in planning and province-specific analysis be provided to support provincial initiatives.

### **Operational Lessons**

Useful lessons also were learned with regard to the day-to-day management and conduct of Policy and Planning component activities. It would have been useful to engage BAPPENAS officials (and other government officials) more fully in the policy work of the NRM Program, though in the reform and decentralization era, the role of BAPPENAS and other central government policy makers will be diminished. NRM could have spent more time translating general economic analyses into specific policy recommendations, though in the rapidly changing policy and economic environment (plus the vast political uncertainty) it was often difficult during the task order period to focus official attention on specific problems and solutions. Also, there was not always wide consensus on the overall policy priorities and development path, so that too-specific policy recommendations probably would have been ineffective. The key for the future will be to identify and engage policy bodies at the national and regional levels and to keep the flexibility to respond to opportunities for positive policy and institutional reform.

The Policy and Planning component also could perhaps have placed more emphasis on developing and sustaining field level activities in the five focus provinces. At the same time, there were pressing economic issues that required attention at the national level, so there was a clear rationale for this more national-oriented approach. The bulk of field activities carried out under the Policy and Planning component related to environmental economic valuation and training, which expanded toward the end of the Task Order period and are recommended to be further intensified during the next NRM/EPIQ phase. Policy results should continue to be disseminated to and through the five provincial liaison offices, and stronger mechanisms should be developed to see that regional lessons are able to influence national policy—especially in the decentralization era.

The NRM/EPIQ Task Order period was very busy, with major policy changes occurring at a rapid pace against a backdrop of deep political and economic uncertainty. There often was little time to address all possible issues that seemed to be of high priority. NRM/EPIQ had to focus and prioritize while remaining flexible and opportunistic. It was a difficult challenge that was addressed by developing

broad, cross-cutting analyses that could cover several issues from more than one perspective while producing results adaptable for presentation in multiple forms and venues. Nevertheless, it would have been desirable to have had more time to:

- Integrate issue areas more fully across all NRM components through structured meetings and brainstorming discussions on policy issues among all NRM component teams and Partners to enable cross-fertilization of ideas and greater learning from each other's experience and more collaborative work at the field level;
- Disseminate results internally and externally through additional multi-purpose publications and media in various formats and directed at a range of important audiences—including the general public and newly empowered regional officials and people's representatives; and
- Learn from experience and document success and lessons more fully, perhaps through structured and participatory meetings, external evaluations, or inputs from expert teams.

These lessons should be strongly considered as future technical and other assistance is programmed to support improved natural resources policies and management planning.

## 4.2 Improving Management of Protected Areas

### Learning from Results

NRM/EPIQ's Protected Areas Management component has strongly contributed to more decentralized and participatory natural resources management approaches in Indonesia. This work has focused on building a strong working relationship with the Department of Forestry & Estate Crops' PKA as well as other government and non-government stakeholders working on protected areas management. Results have reached beyond NRM/EPIQ focus provinces through national and regional workshops leveraging other donor-funded initiatives as well as national and regional government policy. Over the first NRM/EPIQ implementation period, the PAM component has achieved a range of results that hold implications for future programming. Among others, it has accomplished the following:

- **Partnerships.** Built and strengthened a diversity of partnerships to support management of National Parks around Indonesia. Building on our work with "Friends of Kutai," nine of Indonesia's 36 parks now have active partnerships. As a matter of national policy, all National Park directors are developing and nurturing partnerships to build more effective constituencies for National Park management. What is needed now are further examples of working partnerships and their dissemination within the country.
- **National Parks financing and resource allocation.** Through NRM's conservation finance database, PKA is better able to make allocation decisions that link management expenditures to conservation threats. The database enables a more systematic budget allocation, more effectively targeting resources to manageable needs. PKA is now using partnerships, tapping into alternative

government-funding opportunities, establishing park cooperatives, and learning about options like debt-for-nature swaps managed through regional conservation trusts. This includes informed GOI stakeholders and strengthened US and Indonesian institutions. Further work is needed to consolidate gains, examine the implications of Laws 22/99 and 25/99 on protected areas financing and management and to further pursue opportunities for the use of debt-for-nature swaps.

- ***Capacity building.*** Strengthened institutional capacity of National Park management units to facilitate more decentralized and participatory approaches to management, through workshops, training, and grants. The Institutional Development Framework (IDF) has been modified specifically to measure progress toward effective participatory park management. This has been successfully tested in five parks, and draft guidelines for annual use in all the parks are currently under review. The Scoping Exercise—as a part of the IDF approach—has been tested as a tool for developing stakeholder participation in park management. Work in this area should be monitored and the IDF approach institutionalized.
- ***Economic benefits from natural areas.*** Increased awareness of the roles of protected areas in regional development. NRM/EPIQ used resource valuation to demonstrate the economic value of National Parks in regional development. Findings were disseminated through innovative conservation awareness programs—supporting the development of a more informed local constituency necessary for effective conservation management. This has laid a solid foundation for using resource valuation as an important tool for development planning more generally and not just in protected areas management. Further work is needed to expand awareness of resource valuation tools and findings to help regional authorities allocate land and other resources to their highest valued uses.
- ***Legal rights and responsibilities.*** Collaboratively examined legal issues and policy opportunities for decentralization and increased community involvement. NRM/EPIQ and ICEL completed an analysis of laws and regulations related to decentralized and participatory natural resources management with a special emphasis on protected areas. This analysis forms the basis for work toward an integrated vision that will allow democratic and participatory multi-stakeholder protected areas management based on links to local resource use rights and collaboration between groups that previously had adversarial relationships. Future technical guidance is needed in specific locations to demonstrate that this can be mutually beneficial and sustainable.

### **Further Suggestions for Future Conservation Assistance**

Looking ahead to future NRM programming efforts, it is important to engage a wide range of partners in focus provinces as well as at the national level. Efforts should expand to better integrate key forestry, coastal and conservation issues in these locations. More emphasis should be placed on development planning and outreach of empirical lessons learned to strengthen participatory approaches to conservation and broader natural resources management. The NRM Program should further strengthen the policy impact of its work by maintaining the flexibility to focus on critical institutional and policy issues relevant to Indonesia's radical experiment in decentralization. Of critical importance is continued

dialogue and advocacy with local and regional government of the full values of conservation of important ecosystems under the threat of conversion to other uses.

Work conducted under the Protected Areas Management component has resulted in the establishment of an extensive range of professional working relationships and networks for the NRM Program at both the national and regional level. These organizations can continue to serve as collaborative partners in addressing critical institutional and policy issues relevant to Indonesia's current decentralization initiative. For example, Law 22/99 will demand the development of an entirely new institutional setting for National Parks within the context of regional governance, while Law 25/99 will require an entirely new financing system for funding National Park management. All key national level parties—PKA, Department of Home Affairs, BAPPENAS and the Ministry of Finance—are aware of this, and they are receptive to NRM assistance in finding solutions in a participatory manner.

In terms of counterpart organizations, PKA continues to be a primary partner, but every day greater and greater emphasis moves away from PKA toward local government agencies, Home Affairs, BAPPENAS and others. Continuing with this evolutionary process, the NRM Program can facilitate a very tangible, long-term decentralized natural resources management process by focusing on National Parks and possibly the evolution of new provincially designated protected areas. This would actively engage a wide range of NRM partners in focus provinces as well as at the national level. Much of the experience drawn from PAM component work—both to date and in the future—would easily fit in to and support similar regional NRM Program initiatives.

### **4.3 Forest Management Policy and Practice**

The NRM/EPIQ Forest Management component's technical, economic, and policy analyses have continued a long-term USAID-funded effort to improve forest harvesting practices and contributed to recent efforts to encourage reform from within and outside the Ministry of Forestry and Estate Crops. Bridged among regulators, commercial harvesters, and environmental groups, the NRM/EPIQ Forest Management component's work became a significant factor in motivating change toward conservation of forest resources. These efforts have also contributed to a recognition of the need for integrated analysis and economic rationality in the development of policy to manage Indonesia's forests. Experience and hard fought lessons learned in at least three areas should be noted as future assistance plans evolve.

**Harvesting policy and practice.** The NRM program prepared comprehensive technical documentation on forest harvesting aimed at reducing environmental impacts. Through working meetings input was sought from a wide range of stakeholders, including APHI, several individual timber concession holders, CIFOR, IPB, and other donor-funded projects. These documents will be used as guidelines for concessions around Kerinci Seblat National Park as an initial implementation step, and CIFOR is now taking the lead in extending the RIH practices more widely in Indonesia. APHI plans follow-up workshops to discuss technical, economic and policy issues related to adoption of improved practices. This should help to motivate APHI members to adopt environmentally friendly logging techniques at a high management level.

**FKKM support and results.** NRM/EPIQ initiated policy dialogue with FKKM, CGIF, BSP/KEMALA partners, academic institutions, and various relevant central government ministries on issues related to land management and community rights. Through support from Ford Foundation and NRM, FKKM has become an informed and involved advocacy group, providing inputs and influencing legislative deliberations. FKKM has addressed public hearings of the National Parliament (DPR) on the draft revised Basic Forestry Law and the draft Regional Government Decentralization Law.

**Strategic planning capability.** Both informally and formally, NRM/EPIQ has engaged in technical discussions, policy analyses, and stakeholder meetings with the CGIF, the World Bank, other donor-funded projects, BAPPENAS, and the Ministry of Forestry and Estate Crops. These inputs have resulted in the refinement of policy positions and initiatives (e.g., donor loan conditions) to significantly influence Indonesian forestry policy in the direction of greater environmental sensitivity, efficiency, and social equity.

In the next period of implementation, it is recommended that the NRM capability for forestry policy analysis be maintained to integrate forest economics and incentives into broader policy efforts and to keep the NRM Program engaged with community-based resource management issues and policy-making processes at both the national and regional levels.

#### **4.4 NRM Secretariat and Program-wide Support**

##### **Key Secretariat Functions**

A number of lessons useful for the future were also learned from operation of the NRM Secretariat during the first NRM/EPIQ implementation period. Many of these have already been mentioned in the section covering the accomplishments of this cross-cutting component, so they will only be summarized here according to the Secretariat's six objectives stated in the NRM/EPIQ Statement of Work:

- ***Facilitating information sharing and team work among NRM Partners, GOI counterparts, and USAID.*** The Secretariat was most active in this area through its NRM-wide publications program, pulling together information from all Partners and disseminating updates on findings and activities through the newsletter (*NRM News*) and *NRM Headline News* distributed by E-mail. It remains a challenge for NRM/EPIQ to fully carry out its function of facilitating information sharing and program coordination, since the other NRM Program components respond to USAID/Indonesia and their Global Bureau or other U.S. headquarters for direction and guidance, not NRM/EPIQ. Naturally, this has tended to result in individual NRM Program components working somewhat in isolation from each other. Nevertheless, marked improvements were seen toward the latter part of the NRM/EPIQ implementation period and especially after the move to the new office space. But this remains a challenge requiring active USAID management intervention to ensure good integration across all NRM Program components.
- **Identifying and recommending key activities supporting program objectives.** A process of

developing “mini-workplans” for each component has been used during the Task Order implementation period. While this has allowed those most responsible for implementation to draw up detailed plans, it has decreased the integration of effort—especially between those NRM Program components implemented through the NRM/EPIQ mechanism and those carried out by other NRM Partners. The activities identified through this process clearly achieved much, including the accomplishment of most of the stated program objectives. Nevertheless, better integration is needed in the future with less emphasis on formal workplanning and more attention given to identifying key benchmarks and seeing that the various elements of the NRM Program are busy working to see them accomplished.

- ***Providing and supporting technical assistance in specific ministries and field sites.*** The NRM/EPIQ component teams centered the majority of their attention on this function, having organized and implemented crucial technical assistance for key government counterparts as well as other important partners and constituencies. Even the Forest Management component, which got off to a slower than anticipated start, provided strong technical assistance services where there was a clear mandate and audience. Likewise, the PAM component and Policy and Planning components gained a strong reputation for providing timely and relevant technical assistance.
- ***Coordinating annual implementation plans for each of the program components.*** As noted above with respect to the identification of key activities supporting program objectives, NRM/EPIQ did not directly coordinate the NRM-wide work planning process. The Secretariat team worked with USAID and the other NRM Partners to see that workplans were cross-checked for consistency and especially to note that monitoring systems were in place for tracking performance indicators.
- ***Assisting all component teams in developing analytical policy networks within cooperating ministries.*** NRM/EPIQ accomplished much with regard to the development of analytical policy networks. This was done through technical assistance, grants, training, and coordination with other NRM Partners, GOI counterparts and various NGOs and academic institutions. A strong foundation has been established in this regard. However, the rapid implementation of the decentralization process has created the need to deepen regional level networks and to link these to those of the national level.
- ***Ensuring that NRM activities are demand driven and that results are disseminated to appropriate groups.*** It was assumed that the intent of this function was to ensure that the NRM Program followed a participatory approach to the planning and implementation of all activities—involving important stakeholders in key decisions regarding program direction and content. The NRM Secretariat and planning processes for the NRM/EPIQ components have operated in a highly transparent manner and have reached out to a wide range of constituencies—from government bodies to NGOs, academic groups and the private sector. The Provincial Liaison Offices played an important role in this regard. Looking ahead, there are likely to be cases where the assessment of stakeholder views and interests may need to be handled in a more formal manner—especially where it would be helpful to document the process and opinions for transfer from one region to another.

Results dissemination could also be improved through greater effort on public outreach and education, and USAID is already moving in this direction for the next phase of the NRM Program's efforts.

### **Lessons from Secretariat Operations**

This section and the Final Report closes with some further insights for the future according to each of the key elements of the NRM Secretariats operation. These are summarized below.

**Sub-awards.** As noted, longer-term grants and U.S.-Indonesian partnerships were not used despite the original plans. Though time constraints did preclude certain types of activities by grantees, most of these problems could be overcome through phasing of work. There were even cases where the time and funding limitations—coupled with the expectation of further grants if performance warranted follow-up support—actually created stronger than anticipated incentives for results-based structures to the small grants. In the future, more technical assistance should be offered to grantees to help them reach and meet their objectives and ultimate goals in a manner that will leave these institutions even stronger by the end of the grant period. The grant-making process should be simplified, and strong attention should be given to providing follow-on financing to previous grantees where performance has been good and objectives remain clear and achievable within the given constraints of time and resources. With respect to the U.S.-Indonesia partnerships, these remain a good idea. However, trying to identify and promote such partnerships solely from Indonesia proved quite infeasible during the Task Order implementation period. In this respect, the U.S.AEP is perhaps a better model for facilitating such partnerships.

**Training.** Despite NRM/EPIQ efforts to work with NRM partners, USAID, GOI counterparts and other donors to identify relevant short-term non-degree, participant training and study tour opportunities, these were used only on a limited basis. In the future more specific attention should be given to the use of such short courses. Where relevant programs already in existence cannot be identified or do not seem cost-effective, the NRM Program should consider organizing more of its own courses. NRM/EPIQ undertook a considerable number of informal training activities, mainly with Indonesian NGOs but also with MOFEC personnel. This should continue and be focused more on the extremely heavy demands for capacity building at the *kabupaten* and *kecamatan* level, while not neglecting provincial authorities and legislative representatives. In this respect, organizing joint training courses in the regions with other members of the NRM program might be explored.

As noted, many NGOs required more general management training in advance of their ability to adequately absorb technical support, and this situation is likely to continue. More generally, there is a need for Masters level training in a variety of environmental fields in Indonesia, particularly focusing on participants from the Outer Islands. It was clear to the NRM/EPIQ teams that partners and staff with foreign graduate degrees consistently brought the highest degree of professionalism and broadest set of perspectives to the country's transition to democratic governance systems.

**Provincial Liaison Offices.** The work and functions of the Provincial Liaison Specialists proved to be one of the most innovative and useful aspects of the NRM/EPIQ design. The opportunity in the future

exists to expand on this foundation through directing more resources to the five provinces where the NRM Program is most active (West Kalimantan, East Kalimantan, Central Sulawesi, North Sulawesi and West Papua), including the increase of full-time staff located in the provincial capitals. Through this decentralized structure and presence, NRM/EPIQ was able to identify successful field approaches, provincial strategies, and effective/efficient resource management practices to be disseminated to other locations or to inform central government policies and programs. These offices should be used to further promote information exchange, integration of activities, cross-fertilization of good ideas from one place to another, and wider participation in NRM decision-making process.

**Communications.** As noted, future issues of *NRM Headline News* should deal more directly with certain operational issues in NRM Program implementation—especially where this tool can aide in achieving better sequencing of activities and coordination between national and regional work. The NRM Secretariat should be equipped with stronger graphics capabilities and an ability to more widely distribute written program materials through libraries, universities and other formal channels. Better cross-listing of the NRM Web page with the Web pages of collaborating or related institutions also is needed. As public awareness and outreach activities expand, there will need to be close coordination between the NRM-centric communications activities and the translation of NRM outputs into forms of use to new constituencies and the general public.

**Management Indicators.** The USAID SO3 Results Framework and its associated indicators provides an adequate basis for tracking future progress. As indicated, targets have already been set for several of these indicators to 2003 complete with a functioning results monitoring system established by NRM/EPIQ, though these targets should undergo some review. The current indicators should be supplemented with new measures of policy and institutional progress—especially to identify gains or losses recorded at the regional and local levels as part the rapid decentralization process expected over the next several years. The Institutional Development Framework, or some variation on this tool, offers promise in this regard.

### **Program Synergy**

A recurring theme throughout this last section is the desire to see even greater integration and coordination among NRM Program components and activities. This will be even more challenging in the future as work—in parallel with implementation of the very decentralization reforms the NRM Program seeks to support—shifts increasingly from a Jakarta-centric orientation to one that is driven by the needs of selected regions. As indicated, this will demand that some of the staff capabilities shift as well as the types and style of technical assistance offered. For example, an even greater premium will be placed on strong Indonesian language skills for international consultants. And the need to deal with communications challenges, in general, may move to the fore. Stronger mechanisms will need to be created for gaining cross-component synergy and integration of effort, but the groundwork has been established for this to happen.

Indonesia's bold experiment with decentralized democratic reform deserves a chance to work. There will be many challenges along the way, including recalcitrant central government line ministries and local

governments either too weak or too poor to feel they can take on their new natural resources management responsibilities. In other cases, there will be pressures to unsustainably exploit resources to help offset decreases in central government funding for regional development programs. Citizen representation through regional parliaments is still in its infancy, so NGOs and other advocacy groups will need to be vigilant to ensure adequate transparency and accountability in the short run. The NRM Partners and Program are collectively well placed to help define and demonstrate how resources management decisions can be made at the local level in a transparent and participatory manner and to disseminate information about both the successes and failures to a broad and interested Indonesian audience.

## Annex 1: Reports and Other Deliverables

### Reports

1. Towards Outcome-based Regulation of Logging in Natural Forest Concession and Community Forest. 1997.
2. Deregulation of Development Policies for Rattan Utilization. 1997.
3. Inputs for NRM Program Work Plan Consultancy Report in Natural Production Forest Management. 1997.
4. Report & Recommendations for *Lembaga Ekolabel Indonesia* Following Workshop on Criteria & Indicators. 1998.
5. The NRMP Experience in Bunaken and Bukit Baka Bukit Raya National Parks Lesson Learned for Protected Areas Management in Indonesia. 1998.
6. Interim Report: Work Group on Positive Social Outcome in Local Forestry Management. 1998.
7. Forest Sector Regulatory and Management Reforms. 1998.
8. Lore Lindu National Park: Palu Scoping Exercise Summary of Findings. 1998.
9. Procedures for Topographic Forest Surveys Inhutani II, Malinau and the Center for International Forest Research (CIFOR). 1998.
10. *Laporan Lokakarya "Pengembangan Kerjasama Kemitraan dalam Mendukung Pengelolaan Kawasan Pelestarian Alam dan Kawasan Suaka Alam."* 1998.
11. *Laporan Pertemuan Panitia Pengarah (Steering Committee) dan Panitia Pelaksana (Organizing Committee) Mitra Taman Nasional Kutai.* 1998.
12. Code of Practice for Forest Harvesting in Indonesia: Interim Report. 1998.
13. *Laporan Pelatihan "Participatory Rural Appraisal" di Daerah Penyangga Taman Nasional Lore Lindu, Sulawesi Tengah.* 1998.
14. *Laporan Lokakarya "Kepala Balai dan Kepala Unit Taman Nasional se-Indonesia."* 1998.
15. Conservation Financing: Program Alternatives for Nature Conservation in Indonesia. 1998.
16. Assessment of the Feasibility for Debt-for-Nature Swaps in Indonesia. 1998.
17. *Laporan Lokakarya Debt-for-Nature Swaps.* 1998.

18. Raising Conservation Awareness through Education and Outreach. 1998.
19. *Pelatihan Pemetaan Partisipatif Taman Nasional Bukit Baka-Bukit Raya*. 1998.
20. Natural Resource Impacts of Indonesia's Financial Crisis. 1999.
21. *Kajian Hukum dan Kebijakan Pengelolaan Kawasan Konservasi di Indonesia*. 1999.
22. *Himpunan Peraturan Perundang-undangan Pengelolaan Kawasan Konservasi Jilid I-IV*. 1999.
23. Human and Institutional Resources Development in Indonesia: Strengthening Protected Area Management. 1999.
24. Resource Valuation: A Tool for Improving Protected Areas Management in Indonesia. 1999.
25. Spatial Planning Process in the Provinces. 1999.
26. Forest Development Policy Dialogue. 1999.
27. *Pengembangan Datadasar Keuangan Taman Nasional (Laporan Kemajuan I)*. 1999.
28. *Lokakarya Taman Nasional Kutai "Membangun Kesamaan Visi dan Kesatuan Gerakan dalam Upaya Pelestarian Sumber Daya Alam Taman Nasional Secara Terpadu."* 1999.
29. Participatory Workshop for the Economic Valuation of Natural Resources in the Togean Islands. 1999.
30. Principles & Practices of Forest Harvesting in Indonesia. 1999.
31. A Review of Forestry Sector Policy Issues in Indonesia. 1999.
32. Some Views on Decentralization in a Unitary State and Implications for Community-Based Forest Management: Lessons from France. 1999.
33. Making AMDAL a Tool for Road Planning in Forests in Indonesia. 1999.
34. Bunaken National Park Report: Training Report and Management Assessment Report. 1999.
35. Decentralized Multi-stakeholder Natural Resources Management: Lessons Learned from the Natural Resources Management Project in Indonesia. 1999.
36. *Kesepakatan Konservasi Masyarakat dalam Pengelolaan Kawasan Konservasi*. 1999.
37. *Panduan Pelaksanaan Lokakarya IDF (Institutional Development Framework) untuk Taman Nasional di Indonesia*. 1999.
38. *Panduan Pelaksanaan Lokakarya Scoping untuk Mendukung Pengelolaan Taman Nasional di Indonesia*. 1999.

39. Enhanced and Alternative Financing Mechanisms for Strengthening National Park Management in Indonesia. 1999.
40. Management Assessment Report for Bunaken National Park. 1999.
41. Analysis of Current Policies and Deregulation Measures on the Sustainability of the Rattan Industry (Draft). 1999.
42. Proceedings of the First Indonesian Independent Forestry Policy Dialogue, held at the Hotel Ambahara (with LEI). 1999.
43. Management Training for Bunaken's Park Rangers. 1999.

### **Other Representative Outputs**

- NRM Protected Areas Management component brochure, in both English and Bahasa Indonesia.
- *Pengembangan Datadasar Keuangan Taman Nasional*, [Development of a National Park Finance Database], in Bahasa Indonesia, 1999.
- Guidelines for Improved, Environmentally Friendly Logging. Prepared by DJPH Bina Program with the assistance of NRM/EPIQ. 1999.
- Findings of Research Among National Park Managers. Prepared by AC Nielsen with financial and technical support from the World Bank and NRM/EPIQ. 1999.
- Summary of Community-based Forest Management in Nepal (produced as NRM report and written by Mary Melnyk, USAID). 1999.
- *Konservasi Hidupanliar & Keanekaragaman Hayati di Masa Krisis Ekonomi, Kumpulan Pikiran Dan Sikap Masyarakat Pelestari Hidupanliar Indonesia*, [Wildlife and Biodiversity Conservation in the Period of Economic Crisis: A Collection of the Community's Thoughts and Attitudes on the Preservation of Indonesian Wildlife] *Journal of the Indonesian Wildlife Society* (Special Issue) Vol.1, No. 1, 1998. Reports on an NRM/EPIQ-sponsored workshop; editorial assistance provided.
- More than 1,500 copies of the *NRM Newsletter* produced and distributed in five provinces and to Jakarta-Bogor organizations.
- NRM Program Webpage (<http://www.nrm.or.id>) established and kept up to date (the reader is referred to this site for a wide range of additional information on past and current NRM Program activities).

## **Annex 2. Training Activities\***

### **Selected In-Country Training Events**

- National Park Management Leadership Training
- Conflict Resolution of Community Encroachment in Kutai National Park.
- Morawali Nature Reserve Scoping Exercise.
- Training for Timber Concession Holders on Guidelines for Reduced Impact Harvesting
- Technical Training for Marine Protected Areas Management in Bunaken National Park.
- The Role ABRI in the Management of Natural Resources in Central Sulawesi.

### **Overseas Short-Courses**

- Community-based Forest Management Workshop in Davao, Philippines (8 participants).
- Carbon Trading Conference and Study Tour, London, UK, April 1999 (1 participant).
- Participatory Protected Areas Management Training Course (RECOFTC), Bangkok, Thailand, April-May 1999 (2 participants).
- RECOFTC Training Course in Laos (3 participants).
- Environmental Education Teachers Training Course (1 participant).
- World Bank Environmental Economics and Policy Courses (4 participants).
- ACTI Training Course (1 participant).
- UNCTAD Environment and Trade Conference (1 participant).
- IP3 Training Course (1 participant).

\* Note: See also the list of reports and sub-awards for further evidence of training activities tied to technical assistance and other program efforts.



### Annex 3. Sub-Awards

- Title:** Framework for Integrating Biodiversity in Spatial Planning at a Bioregional Scale in Indonesia  
**Sub-Awardee:** Yayasan WWF Indonesia, Jakarta  
**Type and Duration:** Grant; May 1, 1998 – January 31, 1999  
**Purpose:** To develop an approach for planning biodiversity interventions in Indonesia based on an understanding of the distribution and characteristics of ecosystems.  
**Outputs/Outcomes:** Proposal for further development of the bioregional model in Irian Jaya (West Papua) and East Kalimantan.  
**Approved Budget:** \$89,922.
- Title:** Strengthening Conservation Practice and Awareness in the Jayapura Area  
**Sub-Awardee:** Yayasan Pendidikan Lingkungan Hidup Cyclop (YPLHC), Jayapura  
**Type and Duration:** Grant; September 14, 1998 – September 13, 1999  
**Purpose:** To expand community awareness of conservation needs and actions possible to improve management of the Cyclops Nature Reserve near Jayapura in Irian Jaya (West Papua) Province.  
**Outputs/Outcomes:** Improved community understanding of conservation needs and opportunities and development of training materials.  
**Approved Budget:** \$20,360.
- Title:** Congress on Wildlife Conservation During the Period of Economic Crisis  
**Sub-Awardee:** Masyarakat Pecinta Hidupanliar Indonesia (MPHI), Jakarta  
**Type and Duration:** Grant; March 15, 1999 – August 15, 1999  
**Purpose:** To support the convening of a meeting of experts on the wildlife conservation impacts of Indonesia's financial crisis.  
**Outputs/Outcomes:** Workshop held with strong participation by experts and decision makers; special issue of the MPHI Journal issued with proceedings of the workshop.  
**Approved Budget:** \$4,349.
- Title:** Digital Mapping of Lore Lindu National Park  
**Sub-Awardee:** Agriculture and Forestry Faculty (Fakultas Pertanian dan Kehutanan), Universitas Hasanuddin, Ujung Pandang, South Sulawesi  
**Type and Duration:** Grant; March 15 – July 15, 1999  
**Purpose:** To help Lore Lindu National Park in developing its zoning system.  
**Outputs/Outcomes:** Digital maps of geographic information of Lore Lindu National Park in Central Sulawesi were produced with information on topography, river channels, road lines, settlement, administration, contour, vegetation, distribution of fauna, and layout of Lore Lindu National Park.  
**Approved Budget:** \$3,594.
- Title:** Media Campaign of results of the National Congress of the Indigenous People of The Indonesia Archipelago (KMAN)  
**Sub-Awardee:** Lembaga Studi dan Advokasi Masyarakat (ELSAM), Jakarta  
**Type and Duration:** Grant; March 15 – October 31, 1999  
**Purpose:** To raise public awareness of social, cultural, economic, political and religious issues concerning the indigenous people.  
**Output/Outcomes:** Dissemination of information related to the existence of and support for

indigenous people in the archipelago were produced including coverage in national and international press, and awareness campaign on such issues in print, audio-visual, as well as multi-media formats.  
**Approved Budget:** \$59,428.

6. **Title:** Environmental Education Media for Students in West Kalimantan  
**Sub-Awardee:** Yayasan Madanika, Pontianak, West Kalimantan  
**Type and Duration:** Grant; May 20 – October 31, 1999  
**Purpose:** To increase students' critical appreciation and awareness of environmental issues in natural resources management and biodiversity.  
**Output/Outcomes:** An environmental education media model was introduced through a participatory and recreational workshop, exhibition and debate competition. Six monthly newsletters called *EKOMEDIA* were produced during the grant period.  
**Approved Budget:** \$16,355.
7. **Title:** Participatory Mapping—Land Use and CBNRM within the Buffer Zone of Wasur National Park, Merauke, Irian Jaya  
**Sub-Awardee:** Yayasan Wasur Lestari  
**Type and Duration:** Grant; May 27 – October 27, 1999  
**Purpose:** To implement the mapping and planning activities in support of sustainable community-based natural resources management inside and around the buffer zone of Wasur National Park..  
**Output/Outcomes:** The report produced initial map sketches with agreed-upon boundaries for three villages (out of the 15 villages) as well as documented results of GIS training and participatory mapping processes in those three villages. Follow-on activities will be conducted upon approval of a new grant proposal.  
**Approved Budget:** \$11,049.
8. **Title:** Smallholder Rubber Agroforestry Systems as Alternative Best Practices for Community-Based Agroforest Management  
**Sub-Awardee:** Gabungan Pengusaha Karet Indonesia (GAPKINDO), Bogor  
**Type and Duration:** Grant; March 1 – September 29, 1999  
**Purpose:** To develop ways to transform “jungle rubber” areas into improved complex agroforestry systems that can sustain both environmental conservation and rubber farmers' incomes.  
**Output/Outcomes:** Sixty-two demonstration plot locations were surveyed with 60 farmers involved in the process. The results of such activity established new protocols for the rubber production period using a farmer's participatory approach that determined the conditions of technology adoption and innovation and their impacts on farmers' livelihood and prosperity.  
**Approved Budget:** \$42,672.
9. **Title:** Forest Watch Indonesia—Institutional, Database and Information Systems Development  
**Sub-Awardee:** Telapak Indonesia, Bogor  
**Type and Duration:** Grant; March 1 – October 31, 1999  
**Purpose:** To support the program of the community-based rainforest monitoring activities of “Forest Watch Indonesia” (FWI)—a collaborative effort of Telapak Indonesia and World Resources Institute (WRI)—through institution building as well database and information systems development.  
**Output/Outcomes:** The FWI Secretariat was established, including staffing, procurement and installation of infrastructure, development of data and information management and communication

system management. A FWI “Code of Ethics” was produced comprising practical guidelines for collaboration among FWI network members, Global Forest Watch members, and with management systems implemented by FWI sub-nodes. Analysis on the state of Indonesia’s forests was presented in the first FWI “State of the Forest Development”. The report consisted of statistical and spatial national baseline data analysis on the bio-physical status of Indonesia’s forests, their utilization, human settlements, population densities and distribution, traditional (*adat*) claim areas, infrastructure, and existing and planned development projects. Follow-on activities are anticipated under a new NRM grant proposal, possibly in more direct collaboration with WRI.

**Approved Budget:** \$78,300.

10. **Title:** Institutional Capacity and Systems Development for the Indonesian Ecolabeling Institute  
**Sub-Awardee:** Lembaga Ekolabeling Indonesia (LEI), Jakarta  
**Type and Duration:** Grant; May 1 – October 30, 1999  
**Purpose:** To provide technical and other support to help LEI to continue to develop itself to the point at which they can sustain their own activities and attract additional financial resources in the future.  
**Output/Outcomes:** LEI’s organizational structures were established and its forest conservation programs initiated with direct impact on the behavior of logging firms. LEI also interacted closely with international organizations involved in certification benefiting from this experience. Plans were laid for the extension of ecolabeling activities outside of forest harvesting—to forest industry, aquarium fish harvesting and other natural systems exploitation activities.  
**Approved Budget:** \$83,000.
11. **Title:** Development of Women’s Barkcloth Handicraft in Villages around Lore Lindu National Park  
**Sub-Awardee:** Yayasan Jambata, Palu, Central Sulawesi  
**Type and Duration:** Grant; July 1 – October 30, 1999  
**Purpose:** To facilitate and support women’s working groups in 13 villages within Lore Lindu National Park in providing more efficient and sustainable ways and opportunities to develop their barkcloth market as well as to generate more income from selling the cloth.  
**Output/Outcomes:** Working group for each village were established and a training module on sustainable barkcloth crafting was produced. Outputs have been marketed, and one US company (Black Ink) has become the main international distributor.  
**Approved Budget:** \$6,350.
12. **Title:** Community Conservation Awareness and Education in the Morowali National Park Region  
**Sub-Awardee:** Yayasan Sahabat Morowali, Kolonodale, Central Sulawesi  
**Type and Duration:** Grant; June 1 – October 30, 1999  
**Purpose:** To enhance community awareness and understanding of the function of Morowali Nature Reserve as a conservation area.  
**Outputs/Outcomes:** A socialization workshop and training program on conservation awareness were conducted during the grant period. Follow on activities are anticipated under a new NRM grant proposal.  
**Approved Budget:** \$13,125.
13. **Title:** Technical Support to the NRM/EPIQ Protected Areas Management Component  
**Sub-Awardee:** Conservation International  
**Type and Duration:** Sub-contract; July 1997 – October 1999

**Purpose:** To provide technical expertise in support of various aspects of the NRM/EPIQ Protected Areas Management Component.

**Outputs/Outcomes:** Conservation advisor placed in Irian Jaya for 9 months; various studies completed on ecosystem valuation; support provided to bioregional planning in Irian Jaya.

**Approved Budget:** \$347,926 (expended \$77,265)

14. **Title:** Participatory Protected Areas Management in North Sulawesi

**Sub-Awardee:** Wildlife Conservation Society

**Type and Duration:** Sub-contract; March 15, 1999 – September 29, 1999

**Purpose:** To work with government officials and local conservation NGOs to develop scientifically based participatory management and monitoring tools for protected areas in North Sulawesi.

**Outputs/Outcomes:** Regular field-based training for government officials and NGO staff, technical memorandums, workshop presentations, and final report documenting activities.

**Approved Budget:** \$71,942 (expended \$59,628)

15. **Title:** Legal and Policy Analysis for Improved Protected Areas Management

**Sub-Awardee:** Indonesian Center for Environmental Law

**Type and Duration:** Purchase Order; August – December 1998

**Purpose:** Conduct analysis of opportunities and constraints within Indonesian policy regarding decentralized protected areas management in order to provide Indonesia's conservation community with an appropriate policy framework for supporting more decentralized and participatory approaches to protected areas management.

**Outputs/Outcomes:** Widely distributed final report (Kajian Hukum dan Kebijakan Penelolaan Kawasan Konservasi di Indonesia) and four-volume annex of laws and policies. The final report was subsequently published as a book, with more than 1,500 copies distributed to government offices, universities, NGOs and others across Indonesia. Initiated at the start of Indonesia's great decentralization debate, this study is considered by many to be a key reference for current decentralization work.

**Approved Budget:** \$15,543.

16. **Title:** Conservation Awareness Campaign Training Program

**Sub-Awardee:** RARE Center for Tropical Conservation

**Type and Duration:** Sub-contract; March 1, 1999-September 29, 1999

**Purpose:** Design and implement a conservation awareness campaign training program for representative from North Sulawesi's conservation community including government, non-government and community members. Focusing on Bunaken National Park, this training program introduced various aspects of social marketing including market research, surveys and focus group discussions as a way to target key groups with specific action messages aimed at supporting local conservation initiatives.

**Outputs/Outcomes:** Draft training manual, and more than 22 people trained in two-week training workshop.

**Approved Budget:** \$20,865. Expended: \$16,606

17. **Title:** Environmental Economic Analysis in East Kalimantan  
**Sub-Awardee:** Center for Environmental Economic Studies  
**Type and Duration:** Purchase Order; September 29, 1998 – December 15, 1998  
**Purpose:** To support the conduct of an environmental economic analysis of provincial transportation plans as inputs to an environmental impact assessment and as a model for future valuation of project or program environmental impacts in the province.  
**Outputs/Outcomes:** The report produced economic values for a range of environmental changes anticipated as a result of transportation development in the province and was used as an important input to the province’s first sectoral environmental impact assessment.  
**Approved Budget:** \$3,000.
18. **Title:** LEI's Press Conference on Ecolabeling—an NRM Best Practice  
**Sub-Awardee:** Syarif Foundation  
**Type and Duration:** Purchase Order; May 7, 1998 - June 2, 1998  
**Purpose:** To assist Lembaga Ekolabel Indonesia (LEI) in the area of message development and press relations for a press conference that followed the graduation ceremony of 80 sustainable forestry assessors and certifiers. The press conference provided LEI with an opportunity to publicize the assessment and certification process to the press as an important step forward toward forest sustainability in Indonesia.  
**Output/Outcomes:** Prior to the conference background research on LEI's mission was conducted. Based on this analysis a press kit and a press release were prepared to support the press conference. Four press ready articles were also prepared for placement in key media outlets, and some press kits were sent to news and environmental organizations not attending the press conference. Subsequently, an evaluation was produced with comments from journalists, editors and kit recipients.  
**Approved Budget:** \$71,942 (expended \$59,629)
19. **Title:** Provincial Survey on Environmental Impacts of the Economic Crisis  
**Sub-Awardee:** Center for Environmental Economic Studies  
**Type and Duration:** Purchase Order; July 13, 1998 - August 31, 1998  
**Purpose:** To support the conduct of a survey of provincial government data centers to collect current information on the environmental and natural resources consequences of the adverse economic and political situation. This information was used as input in an analysis that provided an overview of the impacts and implications of the ongoing financial crisis and policy responses at the provincial level.  
**Output/Outcomes:** The survey instrument was administered by telephone to provincial government offices, planning bureaus and statistical sections. The survey was also provided to the Biro Pusat Statistik to supplement the ongoing kabupaten-level survey conducted to determine the impacts of the crisis. The study found increased pressures on natural resources during the crisis period including accelerated forest conversion, fisheries exploitation and pressures on protected areas.  
**Approved Budget:** \$3,000.
20. **Title:** Community-based Maleo Bird Conservation Strategy  
**Sub-Awardee:** Sahabat Morowali  
**Type and Duration:** Purchase Order; September 2, 1998 - March 31, 1999  
**Purpose:** To support the conduct of a survey and an analysis of a community-based maleo bird conservation strategy that can be implemented through village community participation in Morowali National Park.

**Output/Outcomes:** The report produced a range of activities recommended for implementation by Sulawesi's BKSDA, the local government in Kabupaten Poso and the local community in efforts to conserve the maleo bird. The strategy includes a presentation of physical and biological information of the maleo bird's habitat, as well as the social organization of the conservation action strategy.  
**Approved Budget:** \$951.

21. **Title:** Participatory Buffer Zone Monitoring System for Bunaken National Marine Park  
**Sub-Awardee:** Yayasan Forum Petaupan Katouan (FPK)  
**Type and Duration:** Purchase Order; September 2, 1998 - March 31, 1999  
**Purpose:** To support the development of a participatory buffer zone monitoring system based on ongoing buffer zone development activities in two villages adjacent to Bunaken National Marine Park. The system was to emphasize the importance of community participation; both in terms of generating necessary local ownership of the monitoring activity as well as to reduce overall management responsibility by the governmental authorities.  
**Output/Outcomes:** The report produced a monitoring system that was used in strengthening working relationship between the local communities and the national park. Such a monitoring system may result in a formal MOU, or Community Conservation Agreement (CCA) between local communities and the National Park as an indicator of success. The system was used to expand future buffer zone development activities for Bunaken National Park and for other National Parks in Indonesia.  
**Approved Budget:** \$5,317.
  
22. **Title:** Community Agroforestry Demonstration Activity  
**Sub-Awardee:** Yayasan Tadulako Membangun  
**Type and Duration:** Purchase Order; September 2, 1999 - February 28, 1999  
**Purpose:** To assist in designing and developing a community agroforestry demonstration plot in the Besoa Valley, an enclave in the southern portion of Lore Lindu National Park.  
**Output/Outcomes:** The report produced an agroforestry demonstration activity prepared in partnership with Besoa Valley farmers and Lore Lindu National Park staff. The activity identified alternative resource use schemes for local farmers while simultaneously resulting in a more effective boundary between the Besoa Valley enclave and the National Park.  
**Approved Budget:** \$3,125.
  
23. **Title:** International Seminar on Indonesian Regional Development Policy  
**Sub-Awardee:** Indonesian Regional Science Association  
**Type and Duration:** Purchase Order; September 10, 1999 - November 22, 1999  
**Purpose:** Provide financial assistance for a seminar that offered NRM an opportunity to strengthen the capacity of an influential Indonesian policy and planning organization.  
**Output/Outcomes:** A final report documented the process of the event including seminar materials and recommendations relating to decentralized natural resources management and proposed follow-up activities. The event was an excellent focal point for NRM's activities in spatial planning and provincial development.  
**Approved Budget:** \$15,625.
  
24. **Title:** Participatory Mapping Training Program  
**Sub-Awardee:** Yayasan Pancur Kasih  
**Type and Duration:** Purchase Order; October 6 - December 21, 1999

**Purpose:** To facilitate a participatory mapping training program for development of local human resources necessary to map the boundaries of Bukit Baka–Bukit Raya National Park, surrounding timber concessions and community resources. The four-week training program emphasized participation and conflict resolution through hands-on field work.

**Output/Outcomes:** The report produced maps with agreed-upon boundaries for the park, as well as the basis for future participatory management of the park.

**Approved Budget:** \$6,868.

25. **Title:** National Park Directors Workshop

**Sub-Awardee:** Direktorat Jenderal PHPA, Dephutbun

**Type and Duration:** Purchase Order; October 8 - October 25, 1999

**Purpose:** To provide financial support for a national park management workshop organized by the DirJen PHPA in Sukabumi. The workshop provided a discussion and communication forum where heads of national parks were able to exchange knowledge and best practices to enhance their insight and vision when facing challenges in the management of national parks. Thus, the performance of national park management could be improved, particularly when implementing the management strategy and policy.

**Output/Outcomes:** The workshop resulted in a similarity of vision among the heads of national parks regarding promising management approaches. It also provided smooth communication between the heads of Balai Taman Nasional and Unit Taman Nasional. The workshop proceeding produced a range of best practices that were used by national park managers when improving their management policies.

**Approved Budget:** \$24,534.

26. **Title:** Park Management Leadership Training Program

**Sub-Awardee:** Lembaga Pendidikan dan Pembinaan Manajemen

**Type and Duration:** Purchase Order; October 16 - 28, 1998

**Purpose:** To prepare, conduct and document a half-day leadership training program for Indonesia's 36 National park managers as part of the USAID/NRM sponsored National Park Management Workshop to be held in Sukabumi. As an integral component of the workshop, this leadership training program helped National Park managers identify and then translate park missions and visions into reality through a more participatory management style. Special focus was given to participatory management, delegation, and partnerships development.

**Output/Outcomes:** The report produced a program oriented toward Indonesia's National Park managers and focus on participatory management styles, delegation and partnership development.

**Approved Budget:** \$375.

27. **Title:** National Park Managers Workshop Documentation and Lessons Learned Video

**Sub-Awardee:** Endro Gunawan, PT Prima Pesona Abadi

**Type and Duration:** Purchase Order; October 20, 1998 - November 15, 1998

**Purpose:** To obtain a professionally shot and edited video documenting/highlighting "lessons learned" from NRM-sponsored National Park Management Workshop, October 21-25, 1998.

**Output/Outcomes:** The video documented various presentations and key themes derived from the workshop and included interviews with workshop participants. The video highlighted successful management activities implemented by various park managers in Indonesia, presented discussions on their applicability for adaptation and captured commitments for follow-up actions. Specific

management activities captured were "scoping exercise", use of institutional development framework, and partnerships development. After being reviewed by a Team of NRM-consultants and DJPHPA officials, the narrated video was targeted for audiences who are involved in conservation and/or integrated conservation and development work in Indonesia.

**Approved Budget:** \$6,875.

28. **Title:** National Park Managers Focus Groups

**Sub-Awardee:** AC Nielsen SRI

**Type and Duration:** Purchase Order; October 27, 1998 - November 14, 1998

**Purpose:** To facilitate and support the documentation and analysis of focus group discussions with Indonesia's National Park managers as a follow-up to the World Bank financed National Park management survey conducted in September and October 1998.

**Output/Outcomes:** The initial survey provided valuable insights into Indonesian National Park management issues—from the impact on park management by the recent economic crisis to attitudes about partnerships, coordination and alternative conservation financing tools. The results of this survey were of greater use through more detailed, guided focus group discussion among National Park managers. The NRM-sponsored National Park Managers workshop held in Lido provided an excellent opportunity to conduct these discussions. Documentation and analysis of focus group discussions provided PHPA, NRM and the World Bank with information and analysis to be more responsive to park management needs.

**Approved Budget:** \$2,500.

29. **Title:** Kutai National Park Socio-economic and Conflict Resolution Survey with Recommendations

**Sub-Awardee:** Lembaga Binakelola Lingkungan (BIKAL)

**Type and Duration:** Purchase Order; January 6, 1999 - February 25, 1999

**Purpose:** To support the conduct of a study on encroachment in Kutai National Park. The study looked at the history of encroachment and involved active participation of the encroachers to better understand the problem and to develop realistic solutions.

**Output/Outcomes:** The report produced an analysis of the background of the problem, reasons of continued encroachment, strategies for addressing the problem and means for reducing threats to conservation management of the park. The report was used as an important input that benefited the Kutai National Park management.

**Approved Budget:** \$5,000.

30. **Title:** Economic Valuation of Services Derived from Gunung Gede-Pangrango National Park

**Sub-Awardee:** Center for Environmental Economic Studies

**Type and Duration:** Purchase Order; January 27, 1999 - March 31, 1999

**Purpose:** To support the conduct of a study to place an economic value on the range of ecological services provided by Gunung Gede-Pangrango National Park as a case study to assist similar valuation exercises for other parks and protected areas.

**Output/Outcomes:** The report was used in efforts to encourage both Indonesian and donor financing for the conservation of the National Park and methods were developed and demonstrated that can be applied in similar efforts elsewhere.

**Approved Budget:** \$3,950.

31. **Title:** Communications Support to the National Congress of Masyarakat Adat

**Sub-Awardee:** National Congress of Masyarakat Adat / PT. Madah Paranpara Rencang.

**Type and Duration:** Purchase Order; March 11, 1999 - April 30, 1999

**Purpose:** To help see that the activities and findings of the National Congress of Masyarakat Adat are widely publicized.

**Output/Outcomes:** Prior to the meeting a press relations plan was prepared. A press kit and two press releases supported two press briefings and a press conference during the Congress; and subsequently an action plan for the Rights Roundtable as well as contributions to a public service announcement were prepared.

**Approved Budget:** \$5,500.

32. **Title:** Reforestation Pilot Demonstration in Kutai National Park

**Sub-Awardee:** Koperasi Wana Kencana TN Kutai

**Type and Duration:** Purchase Order; May 3, 1999 - June 1999

**Purpose:** To support the pilot reforestation of 15 hectares of land in Kutai National Park that were damaged during the fire in 1998. This reforestation demonstration project was part of a greater reforestation effort financed by Mitra Kutai members, facilitated by Koperasi Wana Kencana Balai Taman Nasional Kutai and involving the participation of local communities.

**Output/Outcomes:** Forest rehabilitation endeavor funded by all Mitra Kutai members provided important employment opportunity for local community members who assisted in the day-to-day labor and strengthened the relationship between local communities and the National Park. Support for Koperasi Wana Kencana TN Kutai also demonstrated effective utilization of autonomous legal mechanisms for managing participatory, multi-stakeholder National Park management in Indonesia.

**Approved Budget:** \$3,750.