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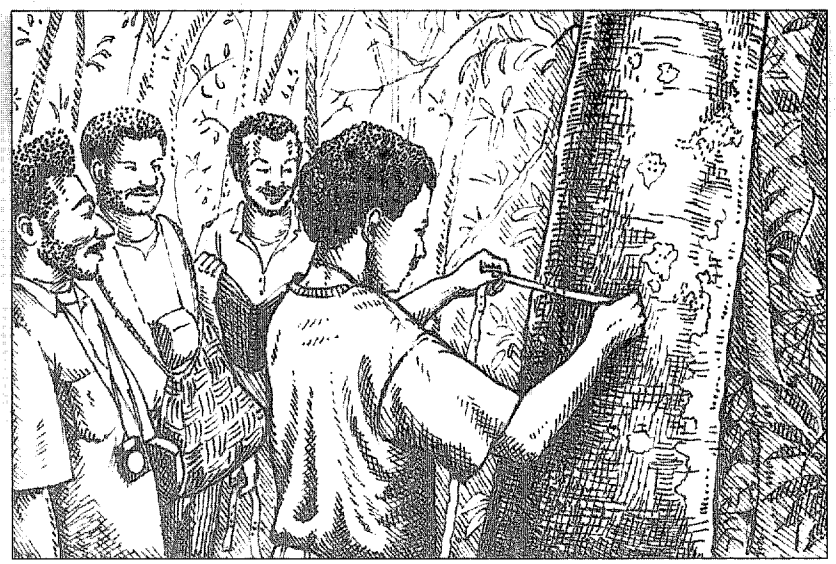
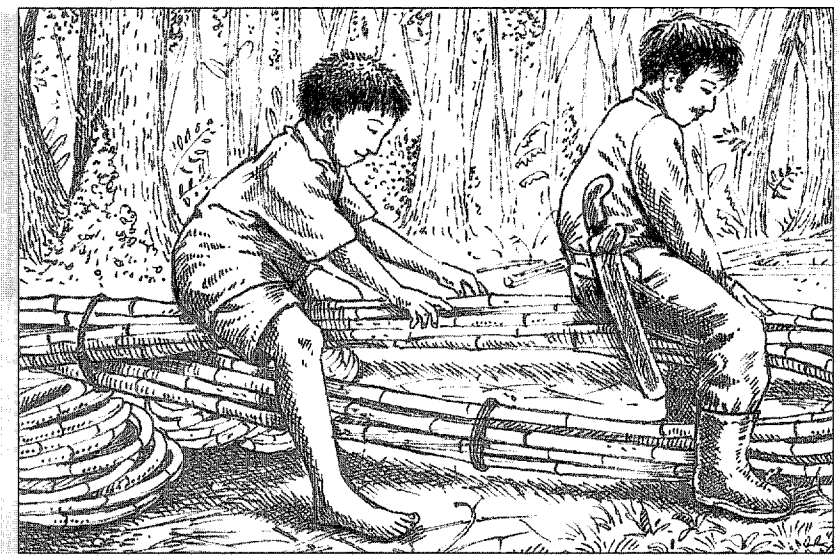
The Biodiversity Support Program's

Biodiversity Conservation Network

1995 Annual Report





Evaluating an Enterprise-Oriented Approach to Community-Based Conservation in the Asia/Pacific Region

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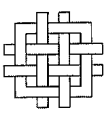

The Biodiversity Conservation Network is administered by the Biodiversity Support Program (BSP), which is implemented by a consortium of World Wildlife Fund, The Nature Conservancy, and World Resources Institute. BCN is funded by the United States-Asia Environmental Partnership (US-AEP) which is led by the United States Agency for International Development (USAID).

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BCN PROGRAM DESCRIPTION - SEPTEMBER, 1995

Background: In the early 1990s, staff at the Biodiversity Support Program and their USAID colleagues identified three factors affecting biodiversity conservation efforts. First, was the observation that many integrated conservation and development projects being implemented in areas of high biodiversity were not likely to succeed because they lacked a link between some of the economic activities proposed and the need to conserve biodiversity. Second, was the increased interest in consumer markets for "rainforest products." The presumption was that if products from biologically diverse areas had a recognized value in the marketplace, then the people living in and around the ecosystems would conserve biodiversity in order to capture some of these economic benefits over the long-term. Finally, it was observed that even though many projects promoting economic activities in areas of high biodiversity claimed to be sustainable, no one really knew what the long-term biological, social, or economic impacts of these projects were on the biodiversity of an area and the local and indigenous people living and working there. An opportunity to evaluate enterprise-based approaches to address these issues through a new program was presented by the creation of the United States-Asia Environmental Partnership Program. As a result, the Biodiversity Conservation Network for the Asia and Pacific Regions was initiated.

Program Overview: The Biodiversity Conservation Network (BCN) was established to 1) support site-specific efforts to conserve biodiversity at a number of sites across Asia and the Pacific and 2) evaluate the effectiveness of enterprise-oriented approaches to community-based biodiversity conservation. To achieve these goals, BCN brings together organizations in Asia, the Pacific, and the United States in active partnerships with local and indigenous communities. The program provides grants for projects that encourage the development of enterprises that are dependent on sustained conservation of local biodiversity. Projects supported by BCN grants must monitor the social, economic, and biological impacts of this enterprise-oriented approach to community-based conservation. A key outcome of the BCN's efforts, in addition to supporting site-specific conservation programs, will be providing information to policy makers, the donor community, and environmental and development organizations about the conditions under which these enterprise-based approaches can contribute to biodiversity conservation.

Approach: The BCN awards two types of grants through a rigorous, competitive process. Feasibility study funds (Planning Grants) were awarded up until April, 1994 to offset the costs of project design. Three-year Implementation Grants are being awarded to those groups whose projects meet BCN's requirements for potential enterprise viability and the development of monitoring plans to assess the biological, social, and economic impacts of the enterprises.

Organization and Funding: The Biodiversity Conservation Network is a 20 million dollar, 6.5 year program initiated in late 1992 with funding from the United States-Asia Environmental Partnership (US-AEP) which is led by the United States Agency for International Development (USAID) under cooperative agreement number AEP-0015-A-00-2043-00. The BCN is a USAID attribution to the Global Environmental Facility (GEF). The program is part of the Biodiversity Support Program (BSP), which is implemented by a consortium of World Wildlife Fund, The Nature Conservancy, and World Resources Institute. BSP works to conserve biological diversity in developing countries by supporting innovative, on-the-ground projects that integrate conservation with social and economic development; research and analysis of conservation and development techniques; and information exchange and outreach.

The United States-Asia Environmental Partnership is a coalition of Asia/Pacific and American businesses, community groups and governmental institutions. The coalition enhances environmental protection and promotes sustainable development in Asia and the Pacific by mobilizing US environmental technology, expertise, and financial resources. US-AEP is supported by a USAID program under the guidance of the inter-agency Trade Promotion Coordinating Committee. USAID's Office of Environment and Natural Resources, Center for the Environment, Bureau for Global Programs, Field Support, and Research will assume management responsibility for the BCN starting in November, 1995.

EXECUTIVE SUMMARY

In FY 1995, the Biodiversity Conservation Network (BCN) staff and Peer Review Committee completed the selection process for the portfolio of Implementation Grants and worked closely with BCN grantee partners on the development of monitoring systems. BCN considered more than 400 proposals, concept papers, and concept inquiries during the 2.5-year proposal review process. The final set of Implementation Grants awarded in 1995 were drawn from the pool of 34 projects that had received Planning Grants (totalling $1.6 million). To date, BCN has awarded 15 Implementation Grants ($7.6 million) with another 5 projects ($2.3 million) in the final stages of approval. These 20 projects seek to:

- Improve conservation on a total land area of 3.2 million hectares;
- Improve the quality of life for over 263,000 people;
- Initially capitalize or provide growth capital for 51 enterprises that will collectively employ over 10,400 people and have projected revenues in the third year of $4.3 million;
- Demonstrate to local, regional and national governments in 12 of the sites that local people are successful stewards of their biological resources when given tenure or access rights to land and natural resources;
- Actively strengthen and encourage indigenous cultural traditions in 6 sites;
- Leverage the $11.5 million of BCN grant funds with $5.3 million in grantee and other donor contributions to increase financial resources and maximize local conservation impacts. BCN is pleased that the resulting $16.8 million in project funds is comprised of a 32% non-USAID contribution.

In addition, most projects address one or more policy issues at the local or national level. The policy issues range from securing tenurial or resource access rights to the recycling of some portion of government tourism tax revenues to local communities. A summary of the 20 projects is shown in Exhibit 1 with more detailed descriptions provided in Appendix A.

Social, economic, and environmental monitoring are crucial to BCN's mission. Every BCN-funded project includes monitoring programs to improve program implementation and to document the success of the projects in generating a variety of social, economic and environmental benefits, the distribution of these benefits, and the ecological impacts of the projects. Monitoring begins at the project's inception, and, on average, 30% of grant funds at each site is allocated to pay for monitoring costs.

A major objective this year was to assist all grantees in developing their monitoring programs. To accomplish this objective, BCN issued and revised its publication on "Guidelines for Monitoring BCN-Funded Projects," held three monitoring workshops, and visited most of the Implementation Grant sites to provide technical assistance and review monitoring plans. The monitoring workshops were an extremely effective means of assistance, as they enabled grantees to learn about an approach to designing monitoring programs in addition to

facilitating cross-project learning. By the close of the year, each individual project appeared to be well on its way to developing comprehensive monitoring programs. During 1996, BCN will continue to emphasize working with our grantee partners to ensure the success of their monitoring programs during implementation.

In 1995, BCN awarded several small grants intended to strengthen the ability of BCN grantees to implement successful projects and to address enterprise and conservation issues not currently included in the BCN portfolio. These small grants also enhance the program's ability to make cross-site comparisons and draw lessons about enterprise-based approaches to site specific conservation efforts. Exhibit 2 summarizes the small grants awarded to date. Representative examples of these grants include support for a regional study of the natural resins market in Southeast Asia and an effort to propose practical alternatives to the widespread use of cyanide and other destructive fishing practices in the Asia/Pacific region.

There are currently 12 BCN staff, with team members posted in Washington, DC, Manila, Jakarta, and New Delhi. The shift over the past year to a majority of field-based staff has significantly improved BCN's ability to provide technical assistance and to work with grantees on understanding USAID's regulations. This increase in field-based staff has also enabled BCN to interact more effectively with a broad cross-section of individuals, non-government organizations (NGOs), and government ministries involved in conservation initiatives in the Asia/Pacific region. During 1996, we anticipate that the Washington, DC-based staff will be further reduced to add field-based staff capacity in enterprise development and monitoring.

An important complement to BCN staff was the 10-member Peer Review Committee. These diverse experts were drawn from the Asia region and the USA. The Committee members added significant insights into the review of 28 Implementation Grant proposals. BCN staff are currently exploring ways of continuing to involve the members of the Committee in the program in the future.

No discussion of BCN's work over the past year would be complete without acknowledging the significant effort demonstrated by all of those who have applied to BCN for funding. Unfortunately, our specific mandate and limited grants funds have prevented us from funding many important and well-planned conservation and development programs. BCN staff thus feel a specific responsibility to take the lessons learned from BCN back to the larger conservation and development community to assist them in their work. We expect that this process of sharing lessons will begin during 1996.

In addition to those 1996 activities mentioned above, BCN staff will continue to focus significant time and resources on further refining grantee monitoring and evaluation programs, providing enterprise technical assistance, and analyzing factors affecting enterprise-based approaches to conservation. BCN staff will carry out the latter analytical program in close collaboration with BCN grantees, BSP's Analysis Program, and other conservation and research organizations. BCN's mid-term evaluation will commence in January, 1996. We are looking forward to this opportunity to receive constructive advice on how to make BCN more

effective over the remaining three and one-half years of the program.

The remainder of this report summarizes BCN's objectives, activities, and future plans according to the major program modules (Exhibit 4) described in Section 1. Section 2 is a discussion of selected topics including our monitoring and evaluation efforts, observations on the types and degree of community participation in individual projects, an analysis of proposals received, and brief descriptions of our highest priority analytical issues. BCN's financial summary is presented in Section 3. Appendix A contains summaries of the 20 Implementation Grants, Appendix B presents materials from the BCN Monitoring Workshops, and Appendix C presents the BCN Staff Organizational Chart.

Finally, a word of acknowledgement for all of those we have worked with during the past year. In a U.S. political climate characterized by questions about the need for biodiversity conservation and the debate regarding the appropriate role of private-sector solutions, it is critically important that the conservation and development community demonstrate prudence in the use of U.S. tax-payer funds and provide insights as to when public/private partnerships can work. We have high hopes for the BCN's collective efforts that rely on the skills and commitment of many talented people in the Asia/Pacific region and the USA.

Women at the Appropriate Technology International (ATI) project site in Nepal. Photo by A. Willett.

EXHIBIT 1
BCN Implementation Grants

South Asia

Country	Lead Organization	Collaborators Receiving BCN Funds	Funds U.S. $	Enterprise Component	Policy/Technical Issues
India	The Mountain Institute	GB Pant Institute	$449,465	Ecotourism	Ecotourism policy Strong emphasis on working with women's groups
	Appropriate Technology International	EDA Rural Systems Himalayan Action Research Centre GB Pant Institute	$571,201	Harvesting and processing of tasar silk, and honey.	Supporting local community forest resource management
	University of Massachusetts at Boston	Tata Energy Research Institute Vivekananda Girijana Kalyana Kendra	$610,404	Non-timber forest product collection and processing	Building a case for local management of resources
Nepal	Appropriate Technology International	Asia Network for Small-Scale Agricultural Biotechnologies Humla Conservation and Development Association	$549,995	Aromatic plant collection and processing	Strong emphasis on working with women's groups Keeping larger portion of NTFP collection taxes locally Community management plans
	King Mahendra Trust for Nature Conservation	World Wildlife Fund - US	$636,607	Ecotourism Rosewood plantations	Legislation for tourism tax recycling to local communities Buffer zone enhancement through plantations

Exhibit 1: BCN Implementation Grants - continued

Southeast Asia

Country	Lead Organization	Collaborators Receiving BCN Funds	Funds U.S. $	Enterprise Component	Policy/Technical Issues
Indonesia	The Nature Conservancy	Sobek Expeditions University of Guelph University of Hasanuddin Government of Indonesia's Directorate General of Forest Protection and Nature Conservation	$584,892	Ecotourism (rafting) Butterfly ranching Honey collection and processing	Building a case for local management of resources Working with Government of Indonesia (GOI) via PHPA on allowable access to protected area
	World Wide Fund for Nature Indonesia Programme	Yayasan Bina Lestari Bumi Cenderawasih	$179,632	Butterfly farming	Streamlining CITES permitting process
	Biological Science Club[1]	Wildlife Preservation Trust International University of Indonesia Gunung Halimun National Park	$415,256	Domestic ecotourism	Building a case for local management of resources Working with GOI (PHPA) on allowable access to protected area
	Harvard University[1]	Cassia Lestari West Kalimantan Ministry of Forestry	$586,650	Sustainable timber harvesting	Working with GOI to set precedent for small-scale, community-owned timber operations Working in critical orangutan habitat around the national park

[1]Not yet contracted.

Country	Lead Organization	Collaborators Receiving BCN Funds	Funds U.S. $	Enterprise Component	Policy/Technical Issues
Indonesia - Continued	Rumsram Foundation[1]	Hualopu Foundation Canadian University Service Organization	$312,529	Marine tourism	Developing legal mechanisms to integrate traditional marine tenure
	Yayasan Dian Tama[1]	P.D. Dian Niaga Appropriate Technology International	$490,829	Harvesting and processing of illipe nuts, damar, and rattan	Working with SFDP project on community control of resources in a GOI-recognized Protected Forest Management Area
Philippines	Kalahan Educational Foundation	Nueva Vizcaya State Institute of Technology University of the Philippines, Los Banos Upland NGO Assistance Committee	$321,190	Forest fruits processing Small-scale timber	Timber stand improvement Site is formally recognized by GOP. Project is working on building case for local resource management
	Manila Observatory/ Environmental Research Division	Southeast Asia Sustainable Forest Management Network	$426,798	Abaca and rattan, and other NTFP harvesting and marketing	Working to formalize community-controlled rattan concessions Tenure for local community seeking CADC
	World Wildlife Fund - Philippine Program	Nagkakaisang mga Tribu ng Palawan Tanggapang Panligal ng Katutubong Pilipino Tribal Filipino Apostolate	$627,698	Rattan and almaciga product harvesting and marketing Honey Production	Building a case for local management of resources -- seeking CADC

[1]Not yet contracted.

Exhibit 1: BCN Implementation Grants - continued

Pacific

Country	Lead Organization	Collaborators Receiving BCN Funds	Funds U.S. $	Enterprise Component	Policy/Technical Issues
Papua New Guinea	Conservation International	Foundation of the Peoples of the South Pacific Wau Ecology Institute	$355,487	Ecotourism	Community management of ecotourism business as an alternative to logging
	Pacific Heritage Foundation	Forest Research Institute	$451,738	Small-scale timber harvesting with a credit facility to assist local landowners	Demonstrating sustainability of small-scale timber operation
	Research and Conservation Foundation	Wildlife Conservation Society	$498,107	Research-based ecotourism	Community management of ecotourism business as an alternative to logging and mining
Solomon Islands	The Nature Conservancy	Ministry of Forests, Environment, and Conservation	$545,372	Deep-water finfish enterprise	Establishment of community-sanctioned sanctuary and cooperatively managed marine conservation area
	Conservation International	Maruia Society Solomon Islands Development Trust	$347,574	Ngali nut processing Ecotourism Honey processing	Assisting communities develop resource management plans
Fiji	University of the South Pacific	SmithKline Beecham Pharmaceutical Company SPACHEE Rainforest Alliance	$348,045	Biodiversity prospecting for pharmaceutical compounds with an equitable prospecting agreement	Policy framework for biodiversity prospecting in the Pacific Region

EXHIBIT 2
Small Grants as of October 1995

RECIPIENT	TOPIC	AMOUNT U.S. $
Regional Community Forest Training Center (RECOFTC)	Fellowship support for Rene Guarin of PBSP to attend the training course on "Marketing of Non-Timber Tree and Forest Products," 6-24 February 1995, Bangkok, Thailand	$4,310
Philippine Business for Social Progress (PBSP)	Identification, Development and Implementation of Site-Specific and Community-based Rattan Microenterprises in the Uplands	$22,890
Gaston Z. Ortigas Peace Institute (GZO-PI)	National Consultation Workshop on "Indigenous Resource Management Practices and Efforts at Ancestral Domain Delineation," 24-28 June 1995, Sagada, Mt. Province, Philippines	$5,990
International Marinelife Alliance (IMA) - Philippines	The Growing Threat of Cyanide Fishing and Emerging Strategies to Combat It	$25,000
World Resources Institute (WRI)	Policy Research Report on Cyanide Fishing and Emerging Strategies to Combat It	$24,867
Regional Community Forestry Training Center (RECOFTC)	Fellowship Support for Six NGO Representatives Identified by BCN to attend the seminar on "Income Generation through Community Forestry," 17-22 October 1995, Bangkok, Thailand	$11,220
Thomas B. Fricke	Southeast Asia Rainforest Resin and Market Assessment	$24,530

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CONTENTS

1. OVERVIEW OF THE BIODIVERSITY CONSERVATION NETWORK -- 1995

1.1 BCN Goals

The BCN was established to fulfil two main programmatic goals:

1) Support enterprise-oriented approaches to biodiversity conservation at a number of sites across the Asia/Pacific region, and

2) Evaluate the effectiveness of these enterprise-oriented approaches to community-based conservation of biodiversity and provide lessons and results to BCN's clients who include communities and groups implementing projects, USAID and US-AEP missions and offices, the members of the Biodiversity Support Program (BSP) consortium (World Wildlife Fund, The Nature Conservancy, and World Resources Institute), and the broader conservation and development community.

1.2 BCN Core Hypothesis

The Biodiversity Conservation Network's Core Hypothesis is that if enterprise-oriented approaches to community-based conservation are going to be effective, then the enterprises must: 1) have a direct link to biodiversity, 2) generate benefits, and 3) involve a community of stakeholders.

More specifically, these three *elements* of the core hypothesis are:

1) ***Linkage between the enterprises and biodiversity:*** The enterprises must directly depend on the *in-situ* biological resources of the region. The BCN thus seeks to develop enterprises that would fail if the biological resource base upon which they depend was significantly degraded.

2) ***Generation of short and long-term benefits:*** The enterprises must generate benefits (economic, social, and/or environmental) for a community of stakeholders both in the short run and, with a high probability, in the long run, after BCN funding ends.

3) ***Community/Stakeholder involvement:*** The enterprises must involve members of the local community, and often others, who are stakeholders in the enterprises and biodiversity of the area.

In effect, the hypothesis is that if local communities receive sufficient benefits from an enterprise that depends on biodiversity, then they will act to counter internal and external threats to that biodiversity.

1.3 BCN Program Modules and 1995 Accomplishments

The BCN Program has five distinct modules as shown in Exhibit 3. Over time, the BCN Program will focus on these modules in a sequential manner as indicated by the large arrows in the diagram going from left to right. A key premise behind this diagram, however, is that the activities and products of each module are highly interconnected. Thus, for example, in order to design the program concept and structure (in Module A) it is necessary to consider who the audiences are and to determine how results will be communicated to them (in Module E). Likewise, BCN's ability to conduct effective analysis (in Module D) will be influenced by the selection of projects (in Module B) and the type of information that is collected through monitoring efforts (in Module C).

Furthermore, although the general flow of the program will be sequentially from left to right in the diagram, there is also an iterative feedback process (represented by the curved arrows on top of the diagram) between the modules. This iterative process enables BCN to respond to the concerns of its clients and make use of the lessons it has learned to improve the quality of the individual projects within the Network as well as the overall program. In particular, as represented by the heavy arrow between Modules C and D, project-based monitoring efforts are an important tool to provide the feedback necessary to improve project quality.

Exhibits 4 A-E list the major objectives for each module. For each objective, we have listed corresponding activities undertaken in the past year, described indicators of successes in achieving the objective, and identified future actions required to complete the objective.

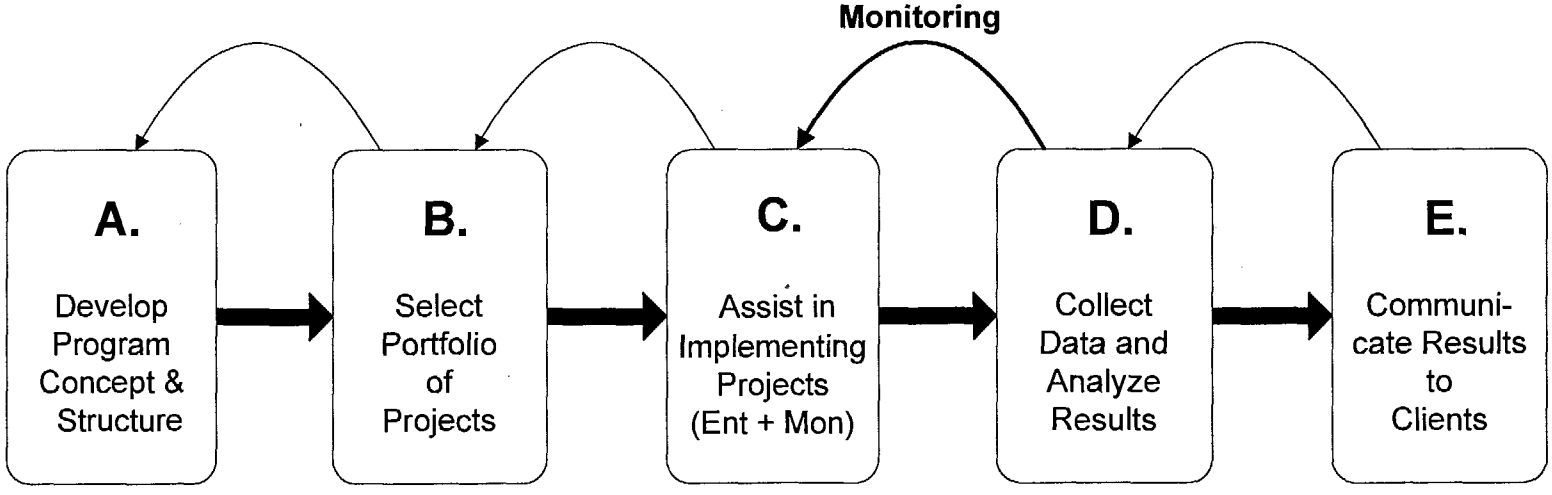
A. Develop Program Concept and Structure

The first program module (Exhibit 4A) involves developing the BCN concept and establishing effective institutional structures and administrative systems. Most of the conceptual development work was completed in the first two years of the BCN program. In FY95, the BCN continued to refine its administrative systems and its ability to manage grants. Highlights include:

- ***Conceptual model developed:*** While working with grantees to develop monitoring procedures, the BCN staff developed a process of conceptualizing projects. To "practice what we preach," the BCN staff have used this process to create a formal conceptual model for the overall BCN program that explicitly describes the process that we have been implicitly using all along. This model is presented in the BCN 1996 Workplan.

- ***BCN presence in Asia/Pacific region expanded:*** Over the past year, the BCN hired a senior social scientist based in Manila, transferred a program officer from Washington to Jakarta, and hired a Biodiversity Advisor based in New Delhi to coordinate the activities of grantees in South Asia. This decentralized structure gives BCN staff the opportunity to work closely with grantees in these countries and to be better informed about important local issues. In the future, BCN will continue to expand its staff presence in Manila and other relevant countries while reducing staff in Washington.

EXHIBIT 3
Overview of the BCN Program Modules



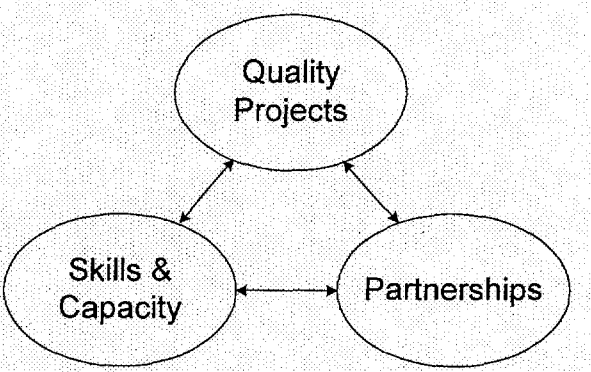
Note: The above diagram focuses exclusively on BCN's staff's activities. The communities and groups implementing the projects in the BCN portfolio are concurrently addressing the similar issues as they design and implement their projects.

BOX 1. Enhancing Skills Development and Strategic Partnerships

Although most BCN activities can be categorized in one of the 5 Program Modules, there are two types of activities that cut across all of these modules: 1) Helping grantees develop the skills necessary to design and implement their projects, and 2) Working with grantees to help them forge strategic partnerships with other organizations. In effect, as outlined in the diagram below, skills and capacity development and the formation of partnerships interact with one another to help produce higher quality projects.

Examples of skills development include providing feedback to grantees to help them develop higher quality proposals, assisting them to institute financial control systems, providing technical assistance in enterprise development and marketing, and holding workshops to help projects develop monitoring plans.

Examples of partnership formation include helping grantees to identify new buyers for their products, linking community organizations with research institutions that can provide guidance for monitoring activities, and identifying national NGOs that can provide policy analysis and advocacy assistance.



- ***Financial management capacity of grantee's improved:*** One finding stemming from the Planning Grants is that a few BCN grantees required assistance in developing strong financial management systems. To this end, the BCN staff, particularly the field based staff, spent considerable time working with these groups to improve their financial management skills, and to help ensure that they comply with all applicable U.S. Government regulations.

B. Select Portfolio of Projects

The second module of BCN activities (Exhibit 4B) involves working with groups to develop high quality projects and proposals, selecting a portfolio of projects, and monitoring grants to ensure continuing quality. In FY95, the BCN completed the Planning Grant process, and

selected most of the Implementation Grants. Highlights include:

- ***High quality projects and proposals developed:*** Throughout the proposal development and review process, the BCN staff worked closely with grantees to improve the quality of their project designs. The major activity in this regard was the awarding of 34 Planning Grants which enabled grantees to develop project ideas and lay out specific implementation plans. In addition, the BCN staff provided feedback to applicants on their proposals, regardless of whether or not the project was funded so as to enable proponents to enhance their project design capabilities.

- ***20 total Implementation Grants selected:*** Through the end of FY95, BCN has reviewed over 400 proposals and concept papers. From this group, 20 projects have been selected to receive Implementation Grants. The competitive nature of this award process is reflected in the high quality of the projects that were selected. The task of selecting projects was facilitated by the development of an extensive review process. BCN would like to acknowledge the significant work put into the review process by the Peer Review Committee. This Committee was composed of 10 senior level practitioners in fields relevant to the BCN program drawn from organizations based or actively working in the Asia/Pacific Region. In the coming months, the BCN hopes to draw upon the knowledge that this Committee developed about the BCN-funded projects and continue to involve its members in the continuing evolution of the BCN program.

- ***Small grants program developed:*** In addition to the major project Planning and Implementation Grants, the BCN also has limited money available to fund small grants. These grants are designed to complement and inform Implementation Grant activities. During FY 1995, the BCN also awarded a few grants to address gaps in its overall portfolio of projects. The BCN developed criteria for the award of small grants that include: building the capacity of grantees to implement successful projects, supporting "sub-sector" studies to understand the market size, structure, and "value-addition" dynamics of commodities and services that are of common interest to several grantees, and strengthening the capacity of local "intermediary" institutions to provide technical assistance to and policy analysis and/or advocacy for BCN grantees (see Exhibit 2).

- ***Grants periodically monitored and reviewed to ensure quality:*** The BCN periodically reviews its portfolio of grants to ensure that quality is being maintained. One of the most difficult tasks that BCN staff undertook in FY95 was to phase out funding for two projects that were performing significantly below expectations. The history and nature of these two particular projects (which did not benefit from receiving Planning Grants) were unique and it is unlikely that such drastic steps will need to be taken in the future.

C. Assist in Implementing Projects (Enterprises and Monitoring)

The third module of BCN activities (Exhibit 4C) involves helping groups to implement their

projects including, especially, their core enterprises and monitoring plans. The information that grantees collect will hopefully be used by proponents to modify and improve project implementation and also enable BCN to evaluate its core hypothesis. In FY95, BCN staff spent substantial time working toward these objectives. Highlights include:

- ***Monitoring protocol developed:*** From the onset, BCN staff realized that the broad range of biological habitats, enterprise types, and socioeconomic conditions that exist across the portfolio of projects precluded the development of prescriptive "cookbook" formulas for monitoring project impacts. Instead, BCN/BSP staff members developed a systematic protocol for designing and implementing monitoring plans in the context of the project cycle through which it could assist projects in meeting their specific needs. As outlined in Section 2.1 and Appendix B, the protocol involves developing 3 parts: I) a *conceptual model* of the overall project, II) a *project plan* that includes measurable goals, objectives, and activities, and III) a *monitoring workplan* that details which indicators will be used, how they will be measured, where, when, and by whom data will be collected, and how results will be used.

- ***Workshops held with representatives of all BCN funded projects:*** In FY95, the BCN staff held 3 major workshops with BCN grantees to share experiences regarding monitoring issues. The workshops's 5 major goals were to: 1) Enable different BCN grantee representatives to meet, get to know one another, and learn about each other's sites and projects; 2) Provide an opportunity for BCN staff to explain the program's goals, objectives, and expectations for monitoring and evaluation work; 3) Enable grantee representatives and BCN staff members to discuss monitoring in the context of the project cycle; 4) Discuss and assess various methods; and 5) Provide an opportunity for each group to refine its monitoring plans with input from other participants and BCN staff/resource persons. The first workshop was held during May in Bangalore, India, and was attended by representatives of all BCN funded projects (Planning and Implementation Grants) in South Asia. The second and third workshops were held during September in Los Baños, the Philippines, and were attended by Implementation Grantees and finalists from Southeast Asia and the Pacific. Overall, the workshops were rated very favorably by participants, outside observers, and the BCN staff. Reports on the workshops are available from the BCN.

- ***Knowledge about project sites greatly improved:*** In FY95, BCN staff visited 22 grant sites in 7 countries. These visits enabled BCN to 1) interact with community members and project implementors and observe first-hand the threats to biodiversity and the conservation measures proposed for each site, 2) discuss ways in which the BCN staff can provide technical assistance to community members and project teams to improve the quality of projects.

D. Collect Data and Analyze Results

The fourth module of BCN activities (Exhibit 4D) involves analyzing the results in conjunction with both grantees and other groups involved in similar efforts. As most Implementation Grants are only just beginning in earnest, it has not yet been possible to undertake extensive analytical activities. Instead, BCN staff have focused on developing preliminary plans for how this analytical work will be conducted. Highlights include:

- ***Planning begun for information collection and analysis:*** Over the past year, BCN began designing the systems that will be used to collect and analyze information obtained from the various projects and began developing analytical efforts (see Section 2.4).

- ***Links established with other groups:*** In addition, BCN also began to develop links with other groups engaged in similar analyses with the hopes of being eventually able to exchange data and results so as to 1) avoid "reinventing the wheel" and 2) enhance both BCN's and the other groups' abilities to learn lessons by expanding the "sample size" of comparable projects. For example, the BCN has begun working with the Center for International Forestry Research (CIFOR) on a project that will examine different examples of the linkages between income generation and conservation.

E. Communicate Results to Clients[1]

The fifth and final module of BCN activities (Exhibit 4E) involves communicating the results of the BCN program to various audiences. Here again, in FY95, BCN's activities primarily involved planning for the future. Highlights include:

- ***Primary clients identified:*** In FY95, BCN staff began a process of identifying the program's primary clients and their information needs. BCN clients include 1) the *groups implementing projects* including community members, local and international NGOs, and government agencies; 2) *BCN supporters* including the members of the Biodiversity Support Program (BSP) consortium (World Wildlife Fund, The Nature Conservancy, and World Resources Institute), USAID and US-AEP offices in Washington and abroad, and the US Government and taxpayers, and 3) *the broader conservation and development community* including conservation and development NGOs, academics, businesses, and other donors.

- ***Long-term strategy for impacting policy developed:*** Through a combination of design and circumstance, the BCN grant review process has resulted in Implementation Grants being concentrated in a relatively small number of countries in the Asia/Pacific Region. In each of these countries, several grantees are addressing similar project and policy

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[1]BCN uses the term "client" as opposed to "audience" to denote its commitments to: 1) find out what information these groups need, 2) provide this information to them in a proactive as opposed to passive manner, and 3) interact with them on a sustained basis to improve the utility of the information over time.

issues. For example, BCN is funding a number of projects in India related to Joint Forestry Management issues and a number of projects in the Philippines addressing indigenous community tenurial rights. As a result, the BCN staff members are seeking to identify existing national "intermediary" organizations that it can collaborate with to assist grantees and other organizations to address these issues. As illustrated in Exhibit 5, BCN ultimately hopes to work with grantees at their specific sites to provide information that practitioners and policy makers at local, national, and even international levels can use to improve policies that affect many other sites.

- ***Networking strategy implemented:*** In FY95, the BCN continued to develop networking opportunities in the countries in which it is working. Networking has three main goals: 1) facilitating the exchange of information among BCN grantees and other relevant organizations, 2) helping grantees to find partners to enhance their chances of fulfilling project and policy goals, and 3) enabling BCN to communicate its results. For example, in India, BCN staff and grantees met for a day with members of the Joint Forest Management Network's Ecology and Economics subgroup to discuss ways in which members of the two groups could collaborate in the future in each of these three areas.

Enterprise managers at Crater Mountain Wildlife Management Area in PNG. Photo by BCN Staff.

EXHIBIT 4A
The Five Program Modules of the Biodiversity Conservation Network (BCN)

PROGRAM MODULE OBJECTIVES	FY1995 ACTIVITIES/OUTPUTS	INDICATORS OF ACCOMPLISHING OBJECTIVES	FUTURE NEEDS
A. DEVELOP BCN CONCEPT AND INSTITUTIONAL STRUCTURE			
Develop BCN Concept			
Refine understanding of the BCN Concept	Developed a conceptual model of the overall BCN program (see BCN Workplan)	Conceptual model enables BCN to develop measurable impact indicators of performance	Continue to refine model as necessary
Develop/Improve Institutional Structure and Processes			
Expand BCN presence in Asia/Pacific to enhance ability to communicate with grantees & provide tech support	Hired additional staff; pursued a decentralized staff structure	Field based staff now posted in Jakarta, Manila, and New Delhi	Continue to expand BCN presence in Manila field office and other relevant countries
Enhance BCN capacity in Washington to administer program & provide technical support to grantees	Refined staff roles; Worked with several consultants and interns	Internal quality audits indicate systems have improved	Continue to enhance staff abilities; Conduct mid-term program evaluation (Jan 96)
Improve BCN's abilities to manage technical and financial aspects of grants	Refined systems for handling & tracking financial and technical reports	Offices now tracking and promptly responding to incoming reports	Continue to improve office systems and grant management skills
Improve financial control systems to provide real-time information on BCN and grantee finances	Interactive spreadsheet models developed	Scenario planning capabillity being developed	Update models for DC and field-based staff
Improve BCN Grantees's financial management capabilities	Worked extensively with several grantees on financial systems following their A-133 audits	Grantees meeting AID requirements on a timely basis	Continue to refine financial management systems and provide assistance where necessary
Continue to improve communications with USAID Bureaus & Missions and US-AEP	Continued to brief USAID and US-AEP staff through written documents and oral presentations	Feedback on BCN activities has been positive; BCN staff involved as advisors in other projects	Continue to work closely with Washington and Mission offices

EXHIBIT 4B
The Five Program Modules of the Biodiversity Conservation Network (BCN)

PROGRAM MODULE OBJECTIVES	FY1995 ACTIVITIES/OUTPUTS	INDICATORS OF ACCOMPLISHING OBJECTIVES	FUTURE NEEDS
B. SELECT PORTFOLIO OF PROJECTS			
Work with Groups to Develop High Quality Projects and Proposals			
Award Planning Grants to enable proponents to develop high quality projects	Planning Grant process completed with a total of 34 grants awarded	Most Planning Grant recipients (including ones not getting Imp. Grants) found process very helpful	Track projects that did not receive implementation funding to assess Planning Grant impact
Improve potential grantees's project design capabilities	Provided susbstantive feedback on all proposals regardless of funding decision	Written and oral feedback from applicants stated that the review process helped them develop capacity	None
Select Portfolio of Implementation Grant Projects			
Build portfolio of Implementation Grant projects across key determinants affecting conservation	Developed frameworks for segmenting portfolio by key determinants	Diversified project portfolio developed	Continue to analyze portfolio and refine key determinants
Refine proposal review and selection process to ensure fairness, equity, and high quality standards	Review forms and meeting procedures revised to incorporate learning	At least 20 people reviewed each of 34 Implementation Grant proposals considered for funding	BCN staff to develop ways to keep Review Committee involved in the program
Select implementation projects	A total of 28 proposals were reviewed by the BCN Peer Review Committee	A total of 20 grants have been approved by the Review Committee	Project selection complete
Write contracts for implementation grant projects	Awarded total of 15 Implementation Grants; 5 more are in contracting stage (Annex A1)	Grants awarded in a timely fashion	Complete grant award process
Award small grants to complement major project activities and address portfolio gaps	Criteria for small grants developed; 7 small grants awarded	None to date; most small grants awarded only recently	Continue to award grants with co-financing where possible; Assess impacts of grants
Monitor Grants in Portfolio to Ensure Quality			
Ensure that grantees are meeting quality standards	Reviewed all implementation grants; adjusted funding levels as necessary	Two projects that were not performing as anticpated were terminated or had funding reduced	Continue to monitor project quality and respond as necessary

EXHIBIT 4C
The Five Program Modules of the Biodiversity Conservation Network (BCN)

PROGRAM MODULE OBJECTIVES	FY1995 ACTIVITIES/OUTPUTS	INDICATORS OF ACCOMPLISHING OBJECTIVES	FUTURE NEEDS
C. ASSIST IN IMPLEMENTING PROJECTS (ENTERPRISES AND MONITORING)			
Assist Grantees in Implementing Project Enterprises			
Work with proponents to enhance their capabilities to manage enterprises and projects	Provided technical assistance while visiting sites & arranged consultancies	Reports from grantees indicate TA and consultancies have been helpful	Continue to assess & provide TA where required; Focus on enterprise & market development
Assist Grantees in Developing and Implementing Monitoring and Evaluation (M&E) Plans			
Develop methodology for assisting grantees to develop and implement quality monitoring plans	Methodology was developed in conjunction with grantees; Monitoring guidelines developed	Response to methodology during the workshops has been positive; Non-grantees requesting methods	Continue to refine methods
Assist proponents in developing & implementing monitoring plans that meet needs of communities, grantees, and BCN	Held 3 Monitoring Workshops for representatives of all projects (Section 2.1 & Appendix B)	Workshops given high ratings by participants; M&E plans are showing improvement	Work closely with groups to develop and implement their M&E plans
Link monitoring information to grantees's ultimate policy goals	Reviewed monitoring plans; Began to identify potential policy impacts	None to date	Continue to work with grantees to refine monitoring plans to meet policy objectives
Ensure that BCN is Collecting Information about Projects			
Increase knowledge about BCN funded projects	Visited 22 project sites	Knowledge about sites has improved; Insights have been used to modify projects	Continue to visit sites on a regular basis; obtain conceptual models for all sites
Enhance quality of information received from grantees & refine the focus of the reports	Developed system for tracking and responding to technical reports sent in by projects	Quality of technical reports is improving	Continue to refine report formats to reduce burden on grantees, but meet BCN information needs

EXHIBIT 4D
The Five Program Modules of the Biodiversity Conservation Network (BCN)

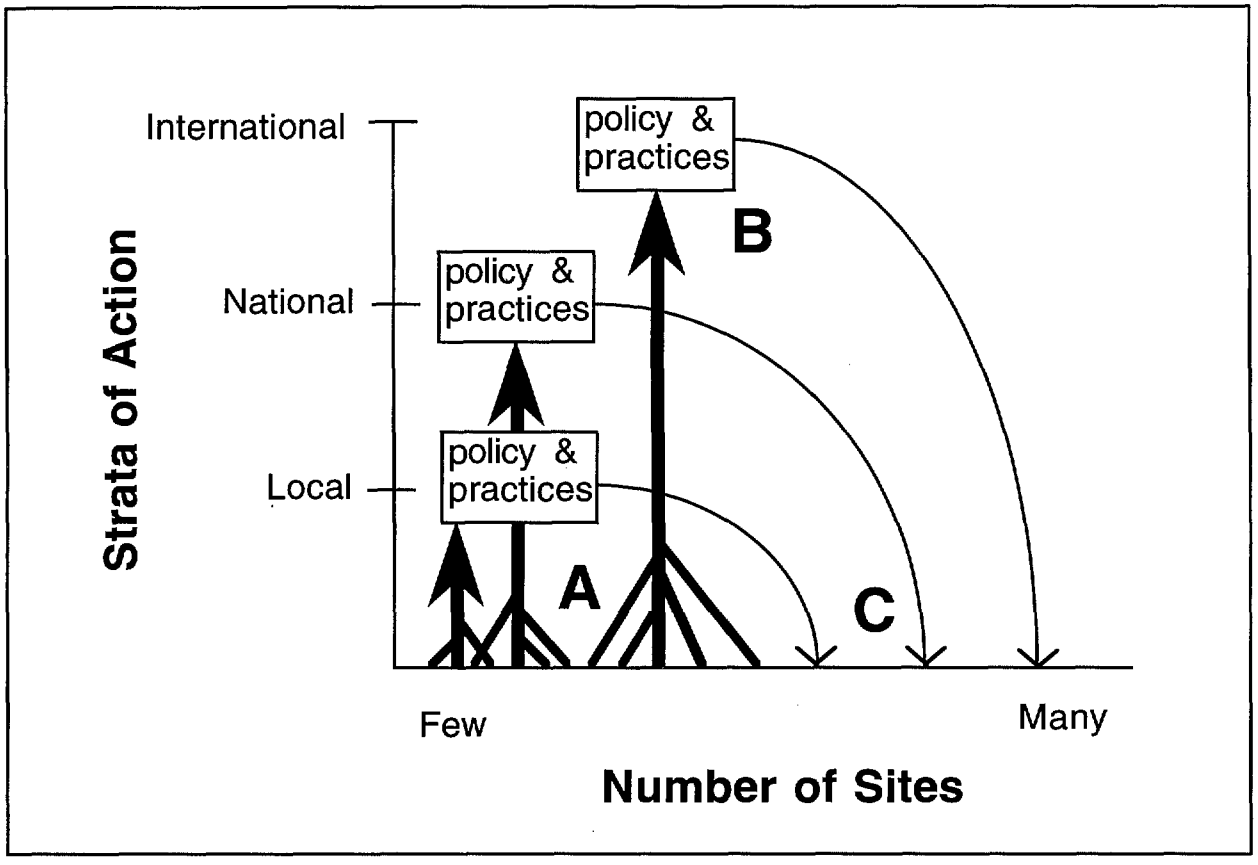
PROGRAM MODULE OBJECTIVES	FY1995 ACTIVITIES/OUTPUTS	INDICATORS OF ACCOMPLISHING OBJECTIVES	FUTURE NEEDS
D. COLLECT DATA AND ANALYZE RESULTS			
Develop and Implement Analyses with Grantees			
Plan analyses that will be conducted to test hypothesis	Began structuring form and content of analytical efforts (Section 2.4)	None yet	Continue to develop
Build cross-site comparisons based on key determinants to conservation	Began developing database system to organize findings; extract and enter data from reports and visits	None yet	Continue to develop in conjunction with broader BSP activities; promote cross-site visits
Design database; Extract data from reports and site visit forms; Enter in database	None yet	None yet	Begin as needed
Conduct analyses & use results to recommend changes in projects & develop lessons learned	Began considering preliminary findings, results, & emerging trends	Preliminary observations developed; several projects have been modified accordingly	Continue to develop
Develop Relations with Other Groups so as to Expand "Sample Size"			
Develop links with other groups doing similar research so as to be able to exchange data/results	Continued developing relations with various groups and outlining potential collaboration	Plans for collaboration have been developed with various groups	Continue to develop existing plans and seek others

EXHIBIT 4E
The Five Program Modules of the Biodiversity Conservation Network (BCN)

PROGRAM MODULE OBJECTIVES	FY1995 ACTIVITIES/OUTPUTS	INDICATORS OF ACCOMPLISHING OBJECTIVES	FUTURE NEEDS
E. COMMUNICATE RESULTS TO VARIOUS CLIENTS [1]			
Determine Who Clients are and What their Needs Are			
Determine who clients are and what their informations needs are	Developed a plan for surveying client information needs and began pilot interviews	None yet	Continue with survey
Communicate Results to Clients			
Build database of project photos and information in other media for presentations	Continued to add to slide data base	Slide data bases containing photos of all sites are in place in DC and Manila	Continue with slides; Develop video productions to present other information
Publicize purpose, approach, and results of BCN/US-AEP/USAID	Developed BCN presentation & gave it to dozens of different groups	BCN has become better known	Continue presentations at appropriate conferences, etc.; Present at USAID
Produce required reports and other "deliverables"	Wrote all required reports; Met AID/US-AEP information requests	Feedback from Missions & Washington offices has been generally positive	Continue to produce required reports
Develop Networking Opportunities with Other Groups Doing Similar Work			
Develop networking activities	Undertook activities in the Philippines, India, Indonesia, and PNG	Identified potential networking partners in all countries with grants	Continue to refine networking strategy & functions
Ensure that other donors and practitioners benefit from BCN experience and do not "reinvent the wheel"	Shared BCN's experiences with groups in US and abroad	None yet	Continue this process

[1] BCN primary clients include 1) communities and proponents that have received grants, 2) USAID & US-AEP Offices and Missions, and 3) the broader conservation and development community including the members of the BSP Consortium

EXHIBIT 5
BSP/BCN Strategy for Impacting Policy



Information collected from a few clustered sites (Region A) is used to influence policy and practices at local, national, and international levels (Region B) which in turn affects biodiversity conservation at many additional local sites (Region C).

Note that BCN's role in this process is to work with local organizations to assist in collecting information that can then be provided to decision makers within the appropriate policy making institutions.

2. SELECTED DISCUSSION TOPICS

2.1 Project Based Monitoring: A Key to BCN's Success

Highlights

The Challenge

- Project based monitoring is a critical key to BCN's success in enabling project teams and the BCN program to get the information needed to fulfil their respective goals.
- Constraints to monitoring include each project's management's lack of time, the lack of coordination among members of project teams, and at a program level, the wide diversity of projects that makes it impossible to develop prescribed "cookbook" methodologies for doing monitoring.
- Existing monitoring plans tend to be "process-oriented" rather than "impact-oriented."

Activities Leading to a Solution

- There has been an evolution in BCN's approach to monitoring that has resulted in the development of a methodology for designing and implementing impact-oriented monitoring plans in the context of the project cycle.
- In the past year, BCN has held workshops attended by representatives of all projects at which this methodology has been presented.
- Although it remains to be seen whether monitoring plans will be fully implemented and will collect necessary data, at this point, all indications are that the new methodology has helped groups make substantial progress in developing and refining these plans.

Introduction: Why Project Based Monitoring is both Critical and Challenging

The commitment to having grantees conduct comprehensive monitoring of their projects has been one of the core distinguishing features of the BCN program. These project based monitoring efforts are critical to the success of the BCN in that they:

1) Provide communities and their partner organizations with the information that they need to manage an ecologically, socially, and financially sustainable enterprise, and

2) Enable the BCN program to collect the information that it needs to test its core hypothesis regarding the effectiveness of these enterprise-based approaches to conservation.

Although the BCN has long recognized that project based monitoring is critical, we have also found that working with project proponents to develop and implement their monitoring plans has been extremely challenging.

Perhaps the most important factor constraining monitoring efforts on a project level has been the project staff's lack of time. At the start of their Implementation Grant, project teams are faced with a host of problems to solve including establishing and operating one or more enterprises, understanding and maintaining complex social relationships with and between

community members, dealing with relevant government agencies, and meeting the BCN's administrative requirements. It is thus not that surprising that despite the best of intentions, "the urgent takes precedence over the important" and the design and implementation of monitoring efforts tend to be postponed. Another factor that often constrains monitoring efforts is that most projects involve a consortium of participants, often with different skills, interests, and orientations. These various participants are typically responsible for conducting different components of the monitoring efforts. Ensuring that these participants have a common conception of project goals and objectives, coordinate their work schedules, and are able to integrate their analyses is a very labor intensive process. Typically, the logistical requirements take longer than anticipated and as a result, monitoring can easily slip or take place in an inefficient manner.

For their part, the BCN staff also face a number of challenges in assisting grantees to develop and implement their monitoring plans. The most important constraint has been the wide diversity of the projects in the BCN portfolio in terms of biological and social contexts, enterprise types, and backgrounds and skills of the different groups implementing projects. This diversity has meant that from the beginning, it has not been possible for BCN to develop a prescriptive monitoring "cookbook" that would uniformly apply across all BCN funded projects. Instead, BCN could only develop a protocol for assisting projects to develop monitoring plans that enable them to meet their specific needs within the context of available resources. Another constraint is that existing monitoring plans often tend to be more "process-oriented" than "impact-oriented." Although documenting processes is necessary to show that projects are completing planned activities, it is not sufficient to demonstrate that the project is achieving its intended results.

In light of the importance of monitoring and these substantial challenges, the BCN made monitoring the primary focus of its activities in 1995. In the remainder of this section, we discuss the evolution of the BCN monitoring efforts, the results to date, and future plans.

Steps in the Evolution of BCN Monitoring Efforts

Initial program design: Although the original BCN Request For Proposals had a unique stress on the importance of monitoring and outlined BCN's willingness to provide funds for these activities, it provided few details as to how grantees should develop and implement monitoring plans or how BCN staff might assist them in these efforts.

Development of monitoring questions -- Monitoring Matrices and Guidelines: As a first step towards assisting groups in developing appropriate monitoring plans that meet both their project's needs and the needs of the overall BCN, the BCN staff worked with experts in the field to develop lists of monitoring questions from which grantees could draw those relevant to their projects. These lists were first presented in the biological, socioeconomic, and enterprise question matrices published in BCN's *1994 Annual Report.* These matrices were then

condensed into a list of questions presented in the *Guidelines for Monitoring and Evaluation of BCN-Funded Projects* that were circulated as part of the BCN March 1995 Six-Month Report.

Developing a common set of questions -- The Bangalore Workshop: Although many project implementors found the questions in the Matrices and Monitoring Guidelines developed by BCN staff to be helpful in thinking about designing monitoring plans for their particular project, the guidelines offered no suggestions as to which specific questions might be most important for either individual projects or the overall BCN program. It thus became apparent that there was a need to hold workshops for representatives of all BCN supported projects that could be used to both enable BCN to work with grantees to develop a *Common Set of Monitoring Questions* and provide a chance for BCN staff to encourage groups to move forward with the development of their plans. The first of these workshops, which was held in May, 1995, in Bangalore, India, included representatives of the nine projects in South Asia that had BCN Planning or Implementation Grants.

The workshop's goals were to:

1) Facilitate networking among BCN grantees and other biodiversity project personnel in South Asia,

2) Work with grantees to develop a common understanding of what monitoring is and why it is important,

3) Develop a "common set" of questions for biological, social and enterprise level monitoring that need to be addressed across all BCN-funded projects,

4) Assess methodologies that can be used to answer these questions, and

5) Work with grantees to refine their site-specific monitoring plans.

In general, based on participant evaluations and the comments of BCN staff, the Workshop was very successful in achieving the first three of these goals. There were some difficulties, however, in achieving the fourth and fifth goals. In the case of methods, these difficulties were largely a function of the limited time available in the workshop format. In the case of refining the monitoring plans, on the other hand, it seemed linked to the fact that although groups understood what questions were important to address in a general sense, they did not necessarily understand how to select the specific questions that were most relevant to their project.

Monitoring in the context of the project cycle -- The Manila Workshops: The problems identified at the Bangalore Workshop led to an expansion of the materials presented at two subsequent workshops held in September 1995 in Los Baños, the Philippines for grantees from

Southeast Asia and the Pacific. At the Bangalore Workshop, the BCN introduced the concept of monitoring being part of the Project Cycle in Workshop sessions (see Fig. 1 in Appendix B), but moved straight into the development of a monitoring workplan. In analyzing the results of the Bangalore workshop and planning for Los Baños, the BCN staff realized that to develop truly effective monitoring plans, it would be necessary to begin with Project Conceptualization and Design. As a result, the goals for the Los Baños workshop were modified from Bangalore changing the third goal and adding a sixth goal as follows:

3) Enable grantee representatives and BCN staff members to discuss monitoring in the context of the project cycle, including particularly the development of a conceptual model, formulation of project goals and objectives, and the development of a monitoring plan that includes indicators, methods, and plans for data collection, analysis, and use.

6) Identify follow-up actions and technical assistance to improve monitoring and evaluation efforts.

Consequently, the workshop schedule was expanded to allow more time for these additional components. An example of the procedure that a group followed in the development of its monitoring plan during the Los Baños Workshop is presented in Exhibits 6A - 6C. In addition, the agenda and instruction sheets from the Workshop are presented in Appendix B.

At the Los Baños workshops, the BCN was able to accomplish most of its stated goals (with the one exception being that, again, there was not enough time to cover methods). In particular, all of the groups made substantial progress in developing conceptual models for their projects and in completing project outlines and monitoring workplans for at least one or two project objectives. At the end of the workshops, participants seemed well placed to take the process home with them and continue to work on developing complete plans. To fulfil Goal 6, BCN staff worked out a "Next Steps" agreement with each project that specified a timetable in which components of the monitoring plans would be completed, and reviewed how the project and BCN staff would work together in the future.

Results of 1995 Activities and Future Plans

Based on formal and informal feedback from the groups participating in the Los Baños Workshop (Exhibit 7), there are strong indications that the BCN/BSP has now developed an effective protocol for working with groups to develop monitoring plans. This result is further supported by the clear conceptual models that many groups have developed. Key features of the "Monitoring in the Context of the Project Cycle" approach that BCN/BSP has developed include:

- ***It is impact oriented:*** The BCN/BSP approach enables project teams and BCN staff to clearly see what specific indicators need to be monitored in order for a project to be able to successfully achieve its goals and objectives.

- ***It provides a means to integrate biological, socioeconomic, and enterprise monitoring components with one another and within the overall project:*** By developing the monitoring plan in conjunction with the project plan, the approach enables groups to integrate these components so as to increase both efficiency and effectiveness.

- ***It enables people to teach themselves:*** By teaching people the process of developing a sound monitoring plan rather than merely the content of the plan, the BCN/BSP approach enables participants to both teach themselves and, hopefully, share their knowledge with other members of the project team.

- ***It provides a useful vehicle for discussing projects:*** One of the most exciting things about the BCN/BSP approach presented at the workshop was the degree to which the conceptualization process enabled the various project team members to openly discuss their understanding of the project and resolve divergent views and opinions.

- ***It is empowering:*** As one participant at the workshop said in describing the BCN/BSP approach "In the past, the foreigners used to come in and tell us what things to do without telling us why these things are important. Now we feel like we can develop an understanding of why we are taking all these steps."

At the writing of this report, a month after the Los Baños Workshop, it is clear that BCN has achieved its process objectives in holding workshops for representatives of all its projects. It remains to be seen, however, whether this process will enable BCN to achieve its ultimate goals. Indicators of achieving these goals that will be tracked in the coming months include whether the participants in the workshop are able to return home and pass the information they learned to their colleagues, whether they will be able to design complete monitoring plans, and most importantly, whether these plans are implemented and produce valuable information that is then used to improve the quality of the overall project.

EXHIBIT 6A
Project Conceptualization

The first section of a complete monitoring plan is a *conceptual model* of the overall project. This model should be a diagram of a set of relationships between certain factors that are believed to affect the project's target condition. Initially, the conceptual model is drawn to model the world as if the project did not exist. One example of an initial conceptual model is presented on the next page using a draft version of the model developed by the Pacific Heritage Foundation (PHF) at the Los Baños workshop. Factors that the project hopes to influence are then subsequently expanded to incorporate the project's activities (Exhibit 6B). A key premise behind the development of conceptual models is that the process "is an art and not a science." To this end, the model should not try to incorporate every factor and every relationship, but should only include those that are most relevant to the project.

Setting up a portable sawmill at the PHF site in East New Britain, PNG. Photo by BCN Staff.

Exhibit 6A -- continued

Pacific Heritage Foundation, PNG
Conceptual Model -- Part I
Draft Version: September 1995

EXHIBIT 6B
Project Outline

The second component of a monitoring plan is a *Project Outline* of goals, objectives, activities, and assumptions. A project's *goal,* which is a general statement of a desired state to which a project is directed, should come from the target condition in the conceptual model. Project *objectives,* which are specific statements of desired accomplishments or outcomes, should be related to the factors that the project hopes to influence. Good objectives are timebound, specific, impact-oriented, measurable, and realistic. Finally, project *activities* are descriptions of actions that will be undertaken to reach objectives and thus the goal. Sample goals, objectives, and assumptions for the PHF project are provided below. The activities are then added into a revised conceptual model presented on the next page.

Worksheet 1: Goals, Objectives, Activities, and Assumptions

Goal: Conserve the forests, wildlife, reefs, and rivers of Papua New Guinea for future generations.
Objective #1: Within 6 months from the start of each of 5 small-scale logging projects in the Bainings area income increases by 200 Kina per week for each community.
Project Activities for Objective #1: - Provide enterprise loans. - Provide enterprise training and technical assistance. - Provide marketing assistance.
Assumptions: - Money from clans is divided among all households. - Clans are able to run enterprises with these levels of training.
Objective #2: 80% of clan chiefs in the project site know about the importance of biodiversity after 1 year.
Project Activities for Objective #2: - Hold awareness workshops 4 times a year with clan chiefs. - Take all clan chiefs to visit areas with large scale logging and community logging.
Assumptions: - Education given to chiefs will be transferred to other community members.

Exhibit 6B -- continued

Pacific Heritage Foundation, PNG
Conceptual Model -- Part II
Draft Version: September 1995

EXHIBIT 6C
Monitoring Workplan

The third component of a monitoring plan is a *Monitoring Workplan* that lists the specific impact and process *indicators* that will be measured for each goal, objective, or activity, the *methods* that will be used to collect the data, where, when, and by whom data will be collected, and how results will be used. An example of part of the workplan for the PHF project is presented below.

Worksheets 2a and 3a: Monitoring Workplan for the PHF Project -- Draft Version: September 1995

Items	Indicators	Methods	Where	When	Who	Why
Goal: Conserve the forests, wildlife, reefs and rivers of Papua New Guinea for future generations	• Forest & reef area • Hornbill & Bird of Paradise and other indicator species • Ecosystem functioning	• Mapping -aerial photos -surveys • Observations -census • Water samples	• project site • forest site • project site	• Start and end of project • 2x/month	biologist and community	Have goals been achieved?
Objective 1: Increase community income through small-scale logging projects	• Wages taken home/family • Number of new items in the house (e.g., pots, cups, radio)	• Survey/personal interview report • Household survey	• Project site/ office • Homes	• Every 6 months • Yearly	• Project Manager • Field Officers	Has income increased?
Activity: Loans	Number of loans approved	Count	Office	Yearly	Project Manager	Are loans being made?
Activity: Training	Number of people trained	Count	Village	Yearly	Project Officer & Village Extension Officer	Have people been trained?
Activity: Marketing	Cubic meters of timber sold	Count	Processing site	Weekly	Project Officer	Is timber being sold?
Objective 2: Increase knowledge of chiefs	Percentage of chiefs with knowledge of environmental issues	Interviews	Project site	1 month before & 1 month after training	Project Officers	Is training required? Is training working?
Activity: Hold training 4 times a year	Number of workshops held	Count	Office	Every 6 months	Project Manager	To ensure training
Activity: Cross site visits	Number of sites visited	Count	Office	Every 6 months	Project Manager	To ensure training

EXHIBIT 7
Summary of Participant Workshop Evaluations

The following table lists the summary results from participant assessments of the 3 monitoring workshops. Percentages are based on answers to yes/no questions; numerical scores are averages of rankings on a scale of 1 to 5. Blanks indicate questions that were not applicable to that particular workshop or were not asked in the survey. Full details and copies of the survey instrument are available in the *BCN Reports on the Monitoring Workshops.*

Questions	South Asia	Southeast Asia	Pacific
	% or Mean Score on Scale of 1-5		
Sufficient time was devoted to networking	75% agreed	100% agreed	88% agreed
Time spent with other grantees was useful	100% agreed	86% agreed	80% agreed
Presentations by other groups were interesting	3.9	3.7	4.5
The introductory session on monitoring was useful	4.2	4.3	4.6
Sessions on developing common set of questions were useful	3.9	-	-
Sessions on developing a conceptual model were useful	-	4.3	4.7
Sessions on project goals, objectives, indicators, and activities were useful	-	4.2	4.7
Options for various methods were adequately explored	3.8	3.3	4.4
Work on project monitoring plans was useful	4.5	4.1	4.5
Adequate time was spent on each workshop activity	3.6	3.7	3.6
More time was needed for the workshop	63% agreed	-	-
The workshop location was satisfactory	4.5	4.1	4.9
The overall workshop was satisfactory	4.6	4.0	4.6

2.2 Involving Organizations with Business and Community Development Experience in BCN Projects

Highlights

A Need for Organizations with Business Experience as Collaborators in BCN Projects

- Initially, BCN envisioned that it would fund projects with a broad range of collaborators including groups with development and business experience who could help core enterprises develop production, marketing, and management strategies;
- Few proposals to the BCN came, however, from community development organizations and private sector companies and the proposals received from these groups were often of lower quality;
- Although BCN has funded a number of project teams with strong enterprise backgrounds, others in the portfolio are being implemented by groups with less enterprise and community development experience;

Steps the BCN Staff is Taking to Further Strengthen Enterprises

- To strengthen these groups that have less enterprise experience, BCN staff are working to get community development and enterprise organizations involved in projects retroactively.
- BCN staff are actively encouraging and assisting grantees to establish management and marketing linkages with enterprise development NGOs and with the private sector;
- BCN is using its Small Grants program to help BCN Grantees understand how best to position their products so as to compete in the relevant market segments and to optimize benefits for the communities they seek to assist.

A Need for Organizations with Business Experience as Collaborators in BCN Projects

In its initial conception, BCN envisioned that it would fund projects with a broad range of collaborators including conservation-oriented NGOs, community development-oriented NGOs and agencies, universities and other research groups, and private for-profit enterprises. With these broad collaborative teams, BCN hoped that each project would have sufficient skills and capacity to address the wide range of issues that it faced. For example, BCN thought that a given project team could draw upon its members from conservation and research backgrounds to conduct its biological monitoring efforts. Similarly, it was hoped that the same project could rely on team members with community development and business experience to help the core enterprises develop effective production, marketing, and financial management strategies.

The BCN received more than 400 proposals and concept papers in response to its request for proposals. An analysis of the proposals received, however, revealed that while most of the proposed projects involved at least one group with experience in conservation, there were few proposals from projects involving groups with experience in community development and even fewer involving groups with experience in business. For example, in looking at the classifications of lead organizations submitting project proposals, only about 18% of all applicants had a community development organization as its lead group and only 7% of the proposals came from private businesses. In comparison, conservation organizations were the

lead group for 45% of the proposals and universities and research institutions submitted the remaining 30%. Overall, fewer than one-third of all proposals had project partners with experience in business.

In addition to the differences in the quantities of proposals submitted by the different groups, there were also striking differences in proposal quality. Most of the community economic development and private sector organizations that submitted proposals failed to present clear linkages between the viability of the proposed enterprises and the conservation of local biodiversity. Furthermore, proposals from the community economic development organizations tended to focus on the rehabilitation of relatively degraded habitats rather than the conservation of more pristine areas, while few of the private sector proposals demonstrated convincingly that local people would benefit from the proposed enterprises. This disappointing response comes despite concerted "second phase" efforts by BCN staff to encourage economic development and private sector organizations to submit concept papers

Although BCN has funded a number of project teams with strong enterprise backgrounds, as a result of the low quantity and quality of proposals received from groups with enterprise experience, the BCN has had to select a portfolio of projects in which some groups have had limited community development and enterprise experience. Accordingly, a major focus of BCN staff activities has been and will continue to be to get community development and enterprise organizations involved in these projects in a retroactive fashion.

Steps the BCN Staff is Taking to Further Strengthen Enterprises

As a first step in this process, BCN staff are actively encouraging grantees to establish management and marketing linkages with enterprise development NGOs and with the private

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BOX 2. Involving Community Development and For-Profit Organizations in BCN-type Projects in the Future

Follow-up discussions with community economic development organizations have revealed that most of these organizations felt that applying to BCN would be too much of a departure from the traditional focus of their work. These organizations also believed that the program's stringent requirements regarding biological monitoring would probably preclude them from submitting competitive proposals. Many also felt that BCN's focus on areas containing biodiversity of international significance was overly restrictive since few of these organizations operate in such places (given the relatively low human population densities and logistical barriers to market entry for conventional agricultural products). Discussions with members of for-profit enterprises revealed similar sentiments as well as an unfamiliarity on the part of entrepreneurs in applying for grant funds through a competitive Request for Proposals process. It thus seems clear that any future efforts to build on the experience of the BCN to promote enterprise-based approaches to biodiversity conservation will need to take a different initial approach so as to be able to identify and meet the needs and interests of these types of organizations and thus involve them from the onset.

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sector as they develop their enterprises. Some grantees have developed such linkages on their own, and several others are now also beginning to do so with BCN support (e.g., through cross-project interactions).

As a second step, BCN is supporting enterprise development consultants to provide technical assistance to a number of grantees to help them develop and refine business plans and marketing strategies. During the course of such consultancies, several grantees have come to the conclusion that instead of relying upon personnel and resources currently involved in the project, they will need to recruit more experienced staff in order to manage their enterprises successfully. Other grantees have realized that it will be advisable to develop marketing relationships with existing trading companies rather than seeking to market products directly to end users themselves.

Finally as a third step, through its small grants program, BCN is supporting a small number of sub-sector studies to analyze the "value addition" dynamics and the size and structure of commodity and service markets that are of common interest to BCN grantees at the sub-national, national, and regional levels. These studies are intended to assist BCN grantees, and other conservation and development practitioners, to understand how best to position their products so as to compete in the relevant market segments, and to optimize benefits for the communities they seek to assist. An advantage of these sub-sector studies is that they can help grantees identify companies that may be appropriate business partners. Another benefit is that these studies can help to identify other community organizations to collaborate with in negotiating better terms of trade and achieving economies of scale in processing and marketing activities. BCN is currently providing support for a sub-sector study of natural resins in Southeast Asia, and is funding further analysis and site-specific application of recommendations made in a completed study of the rattan industry in the Philippines. During the next fiscal year, BCN staff anticipate supporting a number of additional sub-sector studies to help inform the work of BCN grantees.

2.3 Participation in BCN Projects as an Incentive for Conservation

Highlights

Participation as an Incentive for Conservation

- BCN is seeking to assess the extent to which participation in biodiversity-based enterprises provides an incentive for communities to conserve natural resources.
- To address this question, BCN project implementors and staff are tracking forms and levels of participation in relation to various project factors.

Levels of Participation in Projects and Enterprises

- Form and level of community participation in project design, implementation, and monitoring varies significantly within the BCN project portfolio;
- Selected significant variables in the study of community participation and enterprise development include: management capability at the local level, approach and philosophy of cooperating organizations, type of enterprise, community-level factors, and external factors.

Does Participation in Biodiversity-Based Enterprises Provide Incentives for Communities to Conserve Natural Resources?

In seeking answers to this question, BCN is analyzing several key issues: 1) how different types and levels of community participation generate benefits; 2) how community participation relates to the viability of the enterprises; 3) how different patterns of enterprise development affect resource management; and 4) how other factors, both external and internal to communities, significantly affect natural resource management.

Community participation is clearly a crucial component of a biodiversity conservation strategy based on enterprise development. BCN is particularly interested in the relationship between participation and the generation of benefits. Development experience shows that participation in a project or an enterprise does not necessarily lead to benefits. For example, women may be compelled to provide labor for activities that provide cash income for men, even though that income may not be made available to them or their children. Similarly, elites may control the labor or investment of others. In short, the form of participation -- labor, ownership of enterprise, decision making (e.g., board of directors), investment, contribution of intellectual property -- is as important, or perhaps more important, than the level of participation.

BCN acknowledges that participation also does not guarantee sustainability. A focus of the BCN analytical program will be exploring the relationship between participation and sustainability (in all its definitions) which depends on a complex set of circumstances. Without adequate controls and enforcement, for example, greater participation in an enterprise harvesting non-timber forest products could lead to diminishing supply of product due to higher rates of depletion of natural resources. In contrast, low levels of participation in an enterprise, perhaps due to competition from other income generating activities, could lead to

financially unsustainable enterprises.

Analysis of investment patterns at the local level may provide a deeper understanding of how participation in an enterprise relates to community benefits and sustainability. How are people using cash and other benefits? How does this investment affect natural resource management practices and vice versa? How do tenure and inheritance systems shape both investment decisions and natural resource practices, and what role do external factors such as market opportunities and constraints play?

To answer these questions, BCN project implementors with assistance from BCN staff are tracking forms and levels of participation in relation to benefit distribution, enterprise viability, and sustainability. In addition to project monitoring systems, BCN site visits, special studies, and other analytic activities allow BCN staff, consultants, and project participants to collect data and refine the analysis. BCN is designing analytical systems that will allow for comparisons among BCN sites.

Levels of Participation in Project Design, Implementation, and Monitoring

The form and level of community participation in project design, implementation, and monitoring varies significantly within the BCN project portfolio. Some projects began the design phase with a series of Participatory Rural Appraisals that brought community members and other stakeholders together to discuss options for setting up the project. In other cases, neither the community nor local staff contributed significantly to the design of the project, though typically individuals knowledgeable about the area wrote the proposal. Deadlines and externally-imposed standards for project design usually determined the need for the less participatory approach.

Setting up the enterprise may involve shifts from the original project design to bring about greater community participation to generate a higher level of benefit or to alleviate threats from nonparticipants. In the WWF/Natripal project (Palawan, Philippines), for example, project staff refashioned the rattan harvesting enterprise to meet the needs of local people for both cash and goods. A second example is the Environmental Research Division project (Bendum, Mindanao, Philippines). This project is setting up an abaca fiber enterprise, rather than working with depleted stocks of rattan as originally planned, as the abaca will allow for greater community participation and will thus hopefully generate sufficient income to prevent land sales. Finally, the TERI project (Western Ghats, India) has had to think about developing microenterprises for Soligas communities located at a distance from the main enterprise in order to involve them in the larger work of conservation.

BCN projects are taking a variety of approaches to setting up monitoring systems in relation to local communities. The community takes full control of monitoring in some cases, while in others monitoring is largely the work of outsiders. Elsewhere, consultants are working with local researchers, combining local knowledge with mapping and GIS, or training local people as monitors. The major goal of several projects is to obtain or strengthen local resource/land

tenure claims, and the "brokering" or translation of local systems of classification and resource use can provide the additional benefit of securing legitimacy for these claims.

Levels of Participation in Community-Based Enterprises

BCN has found a variety of approaches to community participation and enterprise development:

- In some BCN projects, communities run the enterprise. For example, the Ikalahan, an indigenous community, run the Kalahan Educational Foundation (KEF) in Nueva Viscaya, Philippines. The community submitted a proposal to BCN for help in expanding their markets and diversifying their products for an existing business making jellies out of wild fruits. Consultants assist with monitoring and a local NGO handles marketing, but all of the decision-making rests with the KEF.

- Enterprises can be based in communities, with management responsibilities phased in over time. Appropriate Technology International (ATI)/Nepal has created a community-based enterprise for processing oil from wild jatamansi and other plants. The design came from ATI, and outside managers are running the enterprise, but over time they are transferring management capacity to local people.

- If management of the enterprise is outside of the community, other mechanisms for generating community participation and benefits have to be created. The University of South Pacific (USP) is helping negotiate a bioprospecting enterprise between SmithKline Beecham and a community in Fiji, and significant discussions with the community are taking place to establish an equitable prospecting agreement. The enterprise itself, however, is not likely to employ many community members and its management base is outside of the community. Several steps will be taken to broaden collateral benefits.

The significant variables in the study of community participation and enterprise development include: management capability at the local level; approach and philosophy of cooperating organizations; type of enterprise (skills required, nature of market, scale); community-level factors such as cohesion, decision-making processes, and leadership; external factors such as other types of employment and income generation, policies and regulations that affect participation; and, donor requirements for project design and accountability.

We expect that empirical research on participation in community-based enterprises will have considerable value for other organizations using this model. Specific lessons regarding participation in BCN projects will be published in the years to come.

2.4 The BCN's Highest Priority Analytical Topics

Highlights

Analytical Goals

- A priority activity of the BCN will be collaborating with grantees and researchers to conduct analyses of information gained from projects;
- Analysis will be undertaken by BCN staff, BCN grantees, BSP staff, and other such organizations with an emphasis on communicating findings to appropriate audiences;

Topics Covered

- One set of topics relates to programmatic findings and their policy implications such as the impact of land or tenure rights or the structure of enterprises on conservation effectiveness;
- A second set of topics relates to methods and processes for setting up the grants program, monitoring, and conducting cost effective analyses.

The following list summarizes the highest priority analytical activities that the BCN started in FY 1995 or is planning to initiate in 1996. These analytical efforts will be based on information from the projects and will be undertaken by BCN staff, BCN grantees, BSP staff, and other such organizations with an emphasis on communicating findings to those in need of the information.

Programmatic Findings and their Policy Implications

1) *Issue:* ***Land Tenure and Resource Rights:*** What role do land tenure and resource rights play in enterprise-oriented approaches to conservation?

Audience: National government policy makers and national and international NGOs.

Description: This analytical effort will be undertaken in conjunction with World Resources Institute. The analysis will address a variety of questions such as how do different forms of land and resource tenure affect the types of enterprises that can be created and sustained? And, how do they affect the ability to conserve resources? In some cases, a form of land tenure may be given to local communities separately from permits to exploit resources. In other cases, communities have above ground but not below ground rights. Some communities find that informal tenure arrangements work better than more formal ones. This analysis, whose data will be drawn from site visit and technical reports, looks at how land and resource tenure affects local communities' and other stakeholder participation in the enterprises.

2) *Issue:* ***Enterprise Structure:*** BCN Grantees have established or further developed enterprises that are structured, in terms of community participation and ownership, in a variety of ways. What are the pros and cons of various structures?

Audience: Conservation and development organizations considering enterprise-based approaches to conservation.

Description: This document will discuss examples drawn from BCN projects on structuring community-based enterprises (where "community-based" does not necessarily mean "community owned"). Issues covered will include the implications of enterprise structure, scale, ownership, management, and use of resource base for different stakeholders in the enterprise. In addition, the document will discuss the impact of these factors on the community's ability and desire to conserve its biodiversity.

3) *Issue:* ***Community Participation:*** Does participation in biodiversity-based enterprises provide incentives for communities to conserve natural resources?

Audience: Conservation and development organizations considering enterprise-based approaches to conservation.

Description: This document will examine the question by analyzing how: 1) Projects define and act on community participation; 2) Enterprise structures and benefit sharing mechanisms evolve over time in response to community needs and capacity; 3) Different types and levels of community participation in enterprises generate benefits; and 4) Different types and scales of enterprise are related to community involvement in the project.

4) *Issue:* ***Linking Income Generation and Conservation:*** How can the experiences of BCN and other projects be used to provide guidance to future project designers interested in meeting the income needs of people living in forest areas while promoting conservation?

Audience: Field and urban based project designers and managers.

Description: This book will be written by BCN in conjunction with the Center for International Forestry Research (CIFOR). The book will contain ideas for NGOs or others thinking about ways to develop projects combining

conservation and income generation. The book will contain a general discussion of the link between conservation and biodiversity, discussions of the general factors involved, and about 50 examples of project ideas for linking the two.

Topics Regarding Methods and Processes

5) *Issue:* ***Monitoring in the Context of the Project Cycle:*** How can BCN's experiences with monitoring be captured to address the lack of practical tools for designing and implementing information collection, analysis and use systems for conservation and development projects?

Audience: Project managers and staff (NGOs, government agencies, scientists, and/or community members) at local, national, and international levels.

Description: This guidebook will be written in conjunction with the BSP's Analytical Team and will be designed to walk the reader through the various stages of the monitoring and evaluation (M&E) process. Topics that the guide will cover include fitting M&E in the context of the project design cycle, developing a conceptual model of the project, developing a project plan that includes goals, objectives, activities, and assumptions, and developing a monitoring workplan listing impact and/or process indicators for each goal, objective, activity and other bits of necessary information. The remainder of the plan then lists methods for collecting data to measure these indicators, where, when, and by whom these data will be collected, and how the data will be used. The guide will also advocate a "Reduction of Threat" approach to designing effective projects and M&E. The guide will be written to be as user friendly as possible and will contain extensive examples and illustrations.

6) *Issue:* ***Social Science Monitoring:*** How can BCN staff work with grantees to meet expressed interests in developing research strategies and methods in social science for biodiversity conservation?

Audience: BCN Grantees; Conservation and development NGOs.

Description: This document will provide an overview of different approaches, modes of analysis and methods and links to different resource materials. It will become a "living document" for people to discuss the pros and cons of different research strategies.

7) *Issue:* ***Cost Effectiveness of the BCN Approach:*** Is the hypothesis-testing, skill development, and formation of strategic partnerships approach of the BCN cost-effective at the individual project level and at the overall BCN level?

Audience: BCN/BSP, BCN grantees, USAID and US-AEP, government agencies, donors, conservation and development practitioners.

Description: This analysis will, in all likelihood, build on the significant work already completed by TechnoServe International, a private voluntary organization with international expertise in community-based enterprise development. The BCN will build-on Technoserve's work to develop a methodology suitable for "eco-enterprises" that the BCN can use to assess the cost-effectiveness of its projects.

8) *Issue:* ***Cost Effectiveness of Community-Based Monitoring:*** Are the approximately 30 percent of grant funds supporting monitoring activities being used in a cost effective manner?

Audience: BSP, consortium members, other conservation and development practitioners, USAID.

Description: This document will involve an analysis of the various biological, socio-economic, and enterprise monitoring techniques and methods being used by BCN grantees. It is intended to compare the costs and benefits (in terms of time, money and human resource requirements) from community, NGO and "scientific/technocratic" perspectives.

9) *Issue:* ***Establishing and Running a Program that Makes Grants and Does Research:*** What has the BCN learned to date in terms of the structure and process of establishing a grants program looking at conservation and enterprise development and simultaneously doing research on these issues?

Audience: Other donor organizations considering enterprise-based approaches such as the Foundation for the Philippine Environment, Kehati, Fundación Vida, USAID's Global and Regional Bureaus.

Description: The growing interest in establishing specialized funding agencies to support conservation and development activities has created a need for analyzing BCN's experience to date to generate lessons and

recommendations that can help to inform such efforts. This document will analyze the request for proposals (RFP) the BCN issued and the response it generated, the grant review process, the use of Planning Grants, provision of technical assistance, networking activities, project analysis, and grant administration. In addition, it will discuss the pros and cons of setting up a program that functions simultaneously as a donor and as a research organization.

An elephant at the UMass/TERI/VGKK site in the Western Ghats, India. Photo by BCN Staff.

3. BCN FINANCIAL SUMMARY

The financial summary of the BCN Program is presented below in Exhibit 8.

EXHIBIT 8
BCN Financial Summary

BUDGET ITEM	AUTHORIZED AMOUNT [1]	TOTAL OBLIGATIONS TO DATE [2]	DISBURSEMENTS FY 1993 10/92-9/93	DISBURSEMENTS FY 1994 10/93-9/94	DISBURSEMENTS FY 1995 10/94-9/95	TOTAL DISBURSEMENTS TO DATE
Salaries/Benefits	2,116,079	1,217,679	112,607	530,117	574,955	1,217,679
WWF Indirect Costs	1,464,633	782,417	84,821	350,808	346,788	782,417
Travel & Per Diem	620,542	265,928	3,841	127,650	134,437	265,928
Other Direct Costs	862,634	481,474	62,066	153,114	266,294	481,474
Tech. Assist./Advisory Grps	1,798,612	211,072	309	140,153	70,610	211,072
Small Grants	483,000	118,807	0	0	64,648	64,648
Grants	12,654,500	9,256,403	19,660	1,127,768	1,802,563	2,949,991
TOTAL	20,000,000	12,333,780	283,304	2,429,610	3,260,295	5,973,209

Notes:

[1] Original program was for five years; program now includes an 18-month no cost extension for 6.5 total years.

[2] Expenses for salaries, indirect costs, travel, other direct costs, and technical assistance are disbursed through 9/95. Expenses for grants are total Planning and Implementation Grants and Small Grants awarded through 9/95.

APPENDIX A: Implementation Grant Summaries

The following are descriptions of the twenty Implementation Grant projects underway or in the approval process during 1995. Grants are listed by region and country in the following order:

Region/Country	Lead Organization
South Asia	
India	The Mountain Institute
	Appropriate Technology International
	University of Massachusetts at Boston
Nepal	Appropriate Technology International
	King Mahendra Trust for Nature Conservation
Southeast Asia	
Indonesia	The Nature Conservancy
	World Wide Fund for Nature - Indonesia Programme
	Biological Sciences Club
	Harvard University Laboratory of Tropical Forest Ecology
	Rumsram Foundation
	Yayasan Dian Tama
Philippines	Kalahan Educational Foundation
	Environmental Research Division, Manila Observatory
	World Wildlife Fund - Philippine Program
Pacific	
Papua New Guinea	Conservation International
	Pacific Heritage Foundation
	Research and Conservation Foundation
Solomon Islands	The Nature Conservancy
	Conservation International
Fiji	University of the South Pacific

Country:	India
Title:	Sikkim Biodiversity and Ecotourism
Proponents:	The Mountain Institute (TMI) G.B. Pant Institute of Himalayan Environment and Development (GBPIHED) Travel Agents Association of Sikkim (TAAS) The Green Circle
BCN Funding:	$449,465
Proponent Contribution:	$291,498
Grant Period:	September 1, 1995 - August 31, 1998

The Himalayan state of Sikkim contains the world's third highest mountain peak (Khangchendzonga: 8,545 m), revered as the protective deity of Sikkim and renowned for its rhododendrons and other flowering species. Sikkim, which was only recently opened to tourism, is in fact one of the two most biodiverse areas in India. Several different ethnic groups -- Lepcha, Bhutia, Limbu -- live in the area, along with Tibetan refugees and Nepali immigrants.

Threats to Sikkim's biodiversity include agricultural land conversion, road construction, hunting, over collection of medicinal plants, toxic waste disposal, and fuel wood collection. A hydroelectric project is also underway. In addition, the Indian army, which patrols the areas due to Sikkim's proximity to China, places strains on nearby natural resources.

To counter these threats and build on the opportunity to provide benefits to local communities, TMI together with GBPIHED, The Green Circle (a local NGO), and TAAS are implementing a project designed to strengthen community-based ecotourism opportunities, build community environmental awareness at three sites, and provide economic incentives for participants to conserve the area's rich biodiversity. This project is particularly timely as the state government is eager to embrace policies that minimize the problems that neighboring states have experienced as a result of the rapid development of the tourism sector.

The project team will work in three sites: Yuksom-Dzongri Trekking Trail, Chungthang-Lachung-Yumthang Area, and Tshangu Lake. The team is planning to increase market demand for ecotourism products developed by TAAS and community members by surveying current market demand and improving marketing abilities, and improving the quality and diversity of the ecotourism products. In addition, environmental education, reduction of fuel wood use, and community mobilization will help prevent environmental degradation.

The Sikkim project has the potential to play a significant role in shaping sound ecotourism policy. A central goal of the project is to improve the policy environment and knowledge base for development of more effective biodiversity conservation and ecotourism linkages through planning and policy development.

Country:	India
Title:	Biodiversity Conservation Through Small Producers' Enhanced Commercial Utilization of Natural Resources in the Garwahl Himalayas of India
Proponents:	Appropriate Technology International (ATI) EDA Rural Systems Himalayan Action Research Centre (HARC) G.B. Pant Institute of Himalayan Environment and Development (GBPIHED)
BCN Funding:	$571,201
Proponent Contribution:	$803,397
Grant Period:	September 1, 1995 - August 31, 1998

The Garwahl district is rich in botanical diversity and is home to the endangered snow leopard, black bear, bharal deer, and musk deer. The principal threats to the region's biodiversity are unsustainable levels of fuelwood and fodder collection, grazing, and harvesting of non-timber forest products.

Appropriate Technology International (ATI) and its partners -- AT India, EDA Rural Systems, and Himalayan Action Research Centre (HARC) -- propose to establish community-based oak tasar silk and honey production enterprises in three watersheds in the Chamoli District of Garwahl, Uttar Pradesh. The *Antheraea proylei* silkworms use oak leaves as their food source. Proponents hypothesize that the increase in local incomes from silk cocoon production will provide an incentive to local people to conserve the village-controlled oak forests. The silk enterprise will be divided into a centrally run grainage that will produce silkworm seed (eggs) for sale to community members, household run rearing enterprises that will use oak leaves to rear the silkworms, and a centrally operated silk reeling and marketing enterprise that will take the cocoons and process them to form silk thread that will be sold to cloth manufacturers.

The honey enterprise will involve community-based honey production -- initially for local sale, but eventually for urban and international sale. Straw bee hives will be located next to people's houses, and the bees forage in natural forests, alpine meadows, and agricultural lands. Proponents plan to use environmental education activities to emphasize the enterprises' conservation linkages to local people. Both the silk and the honey enterprises will help strengthen local community forest resource management institutions.

An advisory council composed of community members and representatives of the partner organizations support the project manager, who coordinates the efforts of ATI and its collaborators. The manager is ultimately responsible for overseeing the enterprises as well as the monitoring. Although each enterprise will be managed by AT India and project staff, over time, control of the enterprise will devolve to community members.

Country:	India
Title:	An Integrated Approach Towards the Management of Tropical Forests for Extraction of Non-Timber Forest Products
Proponents:	University of Massachusetts/Boston (UMB) Vivekananda Girijana Kalyana Kendra (VGKK) Tata Energy Research Institute (TERI)
BCN Funding:	$610,404
Proponent Contribution:	$75,652
Grant Period:	December 15, 1994 - December 31, 1997

The Western Ghats is one of the most biologically diverse areas in South Asia. The Biligiri Rangan Hills, where the project team is working, contains elephants, gaurs, sambars, wild pigs, sloth bears, barking deer, and over 900 flowering plants. This richness led to the area being declared a Wildlife Sanctuary in 1972. The biodiversity of the Sanctuary is threatened, however, by overharvesting of forest products by local people and outsiders.

Tribal Soligas communities live within the Sanctuary. A local NGO, Vivekananda Girijana Kalyana Kendra (VGKK), has been working with Soligas communities since 1981. VGKK's initial mandate of providing medical care has evolved into integrated health, education, income generation, and environmental conservation programs. Under the direction of its leader and a board of directors composed mostly of Soligas, VGKK is a strong advocate of the Soligas people's interests.

With the BCN grant, VGKK is establishing several new enterprises which rely on the sustainable management and local processing of four different forest products: amla fruits, herbs, wild honey, and medicinal plant products. They are planning, for example, to produce herbal shampoos in sachet-size containers for sale to hotels. Community members harvest products and receive money from both collecting non-timber forest products (on a per unit harvested basis) and processing them (on a wage basis). Profits from the enterprises will go to community-wide projects such as schools, health clinics, and other development activities. Potential non-cash benefits include maintenance of the Soligas forest-based lifestyle and the health benefits from the use of locally collected medicinal plants. Women will be involved extensively in operating the enterprises since most of the products being collected have traditionally been collected by women as well as men.

The project also plans to help local people regain the control they once had over the forest by encouraging the Karnataka Forest Service to establish community forestry management initiatives in the area. The success of VGKK's efforts in the Western Ghats will help to build the case, in India and elsewhere, for the local management of natural resources.

The Tata Energy Research Institute (TERI) and the University of Massachusetts at Boston (UMB) provide technical assistance to VGKK on enterprise development and biological and social monitoring.

Country:	Nepal
Title:	Integrated Community Based Ecosystem for Humla, Nepal through Local Enterprise Development
Proponents:	Appropriate Technology International (ATI) Asian Network for Small-scale Agricultural Bioresources (ANSAB) The Humla Conservation and Development Association Institute of Forestry (IOF)
BCN Funding:	$549,995
Proponent Contribution:	$143,252
Grant Period:	January 15, 1995 - January 14, 1998

The Humla region of northwestern Nepal lies between two distinct botanical regions, the Western and Eastern Himalayas. This location, and the area's relative isolation, create a region of high floral diversity, including many valuable medicinal and essential oil plants. This complex ecosystem is threatened by overharvesting of these plants caused by increasing national and international demand for products from them, over grazing, and fuel wood and fodder collection.

Project proponents and local people have established an enterprise based on jatamansi oil, an essential oil used by perfume and cosmetic manufacturers. Local people harvest the jatamansi root from nearby alpine meadows using sustainable techniques, process it into oil on-site, and operate and maintain the processing equipment. By selling a processed product, enterprise participants are receiving more money than they did by selling plants in raw, bulk form. Proponents are hoping this additional income will create incentives to reduce the amount of raw plants local people collect and sell to outside traders. In addition, proponents will be working with villagers so that they gain more control over the resources that they collect from government-owned lands.

This project has the potential to broaden the Humla District Forest Office's acceptance of community-based management of local natural resources. Although practiced in many parts of Nepal, this approach to forestry management has not yet been implemented in Humla. The District Forest Officer has expressed an interest in working with proponents and local people to develop forest management plans for the region, an important first step toward community forestry management. The project also places a strong emphasis on working with women's groups, and on establishing mechanisms to allow communities to keep larger portions of the taxes levied on non-timber forest products.

This project works with the villagers living in the section of the Chuwa and Humla Karnali watersheds of the Humla District. Local people created the Humla Conservation and Development Association (HCDA), in Fall, 1993, during the Planning Grant phase to serve as the focal point for field operations and implementation work. ANSAB, a Nepal-based organization that works to commercialize agricultural and forestry related biotechnologies and monitor biodiversity, and IOF, part of Tribhuvan University of Nepal, are working closely with HCDA on the biological component of the project. ATI provides enterprise and social science expertise. ATI and ANSAB have years of experience establishing small scale enterprises using appropriate technologies.

Country:	Nepal
Title:	Promoting Local Guardianship of Endangered Species and Wildlife Habitats in Royal Chitwan National Park, Nepal
Proponents:	King Mahendra Trust for Nature Conservation World Wildlife Fund-US
BCN Funding:	$636,607
Proponent Contribution:	To be determined
Grant Period:	May 17, 1994 - May 16, 1997

Royal Chitwan National Park (RCNP), located in the southern Terai, is one of Nepal's major international tourist destinations. Each year thousands of trekkers and tourists visit the park to observe, often on elephant-back, endangered rhinoceros, tigers, deer, and monkeys. Unfortunately, the increase in the number of tourists and lodges in and around the park has been so rapid that tourism itself now represents a threat to the park's environmental integrity. In addition, communities living in the park's buffer zone, which have not benefited directly from the tourism revenues, have been barred from utilizing resources found within RCNP. Last year, the Nepali legislature began to consider methods by which a portion of tourism revenues can contribute to local conservation and development initiatives.

As a result, Nepal's Department of National Parks and Wildlife requested that the King Mahendra Trust for Nature Conservation (KMTNC), with BCN support, lead an effort to draft national legislation which will establish a mechanism by which 30 to 50 percent of revenue earned on tourism taxes will be shared with local communities. Village-based user groups will decide how the money earned from these taxes can be used to the communities' greatest benefit. KMTNC expects that the tourism revenue will serve as an incentive for local community members to reduce the external threats on the park and conserve its diverse biological resources.

In addition to assisting in the formulation of a national tourism tax policy, KMTNC and its partners are using BCN funds to continue creating woodlots in the parks' bufferzone. Proponents hope that the creation of 300 hectare woodlots will reduce long-term pressure to harvest fuel wood from the park. At the same time, the woodlots extend the park's habitat, thus providing more territory for fauna including especially the rhinos. The establishment and maintenance of these woodlots is the responsibility of local village user groups, who will eventually derive the greatest benefit from them.

RCNP's tourism potential and the woodlots are two core elements of a comprehensive conservation and development plan being designed by KMTNC, WWF-US, seven large tourism concessionaires (located within park boundaries), a small hotel owners' association, and village user groups. KMTNC, involved in the area for over ten years, is taking the lead on establishing relationships with local stakeholders (villages and hotel owners), local capacity building training, and in the socioeconomic monitoring. WWF's project manager, who has been working in the park on and off since 1975, is overseeing the establishment of the biological monitoring system and providing overall project management guidance.

Country:	Indonesia
Title:	Wildlife and Nature-Based Tourism Enterprises in Lore Lindu National Park, Central Sulawesi, Indonesia
Proponents:	The Nature Conservancy Sobek Expeditions University of Hasanuddin Directorate General of Forest Protection and Nature Conservation (PHPA) Environmental Bamboo Foundation
BCN Funding:	$584,892
Proponent Contribution:	$714,767
Grant Period:	August 1, 1995 - July 31, 1998

Lore Lindu National Park (LLNP) in Central Sulawesi is a UNESCO Man and Biosphere Reserve and was nominated as a World Heritage Site by the Government of Indonesia for its biological, cultural, and archeological importance. The area contains some of the largest unbroken tracts of forest within Sulawesi and is home to 73 percent of the island's species of land birds as well as several endemic and endangered birds and mammals. In addition to its biodiversity value, the area provides natural resources to help meet the basic needs of people living in and around the park. The parks' resources are threatened by encroachment, infrastructure development, and illegal harvesting rattan and other forest resources.

The Nature Conservancy used BCN's Planning Grant to examine the feasibility and potential conservation impact of two wildlife enterprises (honey hunting and apiculture, and butterfly ranching and farming) and three nature-based tourism enterprises (whitewater rafting, an ecolodge, and handicrafts center). During the implementation phase, the project team will take the lessons learned during the planning phase and focus on four elements: 1) Continuing to develop rafting/tourism, butterfly ranching and farming, and honey production; 2) Drafting a 25-year resource management plan with the Directorate General of Forest Protection and Nature Conservation (PHPA); 3) Developing, with CARE/Indonesia, a broader community development program; and 4) Ascertaining the impact of the above activities from social, biological, and economic perspectives. A critical component of TNC's monitoring program will be to assess the impact of the ongoing, widespread rattan collection in LLNP.

Each of these projects is integrated into other aspects of TNC's Sulawesi Parks and Partnership programs for LLNP, and fall under the umbrella of integrated conservation and development projects. In addition to developing ecologically sound enterprises and introducing conservation awareness programs, TNC also works with the Government of Indonesia on policy issues. The LLNP project in particular will allow TNC to work closely with PHPA on allowable access and use of protected areas.

The rafting component of this project has a strong management team behind it with a record of having established two other rafting ventures in Indonesia. The butterfly component also has a knowledgeable enterprise manager, who was primarily responsible for establishing the butterfly project in the Arfak Mountains on Irian Jaya for another BCN-funded project. The honey enterprise was designed by a former BCN-consultant with a Ph.D. in apiculture. TNC will provide overall project management and monitoring expertise.

Country:	Indonesia
Title:	Butterfly Farming Enterprise Development in the Arfak Mountains, Phase II-Implementation
Proponents:	World Wide Fund for Nature-Indonesia Programme (WWF-IP) Yayasan Bina Lestari Bumi Cenderawasih (YBLBC) University of Cenderawasih (Uncen)
BCN Funding:	$179,632
Proponent Contribution:	$115,760
Grant Period:	April 1, 1995 - March 30, 1998

The Arfak Mountains Nature Reserve (AMNR) protects lowland rain forest and montane moss forests in the Bird's Head region of Irian Jaya in eastern Indonesia. These forests support such rare and endemic species as tree kangaroos, bandicoots, Bird of Paradise, Vogelkop Bowerbird, and numerous birdwing butterflies. Human activities, however, threaten the biodiversity of the reserve. Agriculture, the collection of *gaharu* wood for fuel and construction, and poaching of some protected species by the Hatam, who live in and around the Reserve, pose the greatest threats.

Working with the Hatam and other Irianese living in the vicinity of the reserve, WWF-IP and YBLBC are developing an enterprise based upon the sale of butterflies raised in the reserves' bufferzone. The earnings from butterfly sales represent a potential alternative to some of the environmentally destructive practices undertaken by the Hatam. Environmental education and participatory biological and socioeconomic monitoring complement enterprise development.

The development of a viable, community-based butterfly farming enterprise, and the demonstration that such efforts are in fact ecologically sustainable, may help encourage CITES authorities to streamline the currently onerous permitting process. Project proponents and local communities also will explore the possibility of expanding the sale of butterflies to domestic markets.

The butterfly enterprise provides not only an alternative source of income but other benefits, such as skills training, that may create community-level incentives for long-term management of resource use and conservation. WWF-IP has extensive experience in terrestrial and marine resource management. WWF-IP is working with YBLBC, a Manokwari-based nongovernmental organization that for three years has helped the communities living in and around AMNR to harvest and trade butterflies, and with Uncen, a national university with faculty and facilities in Jayapura and Manokwari with the capacity to conduct rigorous biological monitoring.

Country:	Indonesia
Title:	Development of Local Enterprises in and around Gunung Halimun National Park, West Java
Proponents:	Biological Science Club (BScC) McDonald's Indonesia Family Restaurants Wildlife Preservation Trust International (WPTI) Center for Biodiversity and Conservation Studies University of Indonesia Gunung Halimun National Park Administration Integrated Development Consultants
BCN Funding:	[1]
Proponent Contribution:	[1]
Grant Period:	[1]

Gunung Halimun National Park (GHNP), established in 1992 by the Government of Indonesia, contains the largest tract of remaining primary lowland forest in Java. GHNP is home to 23 mammal species, at least two of which, the Javan gibbon and the grizzled langur, are endemic and endangered. The park also supports 156 bird species, of which 18 are endemic, and over 500 plant species. Indigenous Kasepuhan and other Sundanese communities live in and around the park and depend heavily on its natural resources. The park protects an important watershed and is a storehouse for fruits, construction materials, and medicinal plants that local communities use to meet everyday needs. GHNP's resources, however, are threatened by small-holder and plantation agriculture, infrastructure development, small-scale gold mining, and unsustainable fuel wood and non-timber forest product harvesting.

BScC began conducting biological research in the Gunung Halimun area in 1988. In recent years BScC has expanded its efforts to work with local communities to address their basic needs, and even represents the Kasepuhan to Park and Department of Forestry officials. Bscc has thus become an integral part of a larger consortium for the sustainable development and conservation of GHNP. During the implementation phase of this project, BScC will work with local communities to develop an ecotourism enterprise and conservation awareness program geared to attracting more domestic and international visitors from nearby Jakarta.

This project will help build a case for local management of resources by demonstrating that local communities have the capacity and the desire to use their resources wisely. The project also offers the opportunity to work with the Directorate General of Forest Protection and Nature Conservation (PHPA) on allowable access and use of protected areas. GHNP's proximity to Jakarta is providing project proponents and local communities the opportunity to tap into a large and growing market of domestic and international ecotourists, and at the same time targeting a significant segment of western Javanese society for conservation awareness and education. McDonald's Corporation's active involvement in the project represents a unique opportunity to get private sector support and resources behind a conservation effort in Indonesia.

[1] As of October 1995, project still in final contracting process.

Country:	Indonesia
Title:	Developing Community Forest Management in Buffer Zones for the Conservation of Biodiversity in Gunung Palung National Park
Proponents:	Harvard University Laboratory of Tropical Forest Ecology (LTFE) Cassia Lestari West Kalimantan Ministry of Forestry Local Community Groups
BCN Funding:	[1]
Proponent Contribution:	[1]
Grant Period:	[1]

Gunung Palung National Park (GPNP), a 90,000 ha national park in West Kalimantan, Indonesia, contains a complete gradient of tropical rain forest habitats ranging from mangrove forest through swamp and lowland forest up to montane and cloud forest on the top of Mt. Palung. The park also contains a full complement of vertebrates including proboscis monkeys, which are endemic to Borneo, and the largest population of orangutans on the island. The forest lands surrounding the park are rapidly becoming degraded. Major threats include corporate mechanized logging, conversion to agricultural uses, and legal and illegal hand logging by local villagers. As a result of these activities, GPNP's habitats are rapidly shrinking and the park will soon become an island too small to support important tree and vertebrate populations.

The Harvard University Laboratory of Tropical Forest Ecology (LTFE) has maintained a research station in GPNP for the past decade. The project will be implemented by the research team from the LTFE working in conjunction with the West Kalimantan Ministry of Forestry. The project will involve setting up small community managed and operated logging enterprises in two 5000 ha buffer zone areas bordering GPNP. Under the current "debt peonage" system, villagers receive an advance payment in kind of food before entering the forests to harvest the trees. Once the logs have been harvested and transported downstream, the payments from the concession holders barely equal the costs of the advance payment. In the new enterprise, however, villagers will not only receive better wages for their work, but they will also share in the profits generated by the enterprise, since substantial value addition will take place in the locally owned sawmill.

Each enterprise will employ between 100-200 villagers, and will be major sources of income for the poorest residents of the villages. The forest areas will be logged on a controlled basis, using a cutting system that incorporates the ecological knowledge of the forest that the project researchers have developed over the past few years. This system, coupled with intensive replanting efforts, should minimize the impact on the forest.

In addition to providing income and incentives for more sustainable resource use on a local basis, the LTFE project also has enormous potential to affect policies regarding community resource management and forestry practices in Indonesia. In effect, by working closely with the Indonesian Ministry of Forestry, the project will provide an important model for community ownership and management of forest resources. If the project can be shown to be economically and environmentally feasible, there is enormous potential for replicating this type of structure throughout Indonesia.

[1] As of October 1995, project still in final contracting process.

Country:	Indonesia
Title:	Sustainable Community-Based Marine Conservation in Maluku and Irian Jaya, Indonesia
Proponents:	Rumsram Foundation Hualopu Foundation Canadian University Service Organization
BCN Funding:	[1]
Proponent Contribution:	[1]
Grant Period:	[1]

Eastern Indonesia has some of the highest marine diversity in the world. The Padaido Islands, Irian Jaya are the site of some of the world's most intact and biologically diverse coral reef systems, harboring 95 coral species and 155 fish species, and other marine resources which offer both non-cash and commercial value to the area's inhabitants.

Many of the coral reefs found in and around the Padaido Islands near Biak, however, are threatened by unsustainable levels of resource exploitation and destructive fishing techniques, such as use of cyanide and explosives. Yayasan Rumsram (based in Biak, Irian Jaya) and Yayasan Hualopu (based in Ambon, Maluku) received a BCN Planning Grant to investigate the feasibility of addressing these threats by working with local communities to establish a community-based marine ecotourism venture in the Padaido Islands and, at the same time, introduce alternative, sustainable methods of harvesting the marine resources in the area.

Rumsram has already built one homestay on the Padaido Islands and has established a functioning community-based credit mechanism. The organization also intends to create community owned and operated dive tourism agency that will offer shares to local community members. Currently, most of the tourism in the area is larger scale tourism that excludes participation of local communities. The travel agency will be owned by Rumsram Foundation and the cooperatives in the three target villages. The stakeholders will be represented by a Board of Directors.

It is expected that the benefits from the dive tourism packages, combined with necessary training in business management and alternative harvesting techniques, will create local incentives for long-term resource management and exploitation. Rumsram will work with Hualopu, which has a great deal of biological monitoring experience; the Canadian University Services Organization; the Environmental Study Centre of Pattimura University; and YPMD, a well-respected Indonesian NGO which has worked extensively with international donor agencies.

[1] As of October 1995, project still in final contracting process.

Country:	Indonesia
Title:	Development of Small-Scale Forest-Based Enterprises within the Participatory Forest Management Area (PFMA) Model in Kalimantan, Indonesia.
Proponents:	Yayasan Dian Tama (YDT) P.D. Dian Niaga (YDT's for-profit branch) Environmental Enterprises Assistance Fund Appropriate Technology International (ATI)
BCN Funding:	$490,829
Proponent Contribution:	$177,044
Grant Period:	October 1, 1995 - September 30, 1998 [1]

The forests of Kalimantan support enormous biological diversity and numerous rare or endemic species, including the orangutan, flying lemur, deer, tarsier, bee bird, and hornbill. The Participatory Forest Management Area (PFMA) where Yayasan Dian Tama (YDT) is working covers ecosystems ranging from lowland forests to swamp and riverine forests and agroforestry systems. Unsustainable hunting of endangered species and commercialization of forest resources, however, represent significant threats to the region's biological diversity.

YDT and its collaborators intend to work within the framework of the Social Forestry Development Project (SFDP), a unique community-based forest concession begun in West Kalimantan in 1990. In collaboration with the Indonesia Department of Forestry (PHPA), the ten-year SFDP seeks to further develop national and local policies to support the sustainable extraction, utilization and commercialization of non-timber forest products.

One of the ultimate goals of the SFDP is to address the primary threats to the region by establishing more clearly defined resource rights and identifying alternative income sources. The BCN-funded enterprises, which are part of this larger strategy and which are intended to complement the SFDP's on-going activities, will be based specifically upon the harvest, processing, and sale of bamboo, rattan, and damar.

YDT and P.D. Dian Niaga, collaborators in the SFDP since 1990, have been working for several years with community members in Sanggau District to develop and sell to foreign markets "green" charcoal that uses coconut shells. During the BCN-funded implementation phase, proponents plan to build upon their past experience and establish market linkages to process damar, a resin used in paints and other industrial products, and to sell semi-processed rattan and bamboo to a Java-based manufacturer and marketer of handbags. Between 300 to 480 families will participate as owners of the enterprises. YDT and Dian Niaga will act as the marketing bridge for their unprocessed and semi-processed product. Local extension workers associated to the SFDP project and YDT will work with individual harvesters to develop enterprise skills and capacity.

YDT's long experience in West Kalimantan may give the organization a key role in helping the government of Indonesia improve its resource use policies. YDT has been working with the German Government bi-lateral aid agency (GTZ), for example, on community control of resources in a government recognized Protected Forest Management Area.

[1] As of October 1995, project still in final contracting process.

Country:	Philippines
Title:	Forest Farms Development Project
Proponents:	Kalahan Educational Foundation Nueva Vizcaya State Institute of Technology University of the Philippines, Los Banos Upland NGO Assistance Committee
BCN Funding:	$321,190
Proponent Contribution:	$94,936
Grant Period:	March 1, 1994 - February 28, 1997

The primary and secondary forests in the Kalahan Reserve, in Nueva Vizcaya, Luzon, support diverse plant and animal species as well as approximately 550 Ikalahan families that live within the reserve. The resources of the reserve, which covers 14,730 hectares of ancestral land, are managed by the indigenous people under an agreement with the Philippine Government. Compared to other localities, these resources are well managed and the community is increasingly emphasizing conservation and sustainable use of forest products. Nevertheless, there are still threats from road building, expropriation of land by commercial developers, and overharvesting of certain nontimber forest products.

The lead implementor of this project, the Kalahan Educational Foundation (KEF), is a local non-governmental organization (NGO) formed by the Ikalahan Tribe. KEF is implementing an integrated program of community forest management and non-timber forest product extraction. The primary objective of the project is to provide the local communities with income generating activities based on sustainable forest resources. Enterprise activities include the production of jams and jellies from forest fruits, extraction of essential oils, collection and cultivation of flowers and mushrooms, and the manufacture of furniture. In addition, local communities are undertaking timber stand improvement in a small percentage of the secondary growth forest in order to increase both biodiversity and the raw materials needed for income generating activities. KEF is diversifying the community's economic base by adding value to the resources and developing alternative marketing channels for these products. KEF hopes these measure will reduce the harvesting pressure on the various natural products local people collected in the reserve, and thus ensure that the natural resource base and the benefits derived from it can be sustained.

The Forest Farms Development Project highlights the potential of creative efforts to provide alternatives for community development that do not deplete and in some cases even restore natural resources. The project site is formally recognized by the government of the Philippines, and the project is an important step in building the case for the local management of these resources.

KEF and the Ikalahan people are also developing monitoring and evaluation systems to document the status of the biological resource within the reserve and then assess the impact of the proposed economic activities on these resources over time. As part of this efforts, KEF will augment the information it already collects on the socioeconomic welfare of the Ikalahan people and the distribution of benefits from the ecoenterprises within the community. In developing these systems, KEF is working with a number of local resource institutions, including the National Museum, the University of the Philippines, and the Nueva Vizcaya State Institute of Technology.

Country:	Philippines
Title:	Bendum, Pantaron Forest Management Project, Bukidnon, Mindanao
Proponent:	Environmental Research Division, Manila Observatory Southeast Asia Sustainable Forest Management Network
BCN Funding:	$426,798
Proponent Contribution:	$340,408
Grant Period:	May 1, 1995 - April 30, 1998

One of the few remaining habitats for the highly endangered Philippine eagle, Mindanao's Pantaron Range is also one of the nation's most critically important watersheds, giving rise to several major rivers, including the Pulangi, the Philippines' second largest river. The Pantaron Forest Management Project is adjacent to one of the ten sites the World Bank has identified as biodiversity priorities for the Philippines.

The project seeks to enable a community of indigenous people, the Bukidnon, to improve their quality of life by marketing several non-timber forest products and obtaining more secure recognition of their ancestral lands. The Environmental Research Division (ERD) of the Manila Observatory is assisting the community in marketing abaca fiber while making preparations to market rattan during the second and third years of the grant period. These preparations include obtaining a rattan cutting license for the community, promoting sustainable rattan harvest practices, and developing the financial management skills of community members.

This forest management project represents an attempt to formalize community-controlled rattan concessions, which will be an important step toward the sustainable use of this and other forest products. ERD is also laying the groundwork necessary for the indigenous people of the area to obtain a certificate of ancestral domain claim (CADC), the most binding form of recognition provided to indigenous communities by the Philippine government.

ERD is particularly skilled in the development of detailed maps that combine information provided by satellite imagery, aerial photography, and geographic information systems (GIS) with community-generated maps and information regarding land and resource use. Such detailed yet "user friendly" information is particularly useful in working with government agencies to seek recognition for indigenous peoples' ancestral lands and approval for sustainable resource management plans.

While ERD's activities focus on the project site in Bendum, it is also seeking to coordinate its efforts with other NGOs active in northern Mindanao to assist indigenous peoples to conserve the entire Pantaron Range. An innovative aspect of ERD's activities is its plan to document linkages between resource management and water availability. ERD believes that establishing this connection will encourage Philippine policy makers to provide more effective support for biologically diverse upland areas.

Country:	Philippines
Title:	Community-based Conservation and Enterprise Program for Indigenous Communities in Palawan, Philippines
Proponents:	World Wildlife Fund - Philippine Program Nagkakaisang mga Tribu ng Palawan (NATRIPAL) Tanggapang Panligal ng Katutubong Pilipino (PANLIPI) Tribal Filipino Apostolate Cultural Survival Small Economic Enterprise Development (SEED)
BCN Funding:	$627,698
Proponent Contribution:	$92,034
Grant Period:	January 15, 1995 - January 14, 1998

The island of Palawan is often described as the last environmental frontier in the Philippines, as it contains some of the country's largest remaining areas of primary rain forest and some of its more intact and diverse coral reef systems. Palawan has an abundance of unique flora and fauna, including numerous endemic species, and accounts for a significant portion of the entire biological resources of the Philippines. Palawan is also home to a large number of indigenous peoples whose territories, natural resources, and cultures face growing threats from legal and illegal destructive logging and fishing practices, mining activities, and the rapid encroachment of immigrants from neighboring islands.

In the implementation phase, proponents are developing new non-timber forest products (NTFP) enterprises and alternatives to the traditional marketing system. The project's short-term focus will be on rattan, almaciga resin, and honey, but over time it will also explore the potential for marketing other NTFPs. Nagkakaisang mga Tribu ng Palawan (NATRIPAL), an association of some 47 groups of indigenous peoples representing a majority of the indigenous communities in Palawan, hopes to simultaneously reduce the pressure on the natural resource base and improve local peoples' well-being through these projects.

The success of a community-based conservation and enterprise program like the one on Palawan will help to establish the credibility of local resource management in general. To further this effort, WWF-Philippines and NATRIPAL are working to obtain the most binding certification of ancestral land rights for two pilot project sites currently available in the Philippines -- the recently promulgated Certificate of Ancestral Domain Claim (CADC). Proponents are also helping project proponents to establish a credit program and marketing unit that will assist indigenous cultural communities in the pilot sites to obtain greater, more sustainable benefits from the sale of NTFPs.

The well-being of the island's indigenous cultural communities may depend on helping them gain greater control over their lands and resources and on raising their incomes, particularly through the sale of NTFPs. For the past several years, NATRIPAL has collaborated with Tribal Filipino Apostolate (TFA), an NGO providing assistance to indigenous peoples in the Philippines, and Tanggapang Panligal ng Katutubong Pilipino (PANLIPI), a legal advocacy organization, on just such an effort.

Country:	Papua New Guinea
Title:	Landowner-based Conservation, Fostered by Science and Adventure Tourism in Lakekamu Basin, Papua New Guinea, Phase II - Implementation
Proponents:	Conservation International (CI) Foundation of the Peoples of the South Pacific (FSP) Wau Ecology Institute (WEI)
BCN Funding:	$355,487
Proponent Contribution:	$152,575
Grant Period:	August 1, 1995 - July 31, 1995

The 2500 square kilometer Lakekamu-Kunimaipa Basin (the "Basin") contains the largest expanse of unbroken humid forest in the southern watershed of peninsular PNG. The Basin contains two areas deemed "of very high priority" for biodiversity conservation by the *PNG Conservation Needs Assessment.* The site is home to healthy populations of many globally vulnerable species of birds, mammals, and other taxa. Although the Basin currently has a low human population density, a number of threats are looming in the near future, particularly industrial logging and mining.

CI and local communities are working to set-up landowner-owned and operated scientific field research and adventure tourism enterprises in the Basin. The research tourism enterprises are establishing and providing support for a tropical forest field station that eventually will include a central lodge, a mapped trail system, and a series of blinds for observing wildlife. Community members are also providing food, portering, and guide services to researchers. The adventure tourism enterprises being planned will establish and provide support for a walking trek that will include a rustic lodge near the airstrip and series of seven overnight rest huts along, in part, the historic Bulldog trail. Community members will also provide guide, naturalist, and support services. In both enterprises, community members will benefit from user fees paid by the visitors.

A central project component is monitoring the biological and socioeconomic impacts of project enterprises and other activities. It is expected that these enterprises, which depend upon the continued maintenance of large tracts of undisturbed forest, will provide a substantial incentive for conservation of the area's biological diversity, and will demonstrate to policy makers at the national level that community management of ecotourism is an alternative to logging and mining.

CI and its partners FSP and WEI have assembled an impressive team to implement the project, most of whom are PNG Nationals. The proponents have a long history of working in the Basin and have established good working relationships with the clans living in the project site. FSP is focusing on developing the social science monitoring plan and coordinating the project's on-site activities; WEI is developing on-site enterprise capacity and infrastructure; and CI is facilitating the biological monitoring and overseeing the enterprise marketing activities.

Country:	Papua New Guinea
Title:	Community-Based Eco-Forestry Projects
Proponents:	Pacific Heritage Foundation (PHF) East New Britain Sosel Eksen Komiti Individual and Community Rights Advocacy Forum Forest Management Foundation Canadian University Services Overseas (CUSO) Forest Research Institute
BCN Funding:	$451,738
Proponent Contribution:	$559,825
Grant Period:	October 1, 1995 - September 30, 1998

The forests of the islands in Eastern Papua New Guinea (PNG), including New Britain and New Ireland, home to a number of rare and endemic plant and animal species, now face some of the most intense commercial logging operations in the region, if not the world. Large foreign logging companies have been able to persuade local landowners to sell the rights to their timber for a fraction of its true market value. PNG stands at an extremely critical juncture regarding its forestry policy, as factions within the forestry department seek to remove most existing environmental controls regarding the forestry sector. The country must develop sustainable alternatives to large-scale commercial logging that can also meet community development needs.

Under this grant, Pacific Heritage Foundation (PHF) is expanding its ongoing efforts to offer local communities an alternative to these commercial logging operations in the East and West New Britain, New Ireland, and Sepik Provinces of PNG. PHF's primary objectives for the Implementation Grant are to: 1) reduce the decline of forest resources by supporting community-owned small-scale logging enterprises as alternatives to large-scale industrial logging, 2) establish a central processing and marketing unit to generate high returns to communities and ensure long-term economic viability, and 3) increase capacities for extension, technical, social, and legal services. The project also will explore other smaller enterprises including the harvest of Galip nuts and other non-timber forest products. Finally, in conjunction with several collaborators, the project will support extensive social and biological monitoring activities.

To date, PHF has helped establish small-scale portable sawmills in six village communities in the Bainings and West Pomio districts of East New Britain Province. With BCN support, the project team plans to expand its operations to an additional eleven sites that have a combined population of about 3,000 inhabitants controlling more than 85,000 hectares of primary and secondary forest. PHF is one of the leading organizations involved in developing and operating small-scale community-owned logging enterprises.

Community-based ecoforestry has enormous potential as a tool for sustainable use of natural resources. This project will help to demonstrate the sustainability of such small-scale timber operations, and comes at a crucial time for the development of PNG's national forestry policy.

Country:	Papua New Guinea
Title:	Crater Mountain Wildlife Management Area: A Model for Testing the Linkage of Community-Based Enterprises with Conservation of Biodiversity
Proponents:	Research and Conservation Foundation of Papua New Guinea Wildlife Conservation Society
BCN Funding:	$498,107
Proponent Contribution:	$76,950
Grant Period:	August 1, 1995 - July 31, 1998

The enormous Crater Mountain Wildlife Management Area (CMWMA) covers 2600 square kilometers, an area equal to half the size of Delaware. The site spans a wide range of elevations (150 - 2100 meters) that contains a full range of the biotic diversity of PNG. Primary forest blankets the lower elevations, while alpine scrub and grasslands are found at higher ones. The site contains over 220 bird species, 49 of which are endemic, and 84 mammal species, 15 of which are endemic to PNG. Although the CMWMA currently has a low population density, a number of threats are looming in the near future including industrial logging, mining, and oil drilling.

The RCF project is establishing locally-owned and operated research and ecotourism enterprises in the CMWMA. The innovative research tourism enterprise is establishing support structures for natural and social scientists interested in studying the natural ecosystems and cultural diversity in the CMWMA. The planned eco-tourism enterprises will provide accommodations and guide services to domestic and international visitors interested in experiencing the natural wonders of the CMWMA. Community members, working through established land-owner communities, will own and operate both enterprises.

The project team members are working with community members to establish the enterprises and to develop the local environmental and economic knowledge base needed for successful management of the enterprises and natural resources. In addition, they are developing biological and socioeconomic monitoring systems to allow for sustainable use and management of the CMWMA. The team is also working with landowners to develop a land-use management plan which provides for biodiversity conservation and enterprise sustainability.

The research and tourism enterprises, which depend upon the continued maintenance of large tracts of undisturbed forest, represent an important investment opportunity that has the potential to pay large conservation dividends if the enterprises can be developed so as to ultimately counter the threats of unwise resource use. The enterprises also may demonstrate that community management of ecotourism businesses is an economically and ecologically viable alternative to destructive mining and logging operations.

WCS, working in the CMWMA since the mid-1980s, is conducting the biological monitoring and liaising with international scientists to strengthen the project's marketing linkages. RCF, with many year's of experience working with local clans, is developing the social science monitoring plan, developing the on-site tourist infrastructure, and managing the project's activities.

Country:	The Solomon Islands
Title:	Community Marine Conservation and Enterprise Development
Proponents:	The Nature Conservancy Ministry of Forests and Environment Conservation (MFEC) Arnavon Island Management Committee
BCN Funding:	$545,372
Proponent Contribution:	$281,610
Grant Period:	October 1, 1995 - September 30, 1998

The Arnavon Islands, midway between the islands of Santa Isabel and Choiseul of the Solomon Islands, lie in the midst of an area rich in marine biodiversity. The Arnavon Islands are one of the most important rookeries in the western Pacific for the endangered hawksbill turtle. The area's marine environment also supports commercially valuable species such as beche-de-mer, trochus, black and gold lip pearl oysters, green snail, and giant clams.

Three villages -- Kia, Posarae, and Waghena -- form the Greater Arnavon Resource Management Area (GARMA). GARMA fishermen and turtle hunters make regular visits to the Arnavon Islands to harvest their resources. The area's cash economy has traditionally been oriented toward extractive commodities, such as shellfish and beche de mer, and a number of other commodities such as shark fin. Extractive activity in the GARMA has been carried out on an "open access" basis according to tenurial rights vested in villages. Collection rates increased dramatically in the 1980s in response to a sharp increase in prices for shellfish and other products. The result has been a series of "boom and bust" cycles for harvesting marine products.

In 1993, representatives from the three communities, the provincial and national governments, and TNC decided to collaborate to address this decline in their invertebrate species. During the BCN-funded Planning Grant phase, proponents established a representative management committee and hired a squad of six conservation officers (two from each community), established the Arnavon Islands Community Marine Conservation Area (CMCA) and obtained legal designation for the area, developed a management plan for the CMCA, and planned for the development of a sustainable deep-water finfish enterprise. By providing viable alternative marine enterprises, proponents are hoping to reduce pressure to harvest the marine invertebrates.

The CMCA marks the first time that a community of the Solomon Islands has created a sanctuary, as well as the country's first cooperatively managed marine conservation area. If successful, it will demonstrate the economic and ecological benefits of a community-based approach to development and resource conservation to other communities of the Solomon Islands as well as to the national government.

Through the six years of project development, TNC staff have developed a strong relationship with the three communities and the representative management committee. The biological monitoring will be designed by TNC and ICLARM, with ongoing monitoring being under-taken by the six conservation officers. MFEC, represented on the management committee, plays an important liaison role among the community members, state officials, and national government.

Country:	Solomon Islands
Title:	Asia and Pacific Regional Initiative in Biodiversity Conservation and Enterprise Development [1]
Proponents:	Conservation International Maruia Society Solomon Islands Development Trust (SIDT)
BCN Funding:	$899,940 (to be revised)
Proponent Contribution:	$437,000
Grant Period:	January 1, 1994 - December 31, 1996

Conservation International is working with SIDT and the Maruia Society in Makira, Solomon Islands, an area of highly significant regional biodiversity and home to indigenous communities still engaged in relatively traditional resource use. Due to its separation from other islands during times of high sea levels, Makira has a high number of endemic floral and animal species. For example, 10 of its 76 bird species are endemic. The most pressing threats to the island's natural resources are international logging operations. Many Makira communities have already succumbed to the relatively large amounts of cash the logging companies offer people to high grade the timber on their land. This process negatively impacts water quality and soil conditions, and, thus, reduces the productivity of local people's forest gardens.

The Conservation In Development (CID) program has established Makira's first conservation area. The CID team of SIDT and Maruia Society/Conservation International has been working with the Hauta and Warohito communities for the past four years to define the conservation area and to identify enterprises whose viability is linked to the need to conserve the area's biodiversity. The CID team has begun to develop small-scale ecotourism and the extraction of ngali nut oil for export. Bee keeping and a butterfly enterprise are also under consideration.

During this past year, the team pressed its first batch of oil and established an in-country tourism operator to oversee organization for future tours to Makira. In addition, they organized a wholesalers marketing trip to visit the hill villages in June. Representatives from Australian, New Zealand, and Solomon Island tourism companies participated as did a journalist who is producing promotional articles and materials as a result. Two additional tourist trips are being planned for 1996. The community will like to have up to three tourist groups each year. This year, a second ngali nut pressing produced 500 liters of oil. The community managed the logistics of ngali nut oil buying, collection, pressing, and shipping. In addition, the team worked to expand potential marketing sources, with a major wholesale outlet now assured for New Zealand and Australia. Finally, a beekeeping workshop was held in Honiara for the ngali nut village committee. These efforts represent a significant step in helping communities demonstrate the viability of community-based conservation efforts in the Solomon Islands and elsewhere in the Pacific.

[1] This Implementation Grant had components in Palanan, Philippines and the Togian Islands, Indonesia, however, BCN is phasing out funding for these efforts.

Country:	Fiji
Title:	Natural Product Development and Conservation in Fiji
Proponents:	The University of the South Pacific The Rainforest Alliance SmithKline Beecham SPACHEE
BCN Funding:	$348,045
Proponent Contribution:	$346,000
Grant Period:	October 1, 1995 - September 30, 1998

Fiji, like many of the islands of the South Pacific, is home to large numbers of rare and endemic species in its forest and marine areas. Fiji has one of the best developed coral reef systems in the Pacific. Fiji's biodiversity is especially threatened due to increasing harvesting pressures and deforestation which has decreased terrestrial habitats and increased siltation of coral reefs.

The University of the South Pacific (USP) and its partners are working to help community members enhance their economic returns from their marine and terrestrial resources by developing a biological prospecting agreement between local residents and the pharmaceutical company SmithKline Beecham. Proponents are working with the community members to: 1) develop an equitable prospecting agreement; 2) set up a procedure to collect and process samples; and 3) develop biological and social monitoring systems to ensure that the project is helping to conserve biodiversity while meeting the needs of the people.

Over the past several years, there has been a growing interest in the concept of "biodiversity prospecting," which involves setting up agreements between tropical countries and multi-national pharmaceutical companies. In general, the company compensates the country for the intellectual property rights contained in its biodiversity in return for exclusive rights to screen the biodiversity for pharmaceutical compounds. If such screening leads to the development of a major drug, the agreements then also generally provide the host country with some share of the potential profits. The agreements completed to date -- such as the one signed with INBio in Costa Rica -- have generally been signed at the national level. The USP represents an opportunity for proponents and BCN to contribute to this debate by focusing prospecting on *community level* links to conservation.

In addition, as Fiji is a relatively small country and the project participants have close contacts with relevant government officials, the project has a good deal of potential to influence government policy regarding prospecting issues. Furthermore, given that USP plays a central role for students from throughout the Pacific Region, the policy implications will undoubtedly be carried to the other countries in the region as well.

APPENDIX B: Monitoring and Evaluation Workshop Session Instructions

BCN/BSP
Monitoring and Evaluation Workshops

Revised Workshop Session Instructions

DRAFT VERSION: 1 November 1995

Introduction

This packet contains updated and revised versions of some of the materials developed for the Biodiversity Conservation Network (BCN) Workshops on Monitoring and Evaluation held in Los Baños in the Philippines in September, 1995.

These materials are still in draft form. **Please do not circulate these materials without first contacting us to obtain the latest version.** We would, however, welcome any comments or suggestions that you have regarding the presentation and content of these materials that could be incorporated into a final version scheduled to be produced in December, 1995. These comments can be addressed to:

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Biodiversity Support Program
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Workshop Goals and Agenda

Biodiversity Conservation Network
Monitoring and Evaluation Workshop for Oceanian Partners
September 13 - 17, 1995
SEARCA, University of the Philippines at Los Banos, The Philippines

WORKSHOP GOALS

1. Enable different BCN grantee representatives to meet, get to know one another, and learn about each other's sites and projects;
2. Provide an opportunity for BCN to explain its goals, objectives, and expectations for monitoring and evaluation work;
3. Enable grantee representatives and BCN staff members to discuss monitoring in the context of the project cycle, including especially the development of a conceptual model, formulation of project goals and objectives, and the development of a monitoring plan that includes indicators, methods, and plans for data collection, analysis, and use;
4. Explore specific methods that may be of use in obtaining data to measure indicators;
5. Provide an opportunity for each group to develop and/or refine its monitoring plans in conjunction with other participants and BCN staff/resource persons; and,
6. Identify follow-up actions and technical assistance to improve monitoring and evaluation efforts.

AGENDA

Day 01:	**September 12, 1995 (Tuesday)**
1:00pm - 5:00pm	Arrival/Check-in at SEARCA, U.P. Los Banos
7:00pm - 9:30pm	Opening, Informal Reception and Dinner
Day 02:	**September 13, 1995 (Wednesday)**
7:00am - 8:30am	Breakfast (Drilon Hall Lobby, SEARCA Office)
8:30am - 9:15am	Welcome/Introduction to the Workshop
9:15am - 9:30am	Participant Introductions
9:30am - 10:15am	Plenary Presentation/Discussion of BCN Goals and Objectives [Slides Presentation]
10:15am - 10:30am	Tea Break (Morning Snacks)
10:30am - 11:30am	Plenary Discussion of Monitoring within the BCN Program
11:30am - 11:45am	Workshop Logistics
11:45am - 1:00pm	Lunch Break (Drilon Hall Lobby, SEARCA Office)
1:00pm - 2:20pm	Project Presentations
2:20pm - 2:40pm	Tea Break (Afternoon Snacks)
2:40pm - 4:00pm	Project Presentations
4:00pm - 5:30pm	Networking Time/Travel Accounting
7:00pm	Dinner (Drilon Hall Lobby, SEARCA Office)
Day 03:	**September 14, 1995 (Thursday)**
7:00am - 8:00am	Breakfast (Drilon Hall Lobby, SEARCA Office)
8:30am - 8:45am	Plenary Review of Daily Agenda
8:45am - 9:30am	Plenary Discussion of Monitoring in the Context of the Project Cycle
9:30am - 10:30am	Plenary Discussion of "Conceptual Models"
10:30am - 10:45am	Tea Break (Morning Snacks)
10:45am - 12:30pm	Breakout Groups to Develop Sample Conceptual Models
12:30pm - 1:30pm	Lunch Break (Drilon Hall Lobby, SEARCA Office)
1:30pm - 2:30pm	Plenary Presentation of Breakout Group Findings
2:30pm - 3:15pm	Plenary Discussion of Goals, Objectives, and Activities
3:15pm - 5:30pm	Breakout Groups (by Project) to Develop Goals and Objectives (Tea Break during Session)
7:00pm	Dinner (Location to be announced)
8:00pm	Presentation by IESAM Staff for Field Trip Participants

Day 04:	**September 15, 1995 (Friday)**
7:00am - 8:00am	Breakfast (Drilon Hall Lobby, SEARCA Office)
8:30am - 8:45am	Plenary Review of Daily Agenda
8:45am - 9:15am	Report Back on Common Set of Goals and Objectives
9:15am - 9:45am	Plenary Discussion of Steps in the Monitoring Process
9:45am - 10:30am	Plenary Discussion of Indicators and Information Needs/ Questions
10:30am - 10:45am	Tea Break (Morning Snacks)
10:45am - 1:00pm	Breakout Groups (by Enterprise Type) to Develop Indicators and Questions
1:00pm - 2:00pm	Lunch Break (Drilon Hall Lobby, SEARCA Office)
2:00pm - 5:00pm	Afternoon Off /Group Activity in Los Banos
7:00pm	Dinner (Location to be announced)
Day 05:	**September 16, 1995 (Saturday)**
7:00am - 8:00am	Breakfast (Drilon Hall Lobby, SEARCA Office)
8:30am - 8:45am	Plenary Review of Daily Agenda
8:45am - 9:00am	Plenary Discussion of Methods
9:00am - 12:00nn	Breakout Groups (by Discipline) to Discuss Methods (Tea Break during Session)
12:00nn - 12:45pm	Plenary Report Back on Methods
12:45pm - 2:00pm	Lunch Break
2:00pm - 5:30pm	Breakout Groups (by Project) to Develop Monitoring Plans and Synthesize the Week's Activities (Tea Break during Session)
7:00pm	Dinner (Location to be announced)
Day 06:	**September 17, 1995 (Sunday)**
7:00am - 8:00am	Breakfast (Location to be announced)
8:30am - 8:40am	Plenary Review of Daily Agenda
8:40am - 12:00nn	Plenary Presentations (by Project) of Monitoring Plans (Tea Break during Session)
12:00nn - 1:00pm	Plenary Discussion of Outstanding Issues
1:00pm - 1:30pm	Workshop Evaluation/Closing Session
1:30pm - 2:30pm	Lunch (Location to be announced)
4:00pm	Departure for Manila

EXHIBIT B1
Monitoring in the Context of the Project Cycle

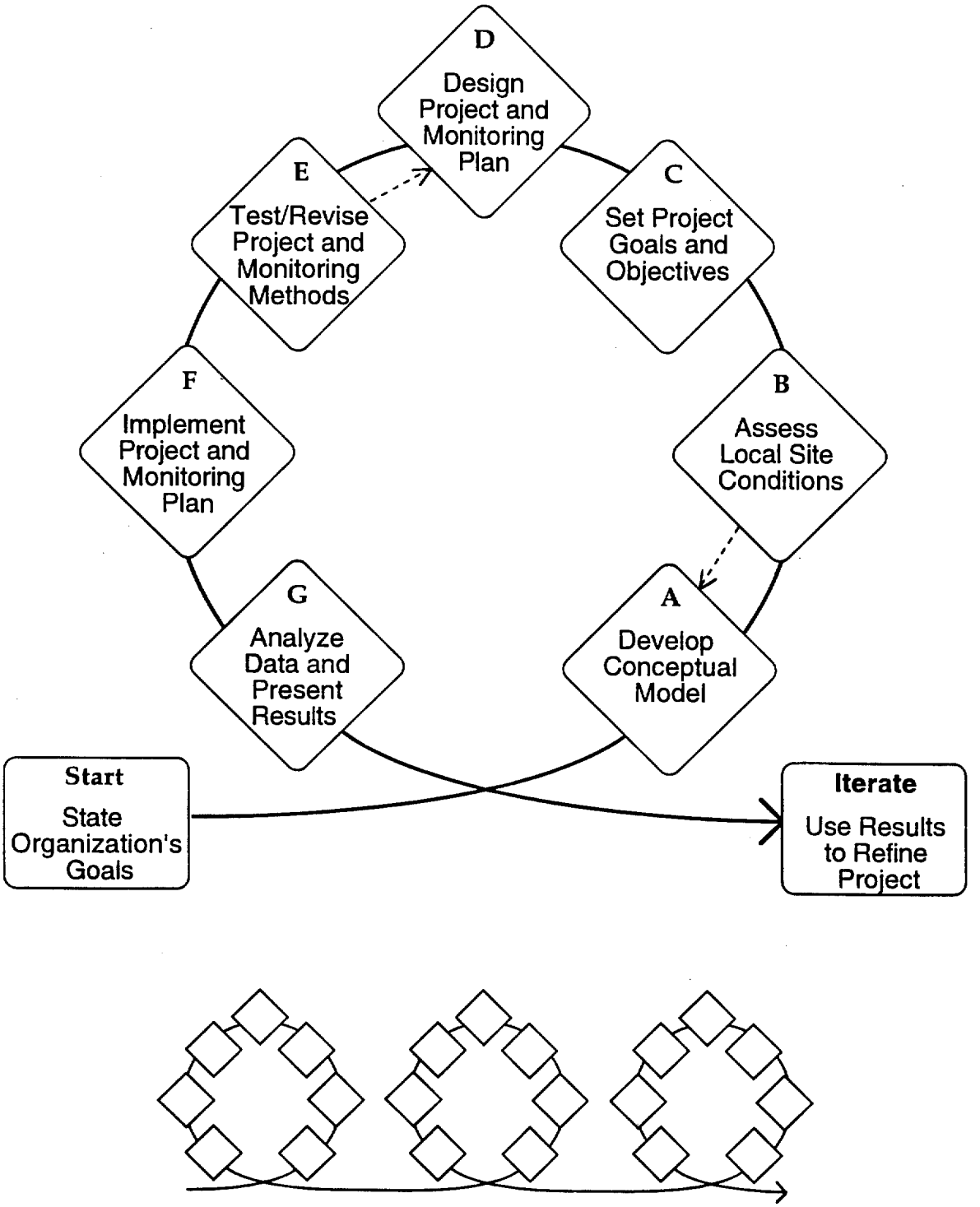


Exhibit B1 -- Continued

I. OVERALL STRUCTURE OF THE DIAGRAM

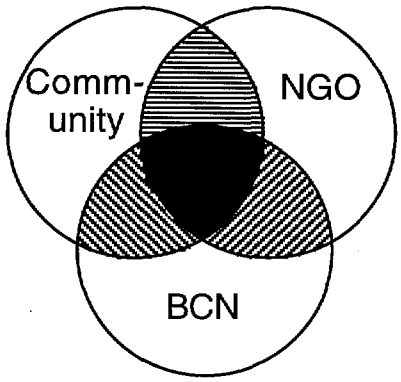
The diagram contains seven "diamonds," each of which represents a different step in the overall project cycle. These steps generally need to occur in sequential order as represented by the letters A-G. There is, however, as represented by the small dashed arrows, some *iteration* required between some of the steps (for example, developing a conceptual model and assessing local site conditions). In addition, the steps themselves are part of an iterative process that involves going around the cycle numerous times as outlined in the overview sketch at the bottom of the page.

II. DESCRIPTION OF EACH STEP

Start: State Organizational Goals

The starting point prior to entering the project cycle is for each of the implementing groups to articulate explicitly what their goals are as an organization (many groups should already have their goals set forth in a mission statement in which case, this process merely involves reviewing these goals). This process is important since the specific actions a group will take will vary greatly depending on its goals. For example, despite the overlap between conservation and development issues, the actions that a group that has biodiversity conservation as its primary goal may be very different from a group that has enhancing community income levels or creating small-scale enterprises as its goals.

As outlined in the following diagram, it most likely that no two of the groups participating in a project will have precisely the same goals. This difference makes it all the more important that each group explicitly spell-out its goals so that it is possible to see where overlap exists (the shaded areas) and where the differences are (the unshaded areas).



A. Develop Conceptual Model

The first step in the cycle is for the organization to develop a *conceptual model* of the proposed project. A conceptual model is a diagram of a set of relationships between certain *factors* that are believed to influence or lead to some final *target condition.* A good model does not attempt to explain all possible relationships or contain all possible factors that influence the condition, but instead tries to simplify reality by containing only the information most relevant to the model builder. The model should be developed in three stages. In the first stage, the model should show the relevant factors at the project site assuming that the project does not exist. In the second stage, the model should be updated to reflect the interventions that the project will undertake. In the final stage, the model should be revised over time.

Exhibit B1 -- Continued

B. Assess Local Site Conditions
The second step is for the organization to assess local site conditions to see a) what community needs, desires, knowledge, attitudes, practices, and expectations are, and b) what biological and socioeconomic conditions exist at the site that will provide opportunities and constraints to the project. This information should then be incorporated into the conceptual model. This step is essential to ensure that project planning fits in with local needs.

C. Set Project Goals and Objectives
The third step is for the organization to set explicit goals and objectives for the proposed project. *Goals* are broad statements of the desired state toward which the project is directed. *Objectives* are more specific statements of the desired outcomes or accomplishments of the project. A good objective is specific, timebound, impact-oriented, measurable, and realistic. This step is necessary to provide direction for the project and a yardstick against which the success of the project can be measured.

D. Design Project Activities and Monitoring Workplan
The fourth step is for the organization to design the project and monitoring plan based on the results of the preceding steps. *Project activities* are the specific actions undertaken by project participants to reach each of the project's objectives. Each activity should be incorporated into the conceptual model. Once activities have been designed, the project should develop a specific *monitoring workplan*. A monitoring workplan starts by listing *impact and/or process indicators* for each goal, objective, activity and other bits of necessary information. The remainder of the plan then lists methods for collecting data to measure these indicators, where, when, and by whom these data will be collected, and how the data will be used. The plans should be as specific as possible. This step is needed to provide a blueprint for project and monitoring activities.

E. Test/Revise Project and Monitoring Methods
The fifth step is to test the activities and methods decided upon during the planning phase and then revise them as necessary based on the results of this test. This step is needed to ensure that the activities and methods will work in the field as planned.

F. Implement Project and Monitoring Plan
The fifth step is to implement the project and monitoring plan. While this step is fairly self-explanatory, it is also obviously of great importance.

G. Analyze Data
The sixth step is to analyze the data collected as a result of monitoring. Data analysis and collection can be greatly facilitated by considering this process during the formulation of the original monitoring plan. This step is needed to ensure that raw data that are collected are actually used as intended.

Iterate: Use Monitoring Results to Revise Project
Once the data have been collected and analyzed, the results should then be used to adjust the project, starting with the conceptual model, and continuing with the rest of the steps in the cycle. This iteration is where the work invested in monitoring can pay off by helping projects incorporate the information that they have learned to help them achieve their goals and objectives.

Instructions for Breakout Session on Developing a Conceptual Model

Purpose of the Session

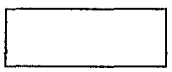
The purpose of this exercise is to build a conceptual model for the project site where you work. A conceptual model is a diagram of a set of relationships between certain factors or variables, including threats, that are believed to influence or lead to some final target condition. A good model does not attempt to explain all possible relationships or contain all possible factors that influence the condition, but instead the model tries to simplify reality by containing only the information that is most relevant to the model builders.

Building a conceptual model is the crucial first-step in any project design activity. It provides you and your colleagues with an opportunity to explicitly lay out what the condition is that the project will try to affect and the factors that influence this final target condition. You will use this conceptual model in the next session to define the project goals, objectives, and activities, and the information that is needed to measure the success of the project.

Procedure

1) State the final target condition you will try to influence with your project activities. For this exercise and BCN, the target condition will be the biodiversity at your site.
2) List the major factors or variables, including threats, that influence the condition.
3) Write the final target condition on a small square of paper. Write each factor on its own square of paper. Place the final target condition square on one side of a large piece of paper (or whiteboard). Next, arrange the factor squares on the large paper to reflect your group's understanding of the relationships between the factors and the final target condition. Draw arrows between the boxes to illustrate the relationships between the factors and how they ultimately influence the final target condition.
4) As you arrange and discuss the factors and how they relate to the final target condition, you may find that some factors may need to be added, deleted, combined or modified.
5) You may also decide to add, subtract, or modify causal arrows between the boxes.
6) Identify the factors or threats that you believe will be most relevant to your project. Expand the conceptual model to capture other factors that you believe will influence these factors or threats.

Key



Factor or Target Condition

Causal Relationship

Outputs

1) After you have finished your conceptual model, draw it on an overhead transparency so that you can present it back in the plenary.

Instructions for Breakout Session on Defining Project Goals, Objectives, Activities, and Assumptions

Purpose of Session

The purpose of this session is to define your project's goals, activities, objectives, and assumptions. In order to do this, you will use the conceptual model you designed earlier. Our definitions for these terms include:

Project Goal: A statement, usually general, of a desired state toward which a project is directed. A project can have multiple goals, but for this workshop and BCN, however, your one goal will be to conserve biodiversity at your site.

Project Objective: A specific statement detailing the desired accomplishments or outcomes of a project. There can be multiple project objectives related to each project goal. Realization of a project's objectives leads to the fulfillment of the project's goal. Good objectives meet the following criteria:

- *Timebound* -- achievable within a specific time period,
- *Specific* -- precisely defined,
- *Measurable* -- able to be recorded in quantitative terms, and
- *Realistic* -- achievable in the context of the project.

Project Activities: Specific actions undertaken by project participants designed to reach each of the project's objectives. These can also be termed "project interventions."

Assumption: A belief about a factor or relationship between two or more factors that is taken to be valid without its being explicitly stated in the conceptual model.

Procedure

1) Using your conceptual model, select the factors where you anticipate your project activities will enter the model and influence the final target condition.
2) Using Worksheet 1, list your project's goal which generally involves restating the target condition from your conceptual model.
3) Continue with Worksheet 1 by writing down project objectives. These objectives should be related to the factors identified in Step 1 above.
4) Refine the objectives that you have developed using the criteria listed above (one way to do this is place each criterion on a card and review the cards for each objective).
5) For each objective, determine the activities that your project will undertake to achieve this objective.
6) As you think about your project goals, objectives and activities, review your conceptual model and modify or elaborate it to include factors or threats that you may have overlooked during the last session.
7) On a overhead transparency that you can lay over your conceptual model transparency, continue to expand the conceptual model to show how your project activities will influence the factors identified in Step 1.
8) List the major assumptions underlying the goal, objectives, and activities that you have developed.

Outputs

1) On overhead transparencies, list your project's goal, objectives, and activities, in the format used for Worksheet 1.
2) On another overhead transparency that you can lay over your conceptual model transparency, add your project activities to show where they are meant to enter and influence the model.
3) On a final transparency, record your list of the project's major assumptions.

Instructions for Breakout Groups to Develop Indicators

Purposes of the Session

The purposes of this session are to 1) generate indicators to measure to what extent the project activities have enabled the project to reach its goal and objectives, and 2) consider additional information and indicators needed to understand the contextual factors and assumptions behind the overall project. Definitions for these terms include:

Indicator: A unit of information measured over time that documents changes in a specific condition. A given goal or objective can have multiple indicators. Indicators should be:

- *Measurable* -- able to be recorded and analyzed in quantitative or qualitative terms,
- *Specific* -- defined precisely,
- *Unambiguous* -- defined the same way by all people,
- *Consistent* -- not changing over time so that it always measures the same thing,
- *Sensitive* -- changes proportionately and in response to actual changes in the effect being measured.

Impact Indicator: An indicator related to the project goals and/or objectives that show that results are or are not occurring.

Process Indicator: An indicator related to project activities that show that the activities have taken place. Process indicators are generally necessary, but not sufficient to show that objectives have been met.

Proxy Indicator: An indicator that is used as a substitute for an indicator that cannot be directly measured or assessed.

Contextual Information: Information that is not directly related to the specific factors in the project being considered, but is related to other factors that affect the target condition.

Procedure

1) Using Worksheet 2a, list the goals and objectives developed for your project.
2) For each goal and objective, write down one or more impact indicators. Refine these indicators by applying each of the five criteria listed above to all proposed indicators. You should add, delete, or change indicators as necessary.
3) For each activity, write down one or more process indicators. Refine these indicators using the criteria listed above (note that process indicators are generally fairly straightforward).
4) Using Worksheet 3a, your conceptual model, your list of assumptions, and the *Guidelines to Developing Monitoring Plans for BCN-Funded Projects,* write down any specific information that you need to know.
5) Write down indicators for each additional piece of information and refine them using the criteria listed above.

Outputs

1) On overhead transparencies, list the indicators developed for each goal, objective, and activity following the format in Worksheet 2a.
2) On a separate transparency, list the indicators developed for each piece of additional information following the format in Worksheet 3a.

Instructions for Breakout Groups to Develop Methods

Purpose

The purposes of this session are to 1) explore options for methods for obtaining data to measure different indicators, 2) assess the tradeoffs (costs and benefits) involved in using these different methods, and 3) select which method is most appropriate for the indicators in your project. The tradeoffs can be structured in terms of:

Costs: Examples include level of skills required, amount of money and or equipment required, amount of time required.
Benefits: Examples include reliability (accuracy) of data collected, replicability, ease of communication of findings.

Procedure

PART I

1) Break into disciplinary groups: biological, socioeconomic, and enterprise. Each group should list the indicators that its members developed in previous sessions and then from this list, the group should select the five indicators that are of highest priority for exploring method options.
2) Starting with the first indicator, write down a range of methods that can be used to collect the data necessary for the indicator.
3) For each method, assess its costs and benefits relative to the criteria outlined above.

PART II

1) Regroup into your original project teams.
2) Review the indicators developed in previous sessions and select methods to obtain data for these indicators in light of the results of the Part I of this session.
3) As you select methods for a given indicator, look for ways in which work can be made more efficient by collecting data to measure one indicator that will also apply to other indicators.
4) You may also need to revise selections of methods based on the overall resource budget available to the project.

Outputs

1) Write the final methods selected for each indicator on an overhead. Follow the format in Worksheets 2a and 3a.

Instructions for Breakout Groups to Develop M&E Workplans

Purpose
The purpose for this session is to develop specific plans for collecting the data necessary to measure each of the indicators developed in the above worksheets. A good workplan will provide answers to the following 7 questions:

1. WHAT: What **information** do **you** and your **audience** need to monitor to assess project impact and effectiveness (based on your conceptual model, goals/objectives, and contextual information)?

2. WHICH: Which **impact and process indicators** will you measure to obtain this information?

3. HOW: How will you do the monitoring? Specifically, which **methods** will be most effective for collecting the data required to measure your indicators given accuracy needs and available resources?

4. WHERE: Where will you do the monitoring? Where are the specific **locations** for collecting these data?

5. WHEN: When will you do the monitoring? What is the **timing and frequency** for collecting and analyzing these data?

6. WHO: Who will be doing the monitoring? Which **project personnel** (project staff, community members, and stakeholders) will be responsible for collecting, analyzing, and reporting these data? Who will receive the findings?

7. WHY: Why did you do this monitoring? How will you and your audience **use the results** to modify the project, affect policy, or both?

Procedure
1) Steps 1 (What), 2 (Which), and 3 (How) should have already been completed on Worksheets 2a and 3a.
2) For each entry on Worksheets 2a and 3a, fill in the appropriate responses for Steps 4-7 using Worksheets 2b and 3b.

Outputs
1) On overhead transparencies, write out your monitoring workplan following the format in Worksheets 2b and 3b.

Guide to the Format and Content for BCN Monitoring Plans

A complete monitoring plan should contain three main sections:

I. CONCEPTUAL MODEL
Written descriptions of the following items as well as a drawing of the overall conceptual model (following the session instructions from the workshop).
1. Target condition
2. Factors affecting the target condition
3. Factors that the project hopes to influence

II. PROJECT OUTLINE
Written descriptions of the following items (following Worksheet 1 from the workshop).
1. Goal(s)
2. Objectives
3. Activities
4. Major assumptions behind the factors and relationships

III. MONITORING AND EVALUATION WORKPLAN
Written descriptions of the following items (following Worksheets 2 and 3):

1. WHAT: What **information** do **you** and your **audience** need to monitor to assess project impact and effectiveness (based on your conceptual model, goals/objectives, and contextual information)?

2. WHICH: Which **impact and process indicators** will you measure to obtain this information?

3. HOW: How will you do the monitoring? Specifically, which **methods** will be most effective for collecting the data required to measure your indicators given accuracy needs and available resources?

4. WHERE: Where will you do the monitoring? Where are the specific **locations** for collecting these data?

5. WHEN: When will you do the monitoring? What is the **timing and frequency** for collecting and analyzing these data?

6. WHO: Who will be doing the monitoring? Which **project personnel** (project staff, community members, and stakeholders) will be responsible for collecting, analyzing, and reporting these data? Who will receive the findings?

7. WHY: Why did you do this monitoring? How will you and your audience **use the results** to modify the project, affect policy, or both?

EXHIBIT B2
Participants in the BCN Monitoring Workshops

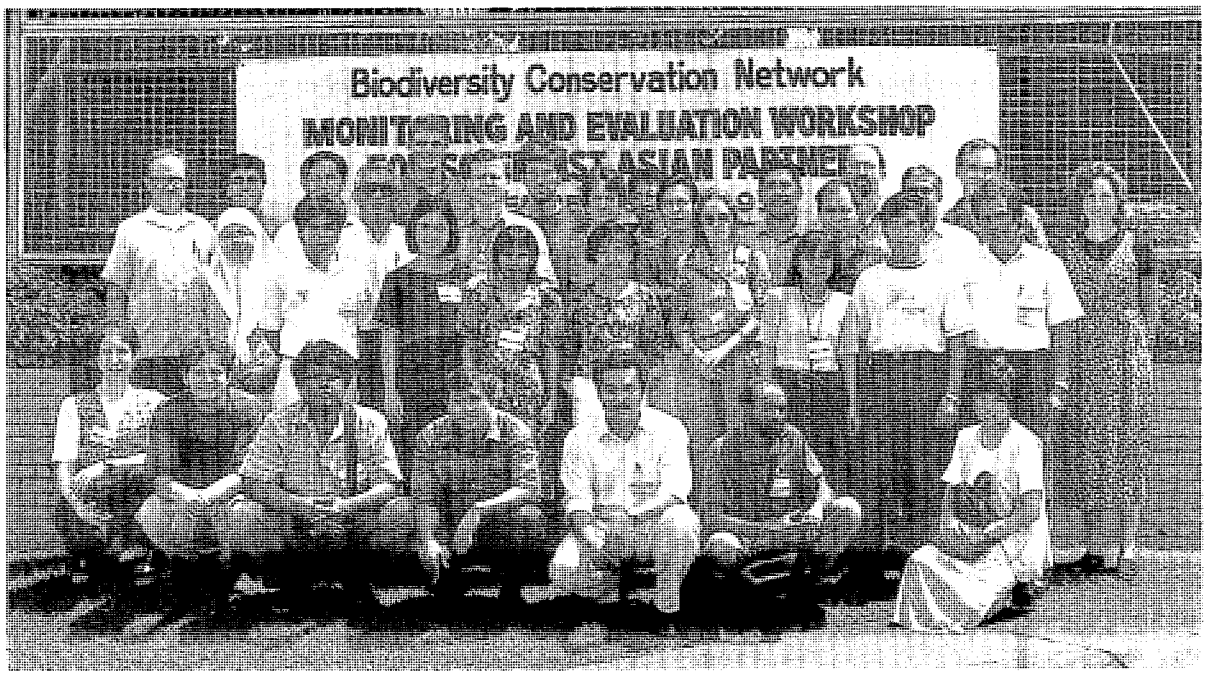
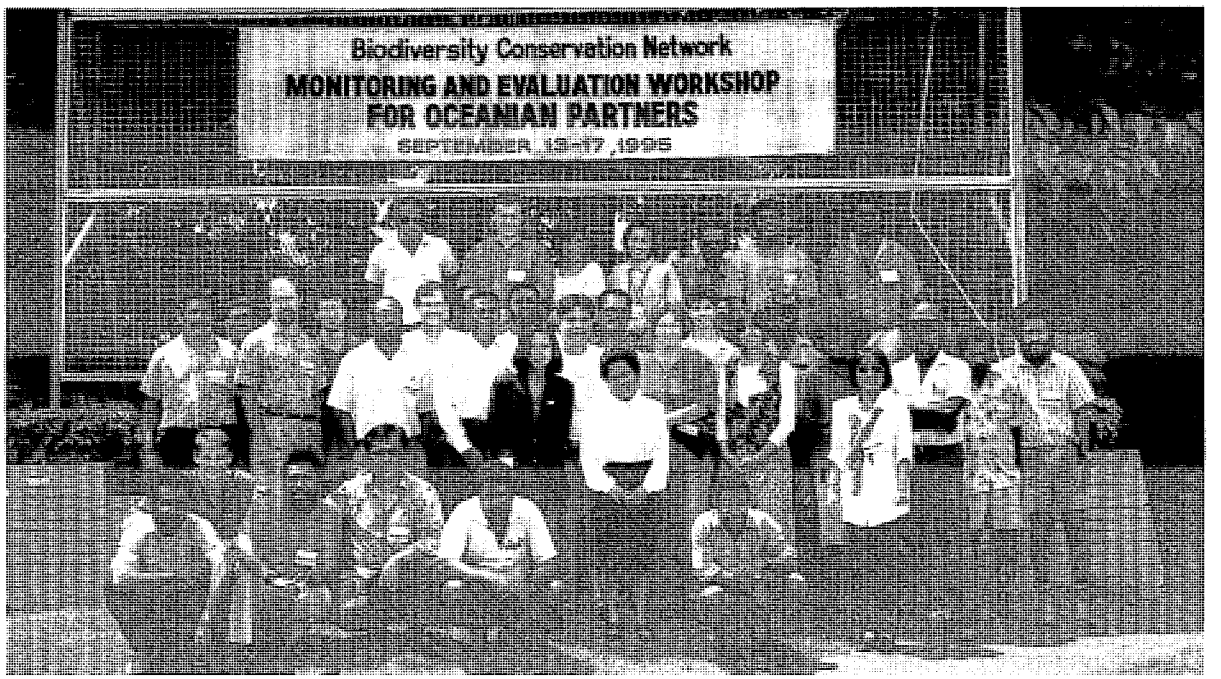
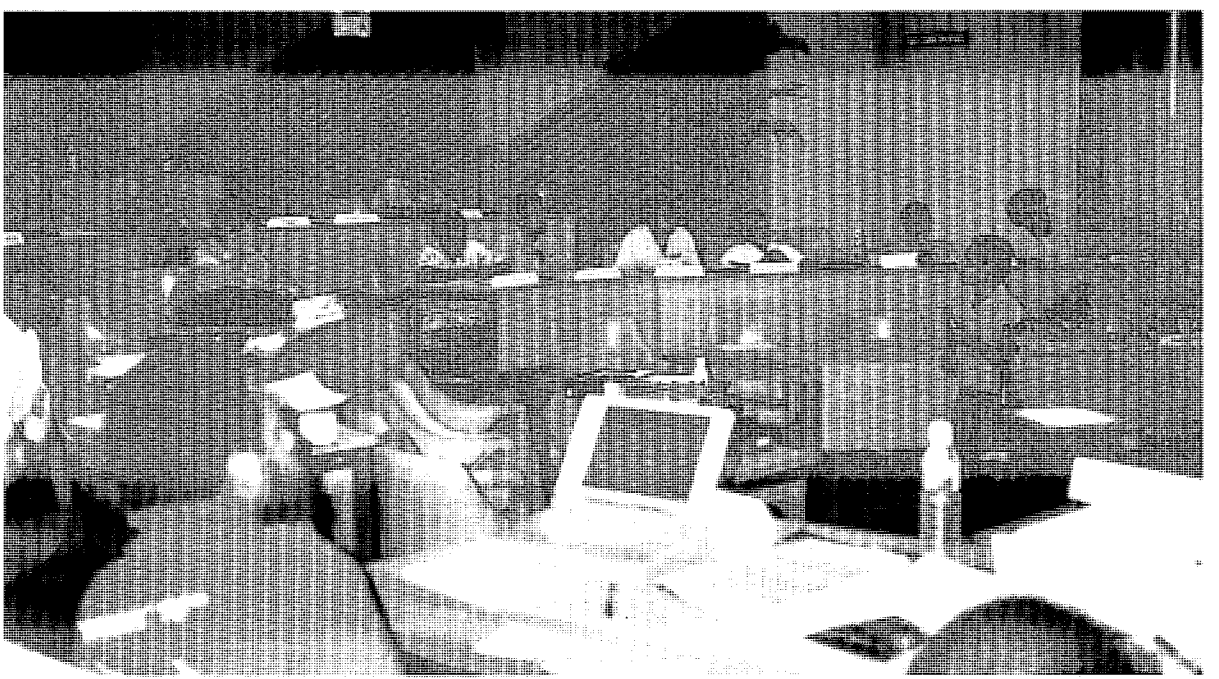


Exhibit B2 -- Continued

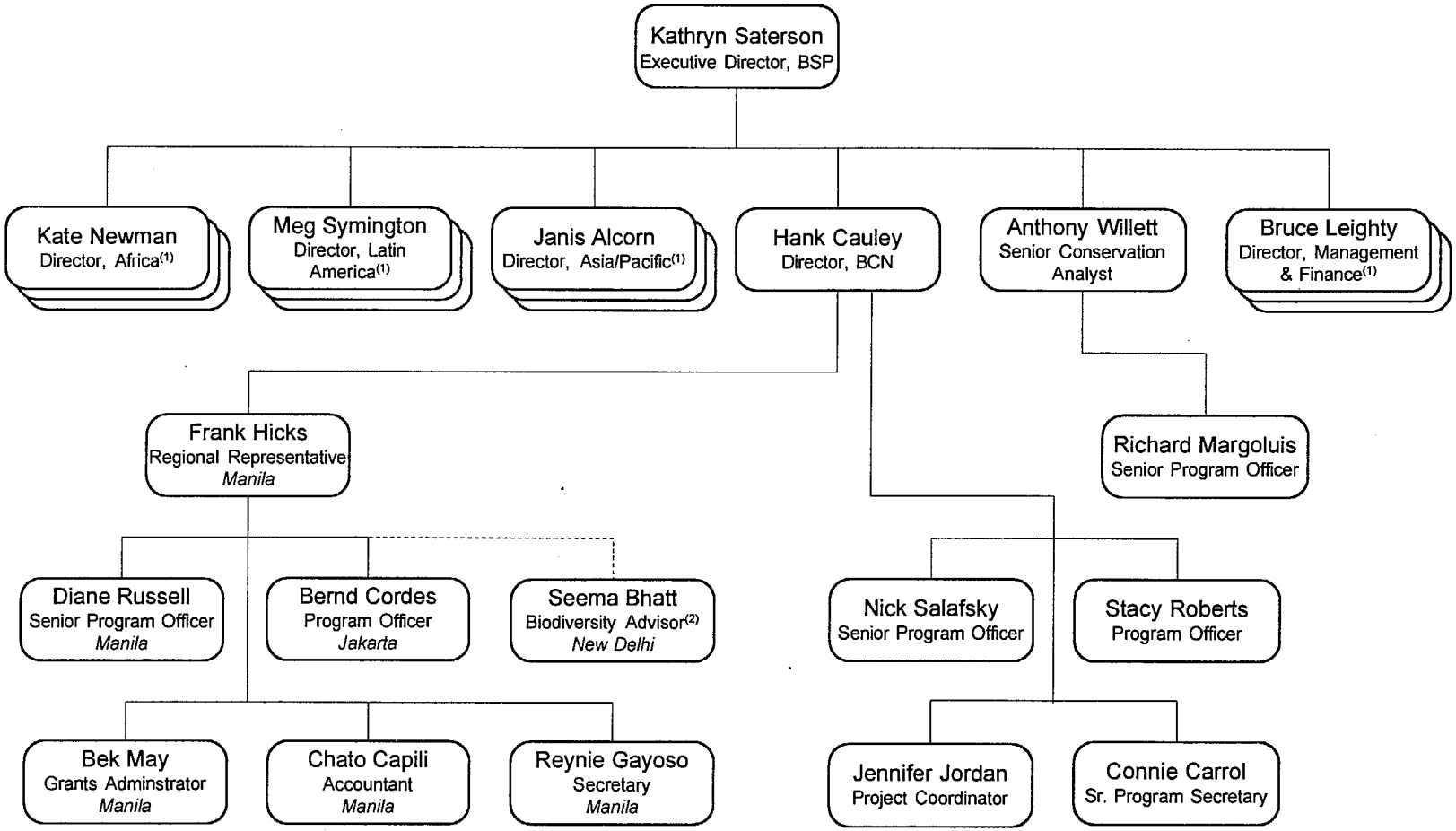




Biodiversity Support Program (BSP)

Biodiversity Conservation Network (BCN)

Organizational Chart, September 1995



All staff based in Washington DC unless otherwise noted
(1) = Organizational chart does not show staff in these programs
(2) = Employed by US-AEP and managed by BCN

BCN 1995 Annual Report: *Response and Feedback Form*

To help us improve the quality and usefulness of future reports, we would appreciate it if you would fill out this form and mail it back to the BCN. Thanks in advance for your help.

Response to Specific Portions of the BCN Annual Report
Please rate each of the following items as to their usefulness by circling your choice:

Executive Summary

1	2	3	4	5
not useful				very useful

Section 1. Overview of the Biodiversity Conservation Network -- 1995

1	2	3	4	5
not useful				very useful

Section 2. Selected Discussion Topics

1	2	3	4	5
not useful				very useful

The section I/we found most interesting was:
2.1 Monitoring 2.2 Enterprise 2.3 Participation 2.4 Analytical Activities

Annex A: Implementation Grant Summaries (Including Exhibit 1)

1	2	3	4	5
not useful				very useful

Annex B: Monitoring Workshop Session Instructions

1	2	3	4	5
not useful				very useful

Tables and Other Exhibits in General:

1	2	3	4	5
not useful				very useful

Exhibits that I/we found interesting (circle all that apply):
#1 #2 #3 #4 #5 #6 #7 #8 #B1 #B2

The overall report was:

1	2	3	4	5
not useful				very useful

It was useful or not useful because:

Other Comments About the Report:

(over)

Information About the Reader:

Country: _____ *Circle all that apply:* Project Manager Project Staff

Job Title: _____ Enterprise Expert Researcher

BCN Project(s) Involved with: _____ Conservationist Government

Development Specialist

[The following are optional -- please include name, however, if requesting additional publications]

Name: _____ *Address:* _____

Position: _____ _____

Organization: _____ _____

Step 1. Fold Down on this Line

From:

Step 4: Place Postage Here

To: Biodiversity Conservation Network
c/o World Wildlife Fund
1250 24th Street NW
Washington DC 20037
USA

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Other BCN Publications that I/we would like to receive at no charge *(please check relevant choices)*:

___ BCN Brochure (12pp) ___ 1995 Annual Report ___ 1994 Annual Report

___ India M&E Workshop Report ___ Los Baños M&E Workshops Report ___ M&E Workshop Instructions

Other BSP Publications that I/we would like to receive at no charge *(please check relevant choices)*:

___ Designing Integrated Conservation and Development Projects

___ Sustainable Harvest of Non-timber Plant Resources in Tropical Moist Forest: An Ecological Primer

___ Indigenous Peoples, Mapping & Biodiversity Conservation: An Analysis of Current Activities and Opportunities for Applying Geomatics Technologies

___ Biodiversity in the Balance: Approaches to Setting Geographic Conservation Priorities

Step 3. Tape or Staple Here