

Effective Alliances for Conservation

Richard Margoluis, Cheryl Margoluis, Katrina Brandon, and Nick Salafsky

CONTENTS:

Introduction	1
Why Study Alliances for Conservation?	3
The Conventional Wisdom on Alliances and	
Organizations	7
What Did We Do?	11
What Did We Find?	17
Putting the Findings in Perspective	37
To Help You on Your Way	41
To Learn More	45

INGOD COMPANY:

Effective Alliances for Conservation

THE CONSERVATION OF LIFE ON EARTH is one of

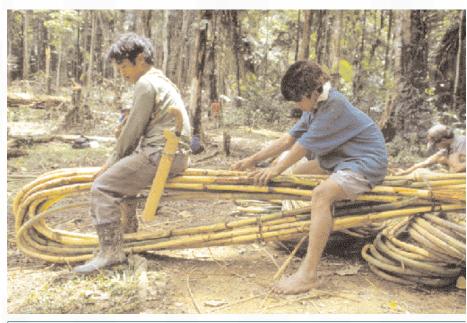
the greatest challenges humankind faces in the twenty-first century. As our hunger for natural resources continues to grow along with the world's population, the sense of urgency to conserve biodiversity has likewise grown. To save ourselves, we must save the environment in which we live. To do this, conservation efforts must be highly efficient

and effective social endeavors.

Conservation is truly a complex issue. Unlike many other subjects of societal concern, figuring out just what our goal in conservation



should be is difficult to define and open to endless public, political, and scientific debate. How to achieve conservation is an equally unresolved and intractable issue. Long gone are the days when we thought that all we had to do was put up a fence to keep people out and to keep an area



Rattan harvesting played a significant role in a number of the BCN-supported enterprises. In some cases, it provided products for local use and in others it provided the raw materials either for local manufacturing or for sale to other manufacturers, bringing new sources of income to communities.

healthy and pristine. Conservation projects now often include the integration of protection, education, economic incentives, and policy, among countless other interventions. Finally, conservation has become a field that includes a myriad of institutions — community and nongovernmental organizations (NGOs), government and bilateral agencies, academic and research institutions, and public and private foundations.

WHY STUDY ALLIANCES FOR CONSERVATION?

As the complexity of conservation has become increasingly apparent to those working in the field, the conservation community has come to realize that it cannot work in isolation. Conservation must fully embrace and include people and institutions whose existence is dependent on the conservation of natural resources, and it must build bridges to other fields in order to reach conservation goals. In an effort to do this, conservation organizations have sought strategic partnerships to help achieve conservation goals. But what are the most strategic relationships we can build to achieve conservation? What are the most efficient ways of working together across the spectrum of organizations and institutions involved in conservation? What makes for the most effective alliances in conservation? These are the questions that the conservation community must address in order to meet the challenges that we presently face.

What We Wanted to Know

Almost all of the work carried out and supported by the Biodiversity Support Program (BSP) since it first began in 1988 has involved collaborating with various organizations and groups. Our allies have included conservation NGOs, development NGOs, government agencies, funding organizations, and academic and research institutions. Because these alliances are so important to our work, we have continuously analyzed them to see what has worked best in building and managing our alliances, what has not worked, and why.

While we have learned much from monitoring our own experiences working with other institutions, we nevertheless wished to gain a more precise understanding of what makes for effective alliances in conservation. We believe that if we can systematically learn about what makes alliances work and share our results with other individuals and institutions working in the field, then we can help other organizations identify strategic and effective partners for achieving conservation.

To this end, we designed this study to address two main questions.

- 1. What are the characteristics of effective conservation alliances and their member organizations?
- 2. What are key principles that can help organizations work together more effectively?

As we began to design this study and review previous work on the subject, we found an amazing number of terms to describe various types of alliances and organizations. Many of these terms, however, proved to be so close in meaning that they were essentially synonymous. In order to help clarify concepts and terms so that we could more efficiently analyze, understand, and communicate relevant insights, we have distilled a list of terms (see p. 5) that we use extensively and exclusively throughout this document. While we are sure you will be able

to think of some exceptions to our classification, we have tried to make the categories as discrete, meaningful, and comprehensive as possible. Throughout the document, we use the term alliance to broadly describe a formal arrangement between organizations that is created to implement some set of project activities designed to achieve specific, on-site conservation goals. In this research, we do not address broad coalitions or networks in which multiple organizations work together, either formally or informally, on general themes. We have categorized alliances into three types. We have also classified alliance member organizations according to their institutional type and their geographic range of influence, or level of operation. Throughout our



Ecotourism is one of the many interventions that formed the basis for enterprise-based conservation activities in the BCN projects. Activities ranged from better facilities and guesthouses to more beautiful beachfronts, to scientific and adventure tours and conservation awareness programs, to fishing and diving excursions.

analysis, we also distinguish organizations by the role they play in the alliance. These distinctions are key to understanding our findings.

In This Publication

Immediately following this section, we present a list of widely held key assumptions about alliances that we uncovered during an extensive review of existing literature and after talking to conservation project managers, practitioners, and researchers. We present these assumptions as *The Conventional Wisdom on Alliances and*

Organizations and use them as the framework around which we structure our analysis.

The complete literature review is available online in the publications section of the BSP Web site at www.BSPonline.org.

Following the section on the Conventional Wisdom, we describe what we did to answer the two main questions we wanted to address through this study (see p. 3). It is in this section, *What Did We Do?*, that we briefly describe the approach and methods we took in our research.

In the section *What Did We Find?*, we present not only our results and analysis, but also our conclusions on each Conventional Wisdom. You will see a mixture of quantitative and qualitative analysis in this section. We discuss statistical significance, proportional relationships, and the results of key informant interviews with project staff and managers. At the end of this section you will find a recap of our assessment, under the heading *Summarizing Our Findings*.

IMPORTANT DEFINITIONS

Alliances

- A contractual agreement is formed when a primary organization hires another organization to complete specific tasks and work. The contracted organization does not usually share in the decision making or liability for the project.
- A partnership involves two organizations that have agreed to work together on a specific project or to achieve a particular, mutually beneficial goal. Partners ideally agree to share decision making, liability, and information in all of their joint efforts.
- A consortium is similar to a partnership but it includes three or more organizations working together on specific projects involving joint liability and joint decision making. The degree of responsibility and accountability, however, depends on predetermined arrangements among the participating organizations.

Organizations That Constitute Alliances

Type of Organization

- Conservation NGOs are private, nongovernmental organizations that have the conservation of biodiversity
 or natural resources as their primary institutional goal, regardless of which strategies they employ to reach this
 goal.
- Development NGOs are private, nongovernmental organizations that are focused primarily on improving
 human welfare and promoting community development as their primary institutional goals. They work in fields
 such as public health, education, and economic development.
- Government agencies formally represent local, regional, or national government interests in the projects in which they work. Their jurisdiction covers, for example, issues such as forest and wildlife management, national parks, and community development. (In our sample of alliances, government agency involvement was virtually absent, so we do not include this type of organization in our analysis.)
- Academic and research institutions are primarily nonprofit, scientific organizations and universities that design and manage a range of biological, social, economic, and political studies.

Level of Organization

- Local organizations interact exclusively and directly with people at local scales usually the community level. These organizations are typically cooperatives, interest associations, village institutions, and resource usergroups.
- National organizations cover a geographic area that is not exclusive to one site or project; they work at
 and directly above the local level in one country, and often link local organizations to larger international organizations. These organizations seek to have impact at both local and national levels and their allegiances and
 connections are not site-specific.
- **International organizations** have a mandate and geographic scope that encompass multiple countries. These organizations may also have offices in the countries where they work.

Primary Roles of Organizations Within the Alliance

- **Simple involvement** refers to when an organization participates in the alliance but does not play a key role, such as the primary implementer or decision maker.
- **Primary implementing organization** is the role played by the organization principally responsible for carrying out the project activities determined by the alliance.
- **Primary decision-making organization** describes the organization that serves as the lead organization for the alliance and is ultimately responsible for the programmatic decisions related to the project.

In the following section, *Putting the Findings in Perspective*, we present our general conclusions. Based on our results, we distill a set of general yet non-trivial principles for forming effective alliances for conservation. These principles are meant to serve as a guide to those project managers who are considering forming alliances to implement conservation projects.

We also provide a framework of questions designed to help organizations think about critical issues as they consider becoming involved in an alliance. The framework, titled *To Help You on Your Way*, is meant to be used as a tool by project managers to help them determine the best structure and partners as they develop their alliances. In the section titled *To Learn More*, you will find selected readings and a complete reference list.



Hatam farmers living in and around the Arfak Mountains Nature Reserve (Irian Jaya) have become guardians of the local population of the CITES-listed birdwing butterfly. Butterfly ranching, which relies on both traditional ecological knowledge and scientific monitoring, has helped the local people realize that their livelihood depends on protecting wild populations from poaching and black market trade.

1 ON ALLIANCES **ORGANIZATIONS**

In order to determine popular opinion on alliances and organizations, we reviewed whatever relevant and available literature we could find and we consulted with many of our colleagues in the conservation field. While there is relatively little written on the characteristics of successful conservation alliances, more information exists for organizations. Much of the common perception on alliances included here, therefore, comes from our discussions with conservation researchers and project managers and is informed by what we know about organizations. Based on our review and preliminary interviews, we generated a list of key hypotheses that we transformed into Conventional Wisdom or presently held beliefs and assumptions related to conservation success achieved by alliances and their member organizations.

This list is by no means exhaustive. We have extracted the Conventional Wisdom that we think is most relevant and essential to understanding what makes conservation alliances work. Our framework is divided into three sec-

For additional analysis of the factors that have been associated with alliance success in previous works, see our complete literature review online in the publications section of the BSP Web site at www.BSPonline.org. tions: composition of the alliance, management of the alliance, and funding of the alliance. For each of these sections, we organize the Conventional Wisdom under important variables, and provide defin-

itions so that it is clear what we are analyzing. This framework forms the basis of our analysis and the development of general and yet non-trivial principles for conservation alliance success.

Composition of the Alliance

Variable: Number of Member Organizations in Alliance

Definition: Alliances are defined according to the number of organizations involved, and the relationship between the participating organizations. As we mentioned in the previous section, we define and focus on three types of alliances: contractual agreements, partnerships, and consortia.

Conventional Wisdom: Alliances with more member organizations are more effective as they have greater access to a variety of technical skills and financial resources.

Variable: Type of Member Organizations in Alliance

Definition: Classification of the organization according to its primary goal and the types of activities it carries out, including conservation NGO, development NGO, or academic/research institution.

Conventional Wisdom: Within alliances, conservation NGOs are best suited to implementing conservation projects.

Variable: Level of Member Organizations in Alliance

Definition: Classification of the organization according to its geographic range of influence or level of operation, including local, national, and international levels.

Conventional Wisdom: International organizations are most effective at managing and implementing conservation projects because they have far greater access to technical skills and financial resources than any other level of organization.

Variable: Characteristics of Organizations That Constitute the Alliance

Definition: Key attributes of member organizations that influence an alliance's ability to achieve conservation, including, for example, size of member organizations, number of staff living on-site, and skills and background of project staff.

Conventional Wisdom: The larger the size (i.e., the greater the number of staff) of the primary decision-making organization in an alliance, the higher the likelihood that conservation success will be achieved.

Conventional Wisdom: The greater the number of staff based at the project site, the more likely the project will be successful because field staff can create good working relationships with local stakeholders.

Conventional Wisdom: Alliances that have high field staff turnover are less effective because it is more difficult for them to form and maintain relationships with the community and other key players in the project.

Management of the Alliance

Variable: Strength and Quality of Leadership

Definition: The availability of a leader who serves as a positive force and can provide vision for the direction of the alliance, act as a unifying influence, and motivate others in the alliance.

Conventional Wisdom: Alliances need a single, strong leader to create and maintain successful conservation projects.

Variable: Clarity of Project Goals

Definition: The extent to which an alliance jointly, clearly, and concisely defines and documents the goals of its project activities.

Conventional Wisdom: Simpler alliances with fewer member organizations are more able to establish and maintain clear project goals.

Conventional Wisdom: When the primary implementing organization within an alliance has clear project goals, the alliance is more likely to achieve conservation success.

Variable: Clarity of Organizational Roles

Definition: The degree to which the roles, authority, and responsibility of each organization in the alliance are clearly defined, understood by all, and mutually agreed upon.

Conventional Wisdom: Alliances with clear, agreed-upon roles, authority, and responsibility are more effective as there is less confusion, redundancy in activities, and competition between member organizations.



Sustainable use of forest resources was the focus of several of the BCN projects, among them, the harvesting of bananas and durian from Lore Lindu National Park.

Conventional Wisdom: Alliances with clear goals generally have more clearly defined roles for their member organizations.

Variable: Flexibility

Definition: The ability of an alliance to adapt to changes in the project and modify plans accordingly.

Conventional Wisdom: Alliances that are flexible are more likely to achieve conservation success.

Conventional Wisdom: Alliances that have clear project goals are generally less flexible and, therefore, less adaptable to changes that may be required during project implementation.

Variable: Credibility

Definition: The degree to which project partners — individuals, communities, and other organizations — perceive an implementing organization to be competent, legitimate, and honest.

Conventional Wisdom: Alliances in which the implementing organization is perceived by project partners as credible are more likely to achieve conservation success.

Variable: Administrative Capacity

Definition: The ability of an alliance to properly manage necessary administrative tasks, including accounting, personnel management, and the preparation of financial and technical reports, related to the successful completion of project activities.

Conventional Wisdom: The greater the administrative capacity of the implementing organization in an alliance, the higher the likelihood that it will achieve conservation success.

Funding of the Alliance

Variable: Type of Relationship With Funder

Definition: The level of cooperation between the alliance and the funding agency.

Conventional Wisdom: A good working relationship with a funder that provides technical assistance in addition to financial resources helps an alliance achieve its goals.

Variable: Funding Level

Definition: The amount of financial resources available to an alliance to carry out a particular project.

Conventional Wisdom: Alliances that receive large amounts of funding for their projects are more likely to achieve conservation success than those that have access to relatively little funding.



Honey farming — which relies on healthy, primary forest to support bee populations — is an enterprise used in some BCN sites.

WHAT DID WE DO?

To answer the two main questions of this study (see p. 3), we wanted to look at a range of alliances working to achieve conservation. We chose to analyze the collection of alliances that make up the Biodiversity Conservation Network (BCN) portfolio of projects. The design of our study is essentially cross-sectional, in which data are collected at one point in time with attention also paid to past circumstances or issues. Because we were interested primarily in how conservation NGOs can be most effective in forming and participating in alliances, much of our attention is focused on them. And, because our main focus of interest is conservation outcome, almost all of our analysis is focused on making links to this variable.

The Biodiversity Conservation Network

The Biodiversity Conservation Network (BCN) was established in 1992 with funding from the United States Agency for International Development (USAID) and the United States-Asia Environmental Partnership (US-AEP). BCN was a semi-autonomous program within the Biodiversity Support Program (BSP), a consortium of World Wildlife Fund (WWF), The Nature Conservancy (TNC), and World Resources Institute (WRI).

The BCN program had two main goals.

- · To support biodiversity conservation efforts at a number of sites across the Asia and Pacific region through the development of enterprise-oriented projects.
- To evaluate and document the conditions under which these enterprise-oriented approaches to community-based conservation of biodiversity are effective.

BCN was founded essentially to test the idea that if local communities receive sufficient benefits from an enterprise that depends on a healthy natural resource base, then they will act to counter internal and external threats to that biodiversity. BCN funded alliances of organizations through its grant-making process. These alliances included various combinations of organizations, including international, national, and local conservation and development NGOs, government agencies, universities, and research organizations, among others. In some cases, BCN funds were used to support already existing alliances, but in other cases, new alliances were formed when they successfully competed for a BCN grant. The grant-making period of BCN ran from 1993 to 1999, and the program ended late in 1999. Although BCN funding ceased at that time, some of the BCN-supported alliances continued on with other financial and technical support.

> The foundation of our study is the framework of Conventional Wisdom that we developed from the literature and our preliminary exploration of conservation alliances. Our results, therefore, are organized using this framework.

Our Sample

We chose our sample — the 20 projects supported by the BCN program — for several reasons.

 All projects are alliances. All 20 projects funded by BCN were alliances that included multiple organizations.

- All alliances include similar member organizations. All alliances were made up of a limited number of types and levels of organizations that played similar roles across the alliances. This arrangement allowed us to examine the characteristics of specific organizations and the relationships between or among them in each alliance.
- The sample is limited in geographic and programmatic focus. All alliances are formed to carry out conservation activities in the Asia and Pacific region. Likewise, each project had the same two general goals: to conserve biodiversity and to test a community-based enterprise approach to conservation. The similarities among projects reduced the number of variables we needed to study that might have had some influence on conservation outcome. (In essence, we controlled for some "confounding" variables by selecting this relatively homogenous sample.)
- We had relatively easy access to information. BCN and BSP staff were familiar with the projects and had access to project documents. BCN and BSP staff had existing relationships with project staff and we could, therefore, more easily interview them about their experiences working in the alliances.
- The sample size is relatively large. In all, there were 20 different projects (or alliances), encompassing 39 sites, 43 organizations, and 37 enterprises. (There were in fact 48 enterprises, but financial information was complete for only 37 of them.) So, given the realities of trying to do this type of research, we actually had relatively large sample sizes, depending on our unit of analysis.

For definitions of and discussions on each of these units, see Salafsky, N., B. Cordes, J. Parks, and C. Hochman. 1999. Evaluating linkages between business, the environment, and local communities: Final analytical results from the Biodiversity Conservation Network. Washington, D.C.: Biodiversity Support Program. This is available online in the **publications** section of the BSP Web site at www.BSPonline.org

By using the BCN portfolio as our sample, we were able to examine a relatively large number of projects that were different enough so that we could figure out what makes for effective alliances, and, at the same time, similar enough so that we could control for factors we did not think were particularly important.

Throughout our research, we used different units of analysis, depending on the question we were addressing. Each alliance implemented one project, all alliances involved multiple member organizations, each project included multiple sites, and each site could include one or more enterprises. Therefore, as we present our findings, it is important to pay close attention to the units we are using.

	ALLIANCES	SITES	
Fiji	1	1	
India	3	4	
Indonesia	6	12	
Nepal	2	3	
Papua New Guinea	3	11	
Philippines	3	5	
Solomon Islands	2	3	
TOTAL	20	39	

organizational Level, by Type					
		LE	VEL		
	INTERNATIONAL	NATIONAL	LOCAL	TOTAL	
Conservation NGO	9	6	0	15	
Development NGO	6	8	6	20	
Academic/research institution	2	6	0	8	

Enterprises, by Type

TOTAL

Organizational Level by Type

	NUMBER	
Ecotourism	13	
Non-timber forest products (NTFPs)	14	
Raw commodity	10	
TOTAL	37	

Measuring Conservation Success and the Factors That Influence It

Measuring conservation impact is an extremely difficult task; nevertheless, it was an essential part of determining what makes for effective conservation alliances. Without some measure of conservation outcome (our dependent variable), there was no way to evaluate the characteristics of one alliance as compared to another.

For a detailed discussion of measuring conservation outcome, see Salafsky, N., B. Cordes, J. Parks, and C. Hochman. 1999. Evaluating linkages between business, the environment, and local communities: Final analytical results from the Biodiversity Conservation Network. Washington, D.C.: Biodiversity Support Program.

Threat Reduction Assessment (TRA) involves identifying threats, ranking them according to their relative importance, assessing progress made in addressing them, and then estimating actual threat reduction as a percentage of the total potential threat. TRA scores range, therefore, from 1 to 100. For more details on this approach, see Salafsky, N., and R. Margoluis. 1999. Threat reduction assessment. Conservation Biology 13(4):830-841 or Salafsky, N., and R. Margoluis. 2000. Measuring conservation project success: The Threat Reduction Assessment approach. Washington, D.C.: Biodiversity Support Program.

Both BSP titles are available online in the publications section of the BSP Web site at www.BSPonline.org. Most direct measurements of the state of biodiversity at a given time are not sufficiently sensitive to the short time frames of projects, many are difficult and expensive to undertake, and, in general, pure biological data are hard to interpret in the context of on-the-ground project management. For this analysis, we used the Threat Reduction Assessment (TRA) approach to represent the conservation impact at each site. This technique examines the ability of a project to achieve biodiversity conservation at a site by evaluating the area, intensity, and urgency of each threat, as well as the degree to which all threats have been addressed by project activities. The TRA approach was also used to determine the primary dependent

variable in BCN's Final Analytical Results (Salafsky et al 1999). Throughout this current study, we refer to the results of the TRA as the conservation outcome or impact.

Conservation success is a measurement of impact at the site level. Throughout our research, therefore, our dependent variable, the TRA score, is measured for sites, and our independent variables are analyzed relative to the sitebased TRA. We can attribute conservation success to the alliance, however, because it is this group of organizations that worked together to achieve conservation at the sites included in their project.

We drew our independent variables — those factors that influence conservation success — from our review of the literature and Conventional Wisdom. These variables were alliance- and organization-level characteristics that we

thought would tell us the most about what makes for effective alliances for conservation. In our analysis, we integrated both levels of characteristics, depending on the Conventional Wisdom we were addressing. Many of these factors have the same name at both the alliance and organization levels, but they mean slightly different things at each level.

Data Collection

Using the results of our review of the literature and our Conventional Wisdom framework, we reviewed project records, BCN site-visit and trip reports, technical and financial reports, and correspondence to distill as much relevant data as possible.

Primary data were collected using a semi-structured questionnaire to interview key informants, including BCN program officers who were responsible for direct oversight of the grants and personnel associated with the alliances and organizations that received the grants. Supplemental data were collected through interviews with BCN managers based in the Washington, D.C., home office.

Data were analyzed both quantitatively and qualitatively. For those variables that had known quantitative values, such as number of staff living on-site or funding level, the raw data were used. For other independent variables that required measuring key informant opinions, such as credibility or administrative capacity, we worked with the BCN program officers to develop a 10-point ranking scale to rate each variable. These values and rankings formed the basis of our evaluation to demonstrate the relative differences across projects for each variable. Our quantitative and qualitative findings are presented in the section titled *What Did We Find?*

Some Things to Keep in Mind

As you read through our findings, please keep in mind the following caveats to help you interpret our results as accurately as possible.

- Causality is difficult to assess. Our research design was cross-sectional; that is, data were collected at
 one point in time, and we did not follow variables over time to see how they influence our outcome variable.
 While statistical significance may indicate an association between two variables, we cannot say for sure which
 variable caused which.
- Alliances changed over time. Many characteristics of the alliances changed throughout the time of
 BCN funding, including the type and number of alliance partners, flow of funding, and access to technical assistance. In addition, initiation of BCN grants ranged from 1993 to 1995, so the varying amount of time projects
 received funding may have influenced conservation outcome. Most of our analysis uses the end of the project as
 the final evaluation point, allowing maximum time for project impact. As our research design is cross-sectional,
 it was difficult to incorporate changes in variables over time.
- Our sample is not random. The projects in our sample are all based in Asia and the Pacific and are all enterprise-oriented projects. They had all been through a screening process in order to receive grants, and, therefore, the portfolio should be biased somewhat toward successful projects. Because our sample is not



Forest fires pose serious threats to both the local communities and to the biodiversity of the forest itself and the surrounding area. Unmonitored clearing of new agricultural lands using fire increases the potential for devastating environmental impacts.

random, some readers may question whether or not it is representative of conservation alliances in general. We believe that this potential cost in lack of generalizability is more than made up for by the benefit of having a relatively homogenous sample from which we can glean meaningful, precise, and specific principles for creating successful alliances.

- · Our sample is both large and small. Most of our analysis is based on site-level conservation impact. From a practical point of view, this is a large sample size considering our unit (sites). From a statistical perspective, however, a sample of 39 is not very large and does not provide us with much statistical power to ferret out real differences between projects and sites. In fact, given this sample size, we would expect to see relatively little statistical significance in our analyses.
- · Bivariate analyses are not comprehensive. In order to determine differences between projects and sites at the broadest scale, we grouped the results of each variable into two categories (e.g., high impact/low impact, clear goals/ unclear goals, flexible/not flexible) and generally only compared two variables at a time. We chose to do this type of categorical bivariate analysis — looking for associations at the broadest scale — because our sample size proved to be too small to break down our variables into more than two categories. While we believe that this was the most appropriate way to analyze our data, relationships between variables are often complex and cannot be entirely

explained through bivariate analysis. We would have liked to have done some multivariate analysis to see the relative importance of variables that are associated with conservation outcome, but this was not feasible given our sample size.

Categories are sometimes hard to define. In some cases, it was difficult to draw clear lines between categories of data. For instance, the distinction between national organization and local organization sometimes became blurred. Some national organizations only worked at one location, for example. We minimized the impact of this issue by defining our categories as precisely as possible.

- We used an indirect measurement of conservation impact. No biological data were available
 from the projects to use to measure conservation outcome despite the efforts of BCN to have its grantees collect biological monitoring data throughout the life of the program. We believe, therefore, that the TRA
 approach to measuring conservation impact was our best option.
- Our interviews were with BCN and alliance staff. We used semi-structured questionnaires to interview BCN staff and alliance personnel. We first needed to standardize our raw data in order to analyze it, and some bias or systematic error could have been introduced in the process. Also, different staff and alliance personnel had different degrees of familiarity with project sites another potential source of bias. We were acutely aware of these and other potential sources of bias and so did our best to minimize them.

Despite these caveats, we believe that the study design and implementation were as strong as they could realistically be. Trying to



When community members participate in monitoring and evaluation programs, they have an opportunity for first-hand knowledge of the results of various conservation interventions.

determine what makes for effective alliances in conservation is not an easy task, and we wanted to learn what we could, given the complexity of doing this type of research. Throughout the presentation of our findings, we strive to be as analytically rigorous and as objective as possible. We do not present opinions as facts, and where we hypothesize the reasons for a particular outcome we clearly identify it as speculation.

WHAT DID WE FIND?

In this section, we present our analysis of the Conventional Wisdom based on our sample of BCN projects. Quantitative and qualitative analyses are integrated to provide a more complete picture for each variable. For each Conventional Wisdom, you will see a table that summarizes our statistical analysis and text that explains our results and conclusions.

The statistical test we used to determine if there was a relationship between two variables is the χ^2 (chi-square) test of significance. (We used Fisher's exact test when cell values in our 2 x 2 cross-tabulations were less than 5.) This test is used when you have categories of data rather than continuous variables. Because our sample size is relatively small, we used a cutoff of P < .10, or a probability of less than .10, to define statistical significance. (The smaller the sample size, the less likely a relationship between two variables will be statistically significant.) This "P value" is simply a way of saying that there is less than a 10% likelihood that the association we see in our analysis is due to chance or some random distribution of the data; in other words, we can be 90% confident that the association is a real one. When an analysis is statistically significant, the relationship between the two variables is very strong.

When the chi-square statistical test is significant, we denote it under the corresponding table. When we describe our results in the text, we say that the relationship is "significant" only if it was statistically significant. This is the only time we use the word "significant" in our analysis. In addition to the frequencies and totals for each variable, we present important proportions. Often, because our sample size is small, these proportions are the most revealing statistics for our analysis. When we talk of proportional differences in our analysis, we are talking about looking at the differences in the percentages. So, when we say, for example, "conservation success was more than twice as likely in projects where the alliance was led by a strong leader," we are comparing the percentages in conservation success between alliances that have a strong leader and those that do not. This difference is not a statistical measurement of the magnitude of the difference between two categories of a variable (as an odds ratio is), but it gives us some idea of the extent of the difference.

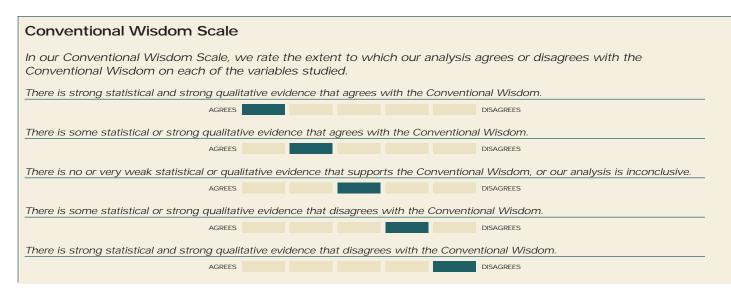
As we mentioned before, depending on our unit of analysis (sites, alliances, or organizations), sample size in our analyses will vary. You will, therefore, see different totals depending on which unit is being analyzed. Sample size is sometimes denoted by "n."

Site-Level Conservation Impact, by TRA Score

TRA SCORE	# OF SITES	CONSERVATION IMPACT
0% to 19%	9	Lowellmanact
20% to 39%	10	Low Impact
40% to 55%	11	I licula licana a at
56% to 100%	9	High Impact
TOTAL	39	
MEDIAN = 40		

Finally, most of our tables look at conservation success as the outcome variable. You will see that the tables use high impact and low impact to denote higher and lower conservation success, respectively. This classification is based on the results of the TRA scores. Conservation success, like most other variables, is divided into two categories at its median.

Taking into consideration our chi-square statistics, the proportions, and our qualitative analysis, we evaluate each Conventional Wisdom using the scale and symbols shown below. This is designed to give you a quick assessment of our findings.

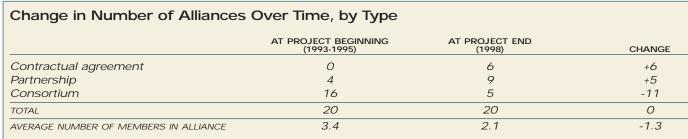


Composition of the Alliance

The first section of our framework looks at the composition of the alliance by focusing on the number, type, and level of member organizations as well as their characteristics and key attributes.

Variable: Number of Member Organizations in Alliance

Conventional Wisdom: Alliances with more member organizations are more effective as they have greater access to a variety of technical skills and financial resources.



DISAGREES WITH THE CONVENTIONAL WISDOM

Note: Projects began at different times depending on when grants were made. We used 1998 as the project end date as that is when we collected the data for this study. Some projects, however, operated into 1999.

All BCN grant agreements were originally set up as consortia (80%) or partnerships (20%). By the end of the BCN program period, however, only 25% of the alliances were consortia and 70% of the alliances had diminished in size. The average number of members in the alliances decreased by 38% to virtually only two organizations working together. By the end of the BCN program, in fact, no consortia included more than three active members. This decrease, in some cases, resulted from natural attrition as projects came to the end of their funding and phased down. However, most changes that occurred in alliance type over time were not planned. Many of the key informants we interviewed expressed the opinion that coordination, administration, and decision making became more

complicated and problematic the greater the number of members in the alliance. According to these key informants, the desire to keep things simple was an important reason why alliances became smaller and less complex over the length of the BCN program.

Site-Level	Conservation	Impact, b	y Type	of Alliance

	HIGH IMPACT	LOW IMPACT	TOTAL	% HIGH IMPACT
Contractual agreement	9	4	13	69
Partnership	6	11	17	35
Consortium	4	5	9	44
TOTAL	19	20	39	

Site-Level Conservation Impact, by Type of Alliance Contractual Agreements vs. All Other Types Combined

	HIGH IMPACT	LOW IMPACT	TOTAL	% HIGH IMPACT	
Contractual agreement	9	4	13	69	
Other (partnership or consortium)	10	16	26	38	
TOTAL	19	20	39		

Note: This analysis is statistically significant.

We found that, contrary to the Conventional Wisdom, the simplest alliances — contractual agreements — were significantly more successful at reaching their conservation goals than the more complex ones. Partnerships and consortia were relatively similar in their ability to achieve conservation success, with consortia being only slightly better than partnerships. These results stand to reason because, as we mentioned above, by the end of BCN, no consortia had more than three active members. The real operational differences between a partnership that includes two members and a consortium that includes three members may be marginal. The fact that alliances simplified over time and that the simplest type of alliance was the most successful leads us to reject the Conventional Wisdom.

Variable: Type of Member Organizations in Alliance

Organizations in All Alliances, by Type

	# OF ORGANIZATIONS	
Conservation NGO	15	
Development NGO	20	
Academic/research institution	8	
TOTAL	43	

Conventional Wisdom: Within alliances, conservation NGOs are best suited to implementing conservation projects.

OUR ANALYSIS AGREES DISAGREES WITH THE CONVENTIONAL WISDOM.

Site-Level Conservation Impact, by Involvement of Conservation Organization

	HIGH IMPACT	LOW IMPACT	TOTAL	% HIGH IMPACT
One or more involved	5	17	22	23
None involved	14	3	17	82
TOTAL	19	20	39	

Note: This analysis is statistically significant.

We first looked at what impacts the mere involvement of a conservation organization in an alliance may have had on conservation success. Surprisingly, we found that conservation success was achieved significantly less frequently when a conservation organization was part of the alliance. In fact, conservation success was almost four times less likely in those projects in which a conservation organization was involved.

Site-Level Conservation Impact, by Type of Primary Implementing Organization					
	HIGH IMPACT	LOW IMPACT	TOTAL	% HIGH IMPACT	
Conservation NGO	5	15	20	25	
Development NGO	13	4	17	76	
TOTAL	18	19	37		
Note: This analysis is statistically significant .					
n = 37 sites; academic/research institutions excluded	as they were the	e primary impleme	enting organ	ization at only 2 sites.	

We also looked at the role of conservation organizations as the primary implementing organization in the alliance. Here, too, we found that alliances were significantly less likely to achieve conservation when a conservation organization was the primary implementing organization. In fact, development organizations were three times more likely than conservation organizations to implement successful conservation projects.

Site-Level Conservation Impact, by	/ Primary De	cision-Makir	ng Orgai	nization
	HIGH IMPACT	LOW IMPACT	TOTAL	% HIGH IMPACT
Conservation NGO	4	17	21	19
Development NGO	13	1	14	93
TOTAL	17	18	35	
Note: This analysis is statistically significant .				
n = 35 sites; academic/research institutions exclude	ed as they were the	e primary decision	-making org	ganization at only 4 sites.

Finally, we looked at the effects of conservation organizations as the primary decision maker in the alliance. Consistent with the previous analysis, we found that those alliances in which a *conservation* organization was the primary decision maker were significantly less likely to achieve conservation success than those alliances in which a *development* organization was the primary decision maker. In fact, alliances in which a development organization was the primary decision maker were five times more likely to achieve high conservation impact than those alliances in which a conservation organization was the primary decision maker. We excluded from the analysis those alliances in which an academic/research institution was the primary decision maker because this type of organization accounted for only four sites, split evenly between high and low conservation impact.

All this leads us to reject the Conventional Wisdom and conclude that, according to our sample of projects, conservation organizations are not the best suited to implementing successful conservation projects. But how can this be? There are a few possible explanations for these outcomes. First, all BCN-funded alliances and projects had to have an enterprise component — all had to support the development of a community-based business that was designed to mitigate threats to biodiversity. We thought it might be that conservation organizations are not particularly good at implementing enterprise projects and, thus, those in our sample were not successful in reaching conservation goals. But when we compared conservation organizations to all other types of organizations in our sample to determine which created more viable enterprises, all types of organizations had virtually the same success rate.

It could also be that, even when enterprise development is well done, it does not necessarily lead to conservation success. The BCN Final Analytical Results (Salafsky et al 1999) supports this premise, but notes also that no

See the section, Two Variables Combined: Type and Level of Member Organizations in Alliance, p. 22, for further analysis on the relationship between these two variables.

alliance developed enterprises independently of other conservation interventions; all alliances included a combination of interventions in addition to enterprise development including, for example, environ-

mental education, policy and advocacy work, and strict protection. So, even if the enterprises did not achieve conservation success during the period of BCN funding, other activities carried out by the alliances could have had a positive impact on conservation.

Variable: Level of Member Organizations in Alliance

Organizations in All Alliances, by Level				
	NUMBER			
International	17			
National	20			
Local	6			
TOTAL	43			

Conventional Wisdom: International organizations are most effective at managing and implementing conservation projects because they have far greater access to technical skills and financial resources than any other level of organization.

Site-Level Conservation Impact, by Involvement of International Organization				
	HIGH IMPACT	LOW IMPACT	TOTAL	% HIGH IMPACT
One or more involved	4	19	23	17
None involved	15	1	16	94
TOTAL	19	20	39	
Note: This analysis is statistically significant .				

Our analysis showed just the opposite of what the Conventional Wisdom predicted. Even though all of the international organizations in our sample had far greater financial and technical resources than the national and local organizations, we found that alliances were significantly less likely to achieve conservation when an international organization was involved simply as a member. In fact, conservation success was more than five times less likely to occur in alliances that included an international organization.

	HIGH IMPACT	LOW IMPACT	TOTAL	% HIGH IMPACT
One or more involved	7	3	10	70
None involved	12	17	29	41
OTAL	19	20	39	

We could not compare alliances that included the simple involvement of national organizations to those that did not involve them — thereby isolating the effects of national organization *involvement* — because almost all alliances included at least one national organization. But when we look at local organizations, our results indicate that alliances that included at least one local organization were proportionately more likely to achieve conservation success than those that did not include a local organization.

Site-Level Conservation Impact, by Level of Primary Implementing Organization					
	HIGH IMPACT	LOW IMPACT	TOTAL	% HIGH IMPACT	
International	3	9	12	25	
National	11	10	21	52	
Local	5	1	6	83	
TOTAL	19	20	39		
Note: This analysis is statistically significant .					

We also found that conservation success was achieved significantly less often when an international organization was primarily responsible for the implementation of conservation activities. Proportionately, alliances were twice as likely to achieve conservation success when a national organization was the primary implementing organization and more than three times as likely to achieve success when a local organization was the primary implementing organization rather than an international organization.

Site-Level Conservation Impact, by Level of Primary Decision-Making Organization				
	HIGH IMPACT	LOW IMPACT	TOTAL	% HIGH IMPACT
International	4	16	20	20
National or local*	15	4	19	79
TOTAL	19	20	39	
Note: This analysis is statistically significant .				
*This includes only one local organization.				

Finally, we found that alliances in which an international organization was the primary decision maker were significantly less likely to achieve conservation success than those in which an international organization was not the primary decision maker. Alliances in which a national or local organization was the primary decision maker were, in fact, four times more likely to achieve high conservation impact than those alliances in which an international organization was the primary decision maker.

Two Variables Combined: Type and Level of Member Organization in Alliance

Type of Organization, by Level of Primary Decision-Making Organization High Conservation Impact Sites Only

		TYPE OF ORGANIZATION				
	DEVELOPMENT NGO	CONSERVATION NGO	ACADEMIC/ RESEARCH INSTITUTIONS	TOTAL		
International	2	2	0	4		
National or local*	11	2	2	15		
TOTAL	13	4	2	19		
n = 19 sites with high conservation impact						

^{*} There was only 1 local development NGO, no local conservation NGOs, and no local academic/research institutions.

We wanted to see what the relationship was between type and level of organization so we did some additional analyses. First we took a closer look at the 19 field sites that were classified as having *high* conservation impact. Of these, *national development* organizations were the primary decision maker in 10 (53%) of them. Only 2 of the 19 sites (11%) had *international conservation* organizations as the primary decision maker, and similarly, only 2 sites (11%) had *national conservation* organizations as the primary decision maker in the alliance.

Site-Level Conservation Impact, by Level of Organization Acting as Primary Decision Maker

Conservation Organizations Only

	HIGH IMPACT	LOW IMPACT	TOTAL	% HIGH IMPACT
International	2	13	15	13
National*	2	4	6	33
TOTAL	4	17	21	

n = 21 conservation organizations.

Site-Level Conservation Impact, by Level of Organization Acting as Primary Decision Maker

Development Organizations Only

	HIGH IMPACT	LOW IMPACT	TOTAL	% HIGH IMPACT
International	2	1	3	67
National or local*	11	0	11	100
TOTAL	13	1	14	

n = 14 development organizations.

Next, we looked at the 21 sites in which a conservation organization was the primary decision maker in the alliance. Of these 21 sites, 15 had an international conservation organization as the primary decision maker and 6 had a national conservation organization in that role. Conservation success was achieved in only 2 of the 15 (13%) sites in which an international organization was the primary decision maker and 2 of the 6 (33%) sites in which a national organization was the primary decision maker. Finally, we looked at the 14 sites where a development organization was the primary decision maker in the alliance. Of these 14, conservation success was achieved in 10 of the 10 sites (100%) in which a national organization was the primary decision maker in the alliance (there was only one site with a local development organization), and in 2 out of 3 (67%) of the sites in which an international organization was the primary decision maker in the alliance. While these results appear to be quite telling, they must be interpreted cautiously as the numbers are very small.

Consistent with our results on Type of Organization, this analysis leads us to conclude that international conservation organizations are not best suited to be the primary decision maker in alliances that work at the site level. Our data support the notion that national development organizations are best suited to being the primary decisionmaking organization in site-based projects. The numbers are really too small to be conclusive regarding the efficacy of international development organizations or national conservation organizations as the primary decision makers in alliances.

These conclusions may sound odd. How can it be that local or national development organizations seem the best equipped to be the primary decision makers and implementers of conservation projects? There are a few possible reasons, in addition to the ones presented above.

First, while we cannot fully explain why international organizations are associated with less successful conservation projects, these results lead us to reason that international organizations are best suited to roles in which they are less actively involved in the direct management of projects. As we will see later on in this analysis, we also found that alliances that failed to define clear roles and responsibilities for their member organizations were less likely to be successful. This fact, combined with the above analysis, leads us to conclude that alliances have a greater chance of success if the roles of international organizations are clearly defined, and if these roles are more supportive such as providing funding, policy support, and technical assistance. In other words, project management, implementation, and oversight should be left to those organizations that are closer to field operations.

^{*} There were no local conservation organizations

^{*} There is only one local development NGO.

During our literature review, we found some previous studies that support our finding that international organizations should not take on the role as the primary implementer of a project, but we found little evidence that international organizations also should not be the primary decision-making organization in an alliance. Our qualitative analysis confirms the notion that international organizations should be neither the primary implementing organization nor the primary

For better or for worse, no community timber harvesting enterprise has made any headway in Indonesia or with the Indonesian government unless a large, influential international organization was involved.

Bernd Cordes, BCN Senior Program Officer, Jakarta (Personal communication 1999)

decision-making organization in an alliance, but that they can play important and invaluable roles. One of the most successful alliances in the BCN portfolio of projects — in terms of both conservation success and working together effectively as a team — was one in which the international organization partner played a purely supportive role to the national organization partner.

Organizations that are closer to the project site are probably more aware of the realities of carrying out field activities, and are, therefore, more likely to make more relevant, timely, and appropriate decisions than their international partners. Local and national organizations may be most effective at implementing conservation projects in the role of primary decision maker because they can work most efficiently and appropriately within the local social, political, and economic contexts. According to the key informants we interviewed, alliances that did not decentralize decision making down to the local or national level were more likely to encounter problems working together as a team or in project implementation. Many complained of the seemingly overly bureaucratic processes that projects had to go through when an international organization was the primary decision maker in the alliance. International organizations were the primary decision maker

In the early years, we had no in-country partner support. Our international partner was managing the project by remote control from Washington. Our organization in Port Moresby was not fully committed to the project at that time. As a result, there were no links between the field, Port Moresby, and Washington, D.C. We didn't know what the hell was going on.

John Sengo, Foundation for People and Community Development (CPD) (BCN 1999a, 168-69)

This project [BR Hills, or Biligiri Rangan Temple Sanctuary, Karnataka, India] would have been impossible without the credibility of the local organization.

Ganesan Balachander, BCN Director, Manilla (Personal communication 1999)

in 12 of the 20 BCN alliances; in 7 of the 12, the international organization had regional or in-country offices to help manage the projects. In the other 5, however, the majority of the programmatic decisions still had to go through the international home office.

Another explanation of these findings is that conservation organizations may simply not be well equipped to reach conservation goals through development interventions. Working with local people to reach project goals is what development organizations have been doing for decades. It is not only their *modus operandi*, it is also the reason for their existence. As almost all conservation projects now involve working with local people to achieve conservation ends, it follows that development organizations may, in fact, be better qualified than conservation organizations to reach conservation goals.



Yayasan Dian Tama has lead a number of non-timber forest product enterprises, including one that relies on newly established market linkages for the sale of semi-processed rattan and bamboo to a Java-based manufacturer of handbags.

Finally, it may be that not all conservation organizations are created equal. When we compared international conservation organizations to national conservation organizations, we found that, indeed, international conservation organizations were less likely to achieve conservation success as the primary decision-making or primary implementing organization in the alliance. In other words, both organization type and organization level are important determinants of success in conservation.

Variable: Characteristics of Organizations That Constitute the Alliance

Staffing Levels, A	veraged Across	Life of Project
--------------------	----------------	-----------------

	AVERAGE	TOTAL	RANGE
Number of staff in organization*	32		2 to 300
Number of staff working on project	7		1 to 20
Number of technical staff based on-site**	2.5		0 to 18
Technical person-days spent on-site per year		1,189	50 to 6,595

^{*} n = 42 organizations; data was unavailable for one organization.

Conventional Wisdom: The larger the size (i.e., the greater the number of staff) of the primary decisionmaking organization in an alliance, the higher the likelihood that conservation success will be achieved.

Site-Level Conservation Impact, by Size of Primary Decision-Making Organization

	HIGH IMPACT	LOW IMPACT	TOTAL	% HIGH IMPACT
Small (0 to 20 staff)	7	3	10	70
Medium (21 to 99 staff)	9	7	16	56
Large (100 and above)	3	10	13	23
TOTAL	19	20	39	
Note: This analysis is statistically significant .				

Larger organizations are often perceived to be better equipped to successfully carry out conservation projects because they have more staff and more money to implement projects. Often, smaller organizations look to form alliances with larger organizations in the belief that they will be able to gain access to funding and technical assistance resources. However, our analysis does not support the Conventional Wisdom. Our analysis indicates that, in fact, bigger does not necessarily mean better; smaller implementing organizations with fewer staff were significantly more likely to achieve conservation success than larger ones. This analysis is greatly influenced by the fact that all of the large organizations were international organizations and, as we saw above, international organizations were significantly less likely to achieve conservation success.

Conventional Wisdom: The greater the number of staff based at the project site, the more likely the project will be successful because field staff can create good working relationships with local stakeholders.

^{**} n = 19 organizations with staff based on-site.

DUR ANALYSIS AGREES DISAGREES WITH THE CONVENTIONAL WISDOM.

Site-Level Conservation Impact, by Presence of Staff Living On-Site					
	HIGH IMPACT	LOW IMPACT	TOTAL	% HIGH IMPACT	
One or more staff living on-site	12	15	27	44	
No staff living on-site	7	5	12	58	
TOTAL	19	20	39		

Site-Level Conservation Impact, by Presence of Staff Living On-Site

	HIGH IMPACT	LOW IMPACT	TOTAL	% HIGH IMPACT	
No staff living on-site	6	5	11	55	
1 to 2 staff living on-site	5	13	18	28	
3 or more staff living on-site	7	2	9	78	
TOTAL	18	20	38		

Note: This analysis is **statistically significant**.

n = 38 sites; data missing for one of the 39 sites.

Our results for this Conventional Wisdom are inconclusive. While it appears that sites where staff live on-site are proportionately less likely to achieve conservation success, when we look at the effects of different numbers of staff on-site, the results are not consistent.

Our qualitative results support the notion that field-based staff are important to the successful implementation of conservation projects. According to our key informants, the presence of on-site staff often improved the relationship between the project and communities and helped maintain the momentum of community involvement in project activities. In addition, in several complex projects that required extensive technical skills, the presence of site staff was particularly critical.

Conventional Wisdom: Alliances that have high field staff turnover are less effective because it is more difficult for them to form and maintain relationships with the community and other key players in the project.

In the lengthy absence of a field worker from a site in the WMA [Wildlife Management Area], confusion and conflict has arisen. The committees have lacked confidence and the experience to take action or to govern on topics related to operation of the WMA or the eco-enterprise ... A resident field worker must still be present to "walk" most of the committees through the motions of conducting a meeting, delegating responsibility, identifying action, making a law, writing letters, or resolving conflict.

Arlyne Johnson, Technical Officer, Research and Conservation Foundation of PNG and Wildlife Conservation Society (Johnson 1997, 22)

ANALYSIS AGREES DISAGREES WITH THE CONVENTIONAL WISDO

Site-Level Conservation Impact, by Staff Turnover at Project Site HIGH IMPACT LOW IMPACT TOTAL % HIGH IMPACT High staff turnover 11 16 27 41 Low staff turnover 4 12 8 19 20 39 TOTAL

There is no statistically significant relationship between on-site staff turnover and conservation success, but we found that, proportionately, low staff turnover is more often associated with greater conservation success. In addition, according to our key informants, high staff turnover in some of the projects affected the relationships

Almost every time we have someone new come along, we have to start our own orientation process over again — language, introductions to government officials. It just increases confusion.

Hikma Lisa, Forestry Socioeconomic Coordinator, Indonesia and Edward Pollard, Field Manager, Gunung Palung National Park, West Kalimantan (BCN 1999b, 9) formed between staff and the community and between participating organizations. This disruption, they report, influenced a project's ability to carry out conservation activities.

Other Characteristics of On-Site Staff

Some previous studies have concluded that key characteristics of on-site staff have great bearing on project success. While none of the staff characteristics listed here were significantly associated with conservation success, key informant data provided some useful insights.

Origin: Project staff who were from the communities where they worked increased credibility with local communities, served as role models to other community members, and were often viewed as the "voice of the community." Foreigners played a valuable role because they were viewed as having more influence over higher-level government officials and were, therefore, more effective in certain cases.

Gender: Gender of the staff did not directly affect the project outcomes. However, few projects chose to have female staff on site for fear that they would not be effective due to cultural restrictions. In one project, this proved to be true, as the female staff member had difficulty commanding the respect of the men in the community.

Level of education: Level of education, as measured by degree obtained, was not associated with conservation success. This could be due, in part, to the lack of variability in the data.

Local-language proficiency: The ability to speak the prevalent local language at the site level proved not to be associated with conservation success, but BCN project officers reported that staff in all projects could generally communicate well with the community, either through the local language or through a third, more national, language.

Previous field experience: Amount and type of previous field experience were also not associated with conservation success, but this too could be due, in part, to the lack of variability in the data. The type of skills staff had were important in complex enterprises but, often, these skills were not easily transferred to local project participants. Only 8% of the enterprises had staff with extensive business skills, 63% had staff with very limited business skills, and 29% had staff with no business skills.

Management of the Alliance

The second section of our framework addresses alliance management by analyzing variables related to leadership, goals, roles and responsibilities, and administrative capacity, as well as qualities of flexibility and credibility.

Variable: Strength and Quality of Leadership

Conventional Wisdom: Alliances need a single, strong leader to create and maintain successful conservation projects.

Site-Level Conservation Impact, by Presence of Strong Leader in the Alliance

	HIGH IMPACT	LOW IMPACT	TOTAL	% HIGH IMPACT
A strong leader present	15	9	24	63
No strong leader present	4	11	15	27
TOTAL	19	20	39	

Note: This analysis is statistically significant.

Effective individual leadership at the alliance level was particularly important to achieving conservation at the site level. In addition to being significantly associated, conservation success was more than twice as likely in projects where the alliance was led by a strong leader.

Many of the alliance leaders were referred to by key informants as "charismatic leaders," that is, individuals who

lead by vision and personality. Leadership was also seen as important to project success at the organization level, but some key informants observed that many local or national organizations were perhaps overly dependent on a single, charismatic leader. Although it is difficult to tell how this dependency will affect the projects over the long term, several key informants reported that some organizations were training other individuals as future leaders.

[He] is a guiding force and charismatic leader for the organization, which has allowed it to be as successful as it is. But he is such a strong leader that many have come to associate the organization with the individual, which may cause problems for its sustainability.

Chuck Encarnacion, BCN Program Officer, Manila (Personal communication 1999)

According to our qualitative analysis, problems did develop in alliances where there was competition between individuals from several organizations who wanted to lead the alliance. In two out of the three alliances where there

was stiff competition for leadership, these problems led the alliances to disband. Alliances also suffered when there were no leaders. This only occurred in three alliances but, according to key informants, the resulting lack of vision and leadership clearly affected a project's development and its ability to achieve conservation success. According to our key informants, leadership voids in some of the alliances led to "decision-making paralysis" in which multiple decision makers were involved in many of the smallest of project decisions, while the most critical issues went unattended.

Fundamental deficiencies resulted in the committee requiring that all management decisions — even day-to-day — go through them. This created cumbersome decision making and further contributed to the administrative problems in the project because no time was left to tend to priority project activities.

Femy Pinto, Project Manager, NATRIPAL Project (Personal communication 1999)

Variable: Clarity of Project Goals

Conventional Wisdom: Simpler alliances with fewer member organizations are more able to establish and maintain clear project goals.

OUR ANALYSIS AGREES

DISAGREES WITH THE CONVENTIONAL WISDOM.

Clarity of Project Goals, by Type of Alliance UNCLEAR % CLEAR GOALS GOALS TOTAL GOALS Contractual agreement 0 100 6 6 7 2 9 78 Partnership Consortium 2 3 5 40 15 20 TOTAL Note: This analysis is statistically significant.

Our analysis supports the Conventional Wisdom that simpler alliances are better able to establish and maintain clear goals than are more complex ones. Contractual agreements were better able to maintain clear goals, followed by partnerships, with consortia having the most difficulty. Some of the key informants we interviewed for this study expressed the opinion that the greater the number of organizations involved in an alliance, the higher the probability of conflict and discord within the alliance.

Conventional Wisdom: When the primary implementing organization within an alliance has clear project goals, the alliance is more likely to achieve conservation success.

DISAGREES WITH THE CONVENTIONAL WISDOM.

Site-Level Conservation Impact, by Clarity of Project Goals of Primary Implementing Organization

	HIGH IMPACT	LOW IMPACT	TOTAL	% HIGH IMPACT
High clarity	16	14	30	53
Low clarity	3	6	9	33
TOTAL	19	20	39	

According to the Conventional Wisdom, alliances need clear goals in order for field activities to be carried out in an efficient and effective manner. Clear goals, it is assumed, provide concrete operational targets for conservation projects and define areas of mutual interest between alliance members. We found that, proportionately, those alliances in which the primary implementing organization had clear goals were more likely to achieve conservation success than those in which the primary implementing organization's goals were not clear.

Since the beginning, disharmony was mainly triggered by the consortium members' different ways of seeing the project's success. This is influenced by their diverse backgrounds of knowledge and experience.

Rinaldi Joy, formerly with Gunung Halimun National Park, West Java, Indonesia, and currently head of Halimun Ecotourism Foundation (BCN 1999a, 62) When we looked at the relationship between clarity of goals of the alliances and conservation impact at their project sites, we found no statistical association. Qualitatively, however, we found that alliances with *very clear* goals achieved greater conservation impact than those with *very unclear* goals. Many of the key informants we interviewed stressed the importance of sound and explicit goals; they found that those organizations that had clear project goals were able to work

effectively with other organizations, while those with unclear goals had more difficulty working together as a team. In two alliances, lack of clarity of goals within the organizations affected their ability to work in the alliance, and the alliances eventually collapsed.

It is difficult to manage an alliance in which the organizations form a partnership of convenience rather than a partnership of compatibility.

> Femy Pinto, Project Manager, NATRIPAL Project (Personal communication 1999)

In addition to having clear goals, organizations working together in an alliance must also have *similar* goals. In the eight alliances in which member organizations had different goals for the project, roles and membership in the alliances changed until the member organizations agreed to some clearly defined project goals. Two of

these alliances underwent formal strategic planning processes that helped them agree upon goals as an alliance team rather than as disconnected individual organizations. We also looked to see if certain types or levels of organizations demonstrated clearer goals than others. For each one of these analyses, however, all types and all levels of organizations had about the same level of clarity of goals (67% to 86%).

Variable: Clarity of Organizational Roles

Conventional Wisdom: Alliances with clear, agreed-upon roles, authority, and responsibility are more effective as there is less confusion, redundancy in activities, and competition between member organizations.

OUR ANALYSIS AGREES DISAGREES DISAGREES WITH THE CONVENTIONAL WISDOM.

Site-Level Conservation Impact, by Clarity of Roles in Alliance

	HIGH IMPACT	LOW IMPACT	TOTAL	% HIGH IMPACT
High clarity	12	9	21	57
Low clarity	7	11	18	39
TOTAL	19	20	39	

While there is no statistical association between clarity of roles and conservation impact, those alliances with clear roles were proportionately more effective than those without clear roles. We found in our qualitative analysis as well that unclear roles in alliances may contribute to institutional discord and disruption; six out of the nine alliances with unclear roles went through major institutional changes during the life of the project.

Conventional Wisdom: Alliances with clear goals generally have more clearly defined roles for their member organizations.

We worked well with one of our partners because we all sat down and created a huge chart which listed every activity, who was going to do it, and who was ultimately responsible for it.

Nandita Jain, Program Manager, The Mountain Institute and Project Manager, Sikkim Biodiversity and Ecotourism (Personal communication 1999)

This consortium avoided major obstacles by ensuring a very clear understanding of their internal working relationships and responsibilities before or just after the project began.

Bernd Cordes, BCN Senior Program Officer, Jakarta (Personal communication 1999)

OUR ANALYSIS AGREES

DISAGREES WITH THE CONVENTIONAL WISDOM.

	CLEAR GOALS	UNCLEAR GOALS	TOTAL	% CLEAR GOALS	
High clarity of goals	10	5	15	67	
Low clarity of goals	1	4	5	20	
TOTAL	11	9	20		

Note: The statistics for this variable revealed a P = 0.13, very close to our self-imposed cut-off of P < 0.10.

Although we found no strong statistical relationship between clarity of goals and clarity of roles in alliances, those alliances with clear goals were proportionately more likely to also have clear roles. In fact, alliances with clear goals were more than three times as likely as those without clear goals to demonstrate a clear division of labor. Because the study design of our research was cross-sectional, we cannot say much about the causal relationship between these two factors, but our analysis in the previous section supports the notion that clear goals provide the framework for organizations to work together effec-

Given differences in the background and long-term perspectives of the partner organizations, divergence of opinion in how best to implement the project is not surprising. The general lesson is that such differences are likely to occur, but can be minimized with clarification of goals and objectives of partners, mutual respect for different agendas of partner organizations, and effective communication among partners.

Kamal Bawa, Professor of Biology, University of Massachusetts, Boston (BCN 1997, 44)

tively as a unified team, making it possible to clearly define and coordinate both roles and responsibilities.

Variable: Flexibility

Conventional Wisdom: Alliances that are flexible are more likely to achieve conservation success.

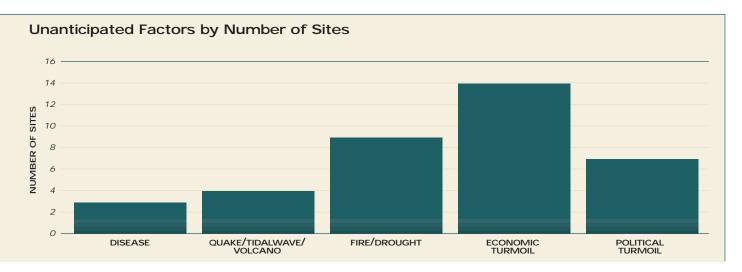
OUR ANALYSIS AGREES

DISAGREES WITH THE CONVENTIONAL WISDOM.

Site-Level Conservation Impact, by Alliance Flexibility

	HIGH IMPACT	LOW IMPACT	TOTAL	% HIGH IMPACT	
High flexibility	13	10	23	57	
Low flexibility	6	10	16	38	
TOTAL	19	20	39		

Flexibility was not significantly associated with conservation success, but those alliances that were flexible were proportionately more likely to be successful.



For more discussion on unanticipated, or "chaos," factors, see Salafsky, N., B. Cordes, J. Parks, and C. Hochman. 1999. Evaluating linkages between business, the environment, and local communities: Final analytical results from the Biodiversity Conservation Network. Washington, D.C.: Biodiversity Support Program. Why do alliances need to be so flexible? Alliances need to be able to adapt to changes administratively and programmatically under normal conditions in the project. But they also need to adapt to abnormal or unforeseen factors such as natural disasters and social or polit-

DISAGREES WITH THE CONVENTIONAL WISDOM

ical upheaval. Many of the BCN projects were subjected to a number of unanticipated factors that required flexibility in project planning and implementation.

Conventional Wisdom: Alliances that have clear project goals are generally less flexible and, therefore, less adaptable to changes that may be required during project implementation.

Alliance Flexibility, by Clarity of Goals

OUR ANALYSIS AGREES

	HIGH FLEXIBILITY	LOW FLEXIBILITY	TOTAL	% HIGH FLEXIBILITY
High clarity of goals	11	4	15	73
Low clarity of goals	0	5	5	0
TOTAL	11	9	20	

Note: This analysis is statistically significant.

Our analysis strongly rejects the Conventional Wisdom that alliances with clear goals are generally less flexible and adaptable. In fact, 73% of the alliances with clear goals were also flexible, while none of the alliances with unclear goals were flexible. Some key informants attributed this to the fact that when an alliance has clearly defined goals,

They are making conceptual models, figuring out what they want to do, where they want to be, how to get there, readapting. This is the major indicator that they are attempting to be adaptive.

Nick Salafsky, BCN Senior Program Officer/Scientist, Washington, D.C. (Personal communication 1999)

it is more secure in what it is trying to achieve, and, therefore, has the flexibility to experiment with new and more innovative project activities. Clear goals, they report, also provide an alliance with a reference point so that flexibility and adaptation can be done systematically, and results of experimentation are, therefore, more meaningful.

Variable: Credibility

Conventional Wisdom: Alliances in which the implementing organization is perceived by project partners as credible are more likely to achieve conservation success.

OUR ANALYSIS AGREES

DISAGREES WITH THE CONVENTIONAL WISDOM.

Site-Level Conservation Impact, by Credibility of Implementing Organization							
		HIGH IMPACT	LOW IMPACT	TOTAL	% HIGH IMPACT		
	High credibility	10	8	18	56		
	Low credibility	9	12	21	43		
	TOTAL	19	20	39			

According to our analysis, implementing organizations that were perceived as being credible were not significantly more effective at achieving conservation impact than those organizations that were not credible, although they were proportionately more successful. Our analysis focused, however, on *organizational* credibility, and what we found was that organizational credibility was not as important at the project site as *individual* credibility. In four of the projects, the strong relationship and level of trust established between the organization and the community were due to the length of time a particular staff member had spent at the site. In three other organizations, credibility was gained through the involvement of credible community members.

As anywhere, the cooperation, trust, and respect of rural landowners in Crater has had to be earned through demonstrated commitment and long-term presence. This has been one of the strengths of the Crater Mountain project to date, where a committed group of associated individuals maintains contact with each other and the communities during and long after their presence in the WMA [Wildlife Management Area].

Arlyne Johnson, Technical Officer, Research and Conservation Foundation of PNG and Wildlife Conservation Society (Johnson 1997, 23)

Variable: Administrative Capacity

Conventional Wisdom: The greater the administrative capacity of the implementing organization in an alliance, the higher the likelihood that it will achieve conservation success.

OUR ANALYSIS AGREES

DISAGREES WITH THE CONVENTIONAL WISDOM.

Site-Level Conservation Impact, by Administrative Capacity of Primary Implementing Organization

	HIGH IMPACT	LOW IMPACT	TOTAL	% HIGH IMPACT	
High capacity	9	11	20	45	
Low capacity	10	9	19	53	
TOTAL	19	20	39		

Administrative Capacity, by Organization Level

	HIGH CAPACITY	LOW CAPACITY	TOTAL	% HIGH CAPACITY	
International	16	1	17	94	
National	9	11	20	45	
Local	3	3	6	50	
TOTAL	28	15	43		

Note: This analysis is statistically significant.

Administrative capacity does not seem to be greatly associated with conservation success. But this variable is greatly influenced by those organizations that had the highest administrative capacity — international organizations. It was this level of organization that also had the lowest success rate for achieving conservation. So we would expect to see the results in the first table for this variable (see p. 32) in which organizations with high capacity are less likely to achieve conservation success.

In the BCN portfolio of projects, international organizations were generally responsible for handling the major administrative needs of the alliance and generating required reports for BCN. While the administrative capacity that international organizations brought to alliances was critical to project management, these larger organizations failed to transfer administrative capacity to other, smaller organizations in the alliances. In 14 of the 20 alliances,

the smaller national or local member organization experienced administrative problems for which the larger member organization provided no assistance.

Although national and local organizations were significantly more likely to achieve conservation success, they did so despite their relatively low administrative capacity. According to our key informants, this low administrative capacity in smaller organizations may be due, in part, to the fact that they found it difficult to keep qualified staff. In many of the countries included in the BCN portfolio, it was difficult for projects to find qualified staff with management and accounting skills. And, in many of the projects, those staff with good skills were quickly lured away by offers of betterpaying jobs.

Destructive fishing practices — such as fishing with explosives or cyanide — are leaving a wake of devastation in the coral reefs on which the fish depend. Marine tourism is an alternative that can both protect the area's coral reefs and offer the local communities an alternative source of income.

Funding of the Alliance

Our analysis of funding issues focused on the relationship between funder and alliance and on the level of funding.

Variable: Type of Relationship with Funder

Conventional Wisdom: A good working relationship with a funder that provides technical assistance in addition to financial resources helps an alliance achieve its goals.



Site-Level Conservation Impact, by Type of Relationship Between Alliance and Fund						
	HIGH IMPACT	LOW IMPACT	TOTAL	% HIGH IMPACT		
Better relationship	15	7	22	68		
Worse relationship	4	13	17	24		
TOTAL	19	20	39			
Note: This analysis is statistically significant .						

According to our results, conservation success was significantly more likely to be achieved when there existed a good working relationship between the funder (BCN) and the alliance. While we acknowledge the potential for bias is high in this variable, as many of our key informants were BCN staff, interview data from non-BCN informants indicate that BCN added much more value than funds alone. In addition to simply supplying funds, BCN provided technical assistance in project design, management, monitoring, and accounting. Many key informants reported that the technical assistance provided by BCN was an important added resource for which the project did not have to pay. Some key informants reported, however, that BCN should have provided more consistent technical assistance during the life of the project.

Variable: Funding Level

Conventional Wisdom: Alliances that receive large amounts of funding for their projects are more likely to achieve conservation success than those that have access to relatively little funding.

OUR ANALYSIS AGREES DISAGREES WITH THE CONVENTIONAL WISDOM

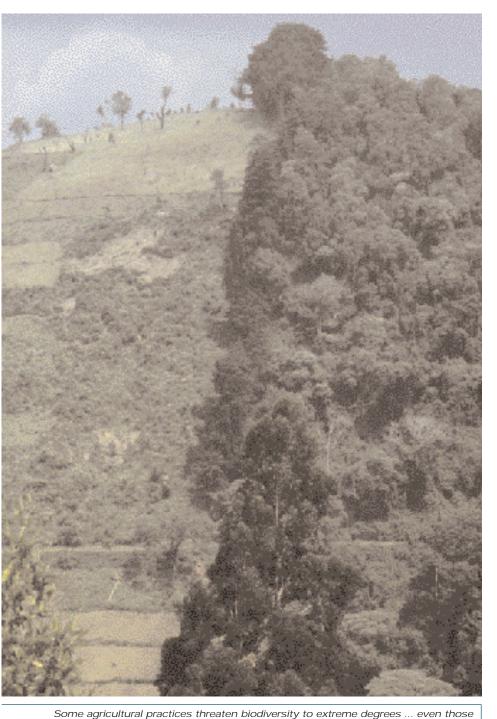
Alliance-Level Conservation Impact, by Total Grant Amount HIGH IMPACT LOW IMPACT TOTAL % HIGH IMPACT Larger grant amount 5 5 10 50 Smaller grant amount 5 5 10 TOTAL 10 10 20

Notes: Conservation impact at the alliance level was determined by combining the results of all sites in the alliance. Total grant amount ranged from \$180,000 to \$645,000, split at median of \$451,000.

Site-Level Conservation Impact, by Grant Amount, Controlling for Number of Sites

	HIGH IMPACT	LOW IMPACT	TOTAL	% HIGH IMPACT
Larger grant amount	11	8	19	58
Smaller grant amount	8	12	20	40
TOTAL	19	20	39	

Note: Grant size, per site, ranged from \$34,774 to \$645,000, split at median of \$175,000.



that stop abruptly at the edge of uncleared land. While protected area status provides specific local protection, the boundaries between the two types of land-use are tenuous at best.

To understand the effects of funding level on conservation impact, we looked at both the overall grant amounts received by alliances and the amount the alliances received per site. At the alliance level, there is no difference in conservation impact between large and small grants. In other words, total grant size did not determine conservation success in our sample. When we control for the number of sites each alliance covered, there is also no significant difference in conservation impact by size of the grant. Proportionately, however, more funding per site is associated with greater conservation impact. We could not, however, control for the amount of additional funds projects may have received from other sources.

Summarizing Our Findings

We include the following table to provide you with a quick reference summary of the results of our analysis for each Conventional Wisdom we tested.

Composition of the Alliance

The Conventional Wisdom **Our Analysis** Alliances with more member organizations are more effective as they have greater access to a variety of technical skills and financial resources. Within alliances, conservation NGOs are best suited to implementing con-AGREES DISAGREES servation projects. International organizations are most effective at managing and implementing AGREES DISAGREES conservation projects because they have far greater access to technical skills and financial resources than any other level of organization. The larger the size (i.e., the greater the number of staff) of the primary DISAGREES decision-making organization in an alliance, the higher the likelihood that conservation success will be achieved. The greater the number of staff based at the project site, the more likely the project will be successful because field staff can create good working relationships with local stakeholders.

Management of the Alliance

nity and other key players in the project.

The Conventional Wisdom Our Analysis

Alliances need a single, strong leader to create and maintain successful conservation projects.

Alliances that have high field staff turnover are less effective because it is more difficult for them to form and maintain relationships with the commu-

Simpler alliances with fewer member organizations are more able to establish and maintain clear project goals.

When the primary implementing organization within an alliance has clear project goals, the alliance is more likely to achieve conservation success.

Alliances with clear, agreed-upon roles, authority, and responsibility are more effective as there is less confusion, redundancy in activities, and competition between member organizations.

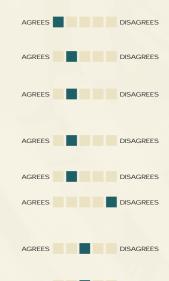
Alliances with clear goals generally have more clearly defined roles for their member organizations.

Alliances that are flexible are more likely to achieve conservation success.

Alliances that have clear project goals are generally less flexible and, therefore, less adaptable to changes that may be required during project implementation.

Alliances in which the implementing organization is perceived by project partners as credible are more likely to achieve conservation success.

The greater the administrative capacity of the implementing organization in an alliance, the higher the likelihood that it will achieve conservation success.



DISAGREES

Funding of the Alliance

The Conventional Wisdom Our Analysis

A good working relationship with a funder that provides technical assistance in addition to financial resources helps an alliance achieve its goals.

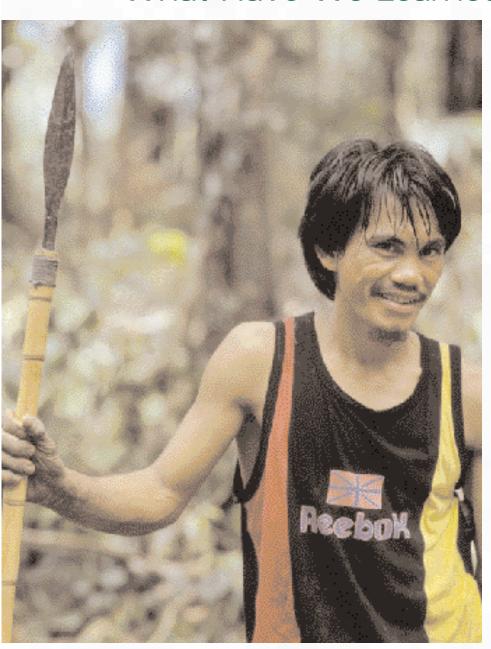
Alliances that receive large amounts of funding for their projects are more likely to achieve conservation success than those that have access to relatively little funding.



PUTTING THE FINDINGS IN PERSPECTIVE

In this section, we summarize what we have learned from our findings, outline principles for effective alliances, and propose next steps in the continuing collective effort to achieve conservation.

What Have We Learned?



Overhunting poses a serious threat to biodiversity and, ultimately, local populations. Interventions that provide alternative sources of income can make a difference in the priorities and practices of local communities.

Ultimately, the goal of our analysis is to help organizations create more successful conservation alliances and, thus, improve the chances of achieving conservation success. What do our findings mean? Here are the general conclusions of our study.

Simple is better. Organizations in the field of conservation are faced with a number of choices about with whom they want to work and what type of project they want to implement. Complex projects and complex alliances — with many member organizations — are seductive as they suggest prospects of great success. But with this complexity come more difficulties. And, in the end, we are not sure the benefits of these institutional arrangements outweigh the costs. Complex projects and alliances are difficult to maintain and this maintenance requires time, energy, and money that could otherwise be spent directly on the project. Simple alliances, such as partnerships and contractual agreements, allow for complementary resources and skills to be shared, while minimizing the resource investment required for the institution itself. We can infer from our results that simplicity can also be achieved in consortia — alliances of three or more organizations — by having clearly defined goals, roles, and responsibilities.

Clarity of goals is the starting point. Without some common understanding of what a project is trying to accomplish, alliances have very little chance of achieving conservation success. Negotiating and explicitly defining project goals (yes, written down on paper!) is something that is often overlooked in the rush to forge alliances and institutional relationships. Clarity of goals for an alliance is usually a direct function of the level of clarity of the institutional vision and goals of the member organizations. If consensus is not reached on the goals of a project at the beginning, it often means that there is a long road ahead of unnecessary miscommunication, lack of coordination, and even distrust among member organizations.

Organizations need to play appropriate roles to be effective. International organizations often have the most control over projects, making all major decisions while also implementing the projects in the field. Not only did this prove to be less effective in our sample, but also, it is not a sustainable role. Local and national organizations need to be more actively involved in the projects and have more authority to make decisions. The most effective, sustainable strategy is for international organizations to support these local and national organizations, in whatever capacity necessary, so that they can create and manage successful conservation projects on their own. Also, conservation organizations may not always be the best suited to implementing conservation activities that involve working with local people. Projects that have conservation goals and involve organizing, training, or educating people who live around an area of high biodiversity may be better managed by development organizations or some other type of organization whose mandate it is to work with local people.

There are benefits and costs in each collaboration. There can be a trade-off between working with an organization for its skills and working with an organization with a similar vision; often, the organizations that have complementary skills have very different visions. Organizations with different visions run into problems negotiating and maintaining clear goals for a project. The added skills may not be worth it if you can contract out specific tasks as needed. Do not underestimate the need for a common vision, which also means do not get involved in alliances for money or convenience.

Principles for Effective Alliances

The second goal of our research was to determine key general yet non-trivial principles that can help organizations work together in alliances more effectively. The principles that you find in this section are not meant to be a recipe

that guarantees success, but rather basic guidelines to help focus on the characteristics of effective alliances, according to our findings.

Based on our analysis, we propose a number of principles for establishing effective alliances and increasing the chances of conservation success.

Create simple alliances. Simple alliances are easier to manage than more complex ones, and they can achieve greater conservation impact. Having more organizations in an alliance means more skills and resources, but it also means increased complexity and the chances for more problems. Organizations in an alliance can combine skills and even contract out specific tasks if needed. If an alliance must include many



Intense commercial logging operations threaten biodiversity around the globe. One BCN project worked to counter these threats on the island of New Britain in Eastern Papua New Guinea with small-scale timber production enterprises using portable or "walkabout" sawmills.



Conservation projects often work in landscapes that are composed of various levels of human intervention. Often sites encompass a mix of primary and regenerating forest and active agricultural lands.

organizations, make especially sure that project goals are clear and the roles and responsibilities of each organization have been clearly defined.

Allow for decision making at the appropriate levels. Alliances are most successful when they leave decision making related to project design and management to those organizations most involved in implementation. Keep decision-making authority in the hands of as few organizations as possible. Streamline decision making as well so that the project does not get bogged down because there are too many people involved in making simple decisions. Make sure that all members of the alliance know who has decision-making authority.

Secure strong leadership. Alliances are more effective when there is a single, capable leader rather than a number of leaders from several organizations competing for authority. Look for charismatic leaders when starting a project, but train others to lead as well. By training other individuals to be leaders, there is a greater likelihood that projects can continue to function smoothly with or without specific individuals.

Negotiate and maintain clear project goals. Without clear goals, chances are that the alliance will not be successful. Take whatever time is necessary, right when the alliance is formed, to discuss, negotiate, and document the goals of the alliance. If it is too difficult to arrive at mutually acceptable goals, stop — do not continue into the design or implementation phase of the project. Instead of ignoring differences and thinking that it will all work out later, reconsider your partners in the alliance — it probably means that at least one organization should not be a part of the alliance.

Define and maintain clear roles and responsibilities. Clear roles and responsibilities are extremely important to ensure that each organization is aware of and comfortable with its part in the alliance. The more complex the alliance, the more important it is to make sure that all member organizations understand and agree to their roles. Maximize your role in the project according to the skills and resources in your organization. While local and national organizations are better at implementing field projects, international organizations should play a supportive role, focusing on policy, training, technical assistance, and fundraising.

Be prepared to adapt to changes in the project. Alliances need to be able to adapt to the changes in the project as needed. They also need to be able to withstand unforeseen natural, social, political, or economic crises that may come along. Alliances must also be resilient to changes in alliance membership over time as well.

Strengthen management capacity within the alliance. Regardless of who is in charge of the major administrative tasks in the project, work on building the management, decision making, and administrative capacity of the smaller organizations in the alliance. Make sure the transfer of necessary skills is planned for at the very beginning of the formation of the alliance.

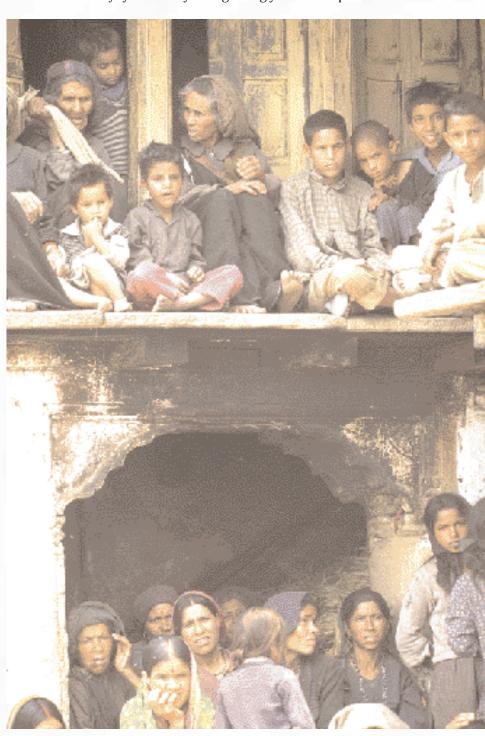
Next Steps

This research has revealed a number of unexpected results that run contrary to the Conventional Wisdom on effective alliances for conservation. While we were surprised by some of our findings, we are confident that they accurately reflect the reality of the sample of alliances we studied. By systematically testing strongly held assump-

tions, we were able to generate clear principles that we hope are useful to project managers around the world.

As we conducted this study, we came to the conclusion that both individuals and institutions require specific skills in order to form and maintain effective alliances for conservation. The most basic of these skills are related to project design, management, monitoring, analysis, and communications. Despite the best of intentions, if these skills are not present in the people and organizations that make up conservation alliances, it seems that the likelihood of success is greatly reduced.

There remains much to be learned about alliances and we encourage other research practitioners to similarly study and analyze the conservation alliances in which they are involved. It would be interesting to see if similar conclusions are reached or if there are other important principles that did not surface from the sample we studied. Only by examining our experiences in creating and managing conservation alliances — both the successes and the failures — can we learn how to more efficiently and effectively achieve conservation success. We truly hope that our findings are of use to you and your organization as you strive to maximize the results of your conservation endeavors.



Across the BCN program, project staff confirmed the importance of working closely with local communities — key stakeholders in the process.

TO HELP YOU ON YOUR WAY

low the lead of another organization?

If you are considering joining an alliance, there a number of issues to think about to make sure that the alliance is the right one for your organization, and that your organization is the right one for the alliance.

The first step is to be aware of the key institutional characteristics that can affect the performance of your organization. These may be fairly obvious, but our research indicates that organizations that devote attention to these characteristics are more effective.

	Decentralized decision making	
	Streamlined decision making at higher levels	
	Strong, effective leadership	
	Clear goals	
	Clarity in roles of individuals and divisions	
	Flexibility	
	Management capacity	
	e next step is to ask yourself a number of questions to determine whether joining the alliance is the right decin for your organization.	
First, ask about your own organization		
	What is the goal of our organization in this project? Is it similar to the goals of the other organizations?	
	What skills can our organization bring to the alliance? What skills are complementary to ours for the projects we want to work on?	
	What role does our organization want to play in the project? Is this where we can be most effective?	
	Has our organization worked with any of these organizations before? If so, what has been our experience?	
	Is our organization planning to have staff based on-site? If so, what specific skills and characteristics do these staff need to have to effectively implement the project? Do we have staff with these skills?	
	How involved with administrative tasks does our organization want to be?	
	Is this project a priority within our organization? Is this fact known to other organizations and are they satisfied with its	
	Is there anyone in our organization that would be an appropriate leader for the alliance or are we willing to fol-	

Then, ask about the alliance

	·
	Is the alliance forming because of mutual interests, a grant, or some other reason? Are the rules of membership in the alliance clear?
	Is the project goal of the alliance clear?
	How many organizations will be involved in the alliance?
	What types of organizations are joining to form the alliance? Do the organizations in the alliance have similar or compatible institutional goals?
	Have the organizations or the individuals in the organizations worked together before?
	Are there any skills needed for the project that are not present in any of the organizations?
	Does each organization know its role and is it satisfied with this division of labor and responsibility?
	Is there a clear process identified for how decisions are made in the alliance and who will make them?
	Is there a strong, capable leader of the alliance? Is there consensus on who will lead?
	Where is the funding for the alliance coming from? How much is it? How is it distributed within the alliance? Will there be technical assistance provided with the funding?
lf	you are a national or local NGO, ask
	Does our organization have the skills to implement the project in the field or does it need assistance from another organization? Is there a member of the alliance that is willing and able to provide us with the necessary technical assistance?
	Are there other skills that we can gain from our participation in the alliance?
	Are there larger organizations that are willing to work with our organization in a supportive role and give our organization authority in decision making for the project?
	Does our organization have the administrative capacity for the project or do we need to find another organi-

☐ Does our organization want to work with international organizations or would we prefer to work with other national or local organizations?

zation to handle that?

☐ Are the organizations that our organization wants to work with considered credible by the government, other NGOs, and other stakeholders?



With the establishment of village-level weaver groups, communities can help support their livelihood through the sale of baskets and other goods made from renewable forest resources.

lf	you are a national NGO, ask
	Is our organization looking to gain skills in this alliance or is it prepared to strengthen the skills of other organizations?
	Does our organization want to work with an organization closer to the site or be more directly involved in the implementation of field activities?
	Does our organization have the credibility in the community to work without a local partner?
	Does our organization have the capacity and credibility to deal with the government and other NGOs effectively?
lf	you are an international NGO, ask
	How can we help the alliance define and maintain clear project goals?
	What role would our organization best play in the alliance? How can we help the alliance clearly define the roles of all member organizations?
	Will the home office of our organization relinquish control over project management and let programmatic decisions in the alliance be made by those managing field activities?
	Does the organization that will be the primary implementing organization have the skills and credibility to work at the project site?
	Are there gaps in the technical skills needed for the project in the other organizations? Does our organization have the capacity to help train other member organizations?
	Does our organization have the capacity and credibility to deal with the government effectively if necessary?
lf	you are a donor, ask
	Have the organizations involved worked together before or are they coming together specifically for this grant?
	How complex is the alliance that will be implementing the project?
	Do the organizations involved have similar institutional goals?
	Are the goals of the alliance clearly and operationally defined?
	Are the roles for each organization clear?
	Is there one organization that is ultimately accountable for the project?
	Do the organizations have the specific skills necessary for this type of project?
	Does the alliance plan to have staff that live on site?
	Is there an experienced organization that can effectively deal with government relations if necessary?
	Is there a mutually agreed upon exit strategy for organizations that want to leave the alliance?
	Has our agency provided a long enough funding cycle for the project?
	Has our agency minimized the bureaucratic burden of the project so that valuable time can be spent on project activities rather than fulfilling insignificant reporting and administrative requirements?

 $\ \square$ How has our agency communicated to the alliance that we value learning and would like to see the alliance

document what it learns along the way?



Sport diving — an industry that generates millions of dollars annually worldwide — is increasingly becoming an important source of revenue for coastal communities throughout Asia and the Pacific.

TO LEARN MORE

The authors of this study encourage others to continue learning more about what makes for effective alliances in conservation. These resources can help support that learning.

Suggested Readings

Brandon, K., K. H. Redbird, and S. E. Sanderson, eds. 1998. Parks in peril: People, politics and protected areas. Washington, D.C.: Island Press.

Carroll, T. F. 1992. Intermediary NGOs: The supporting link in grassroots development. West Hartford, Connecticut: Kumarian Press.

Cernea, M. 1988. Nongovernmental organizations and local development. World Bank Discussion Paper 40. Washington, D.C.: The World Bank.

Edwards, M., and D. Hulme, eds. 1996. Beyond the magic bullet: NGO performance and accountability in the post-cold war world. West Hartford, Connecticut: Kumarian Press.

Fisher, J. 1993. The road from Rio: Sustainable development and the nongovernmental movement in the third world. Westport, Connecticut: Praeger.

Fowler, A. 1997. Striking a balance: A guide to enhancing the effectiveness of nongovernmental organizations in international development. London: Earthscan Publications, Ltd.

Margoluis, R., and N. Salafsky. 1998. Measures of success: Designing, managing, and monitoring conservation and development projects. Washington, D.C.: Island Press.

Complete Literature Review

The complete documentation of the extensive literature review for this study is available online in the publications section of the BSP Web site at www.BSPonline.org.

References

Publications noted with this symbol are available in the publications section of the BSP Web site at www.BSPonline.org.

Barrett, C. B., and P. Arcese. 1995. Are integrated conservation-development projects (ICDPs) sustainable? On the conservation of large mammals in Sub-Saharan Africa. World Development 23(7):1073-

Bebbington, A., and J. Farrington. 1993. Governments, NGOs and agricultural development: Perspectives on changing inter-organizational relationships. The Journal of Development Studies 29(2):199-219.

Bhatnagar, B. 1991. Nongovernmental organizations and World Bank supported projects in Asia: Lessons learned. Departmental Papers Series, No. 2., Technical Department. Washington, D.C.: The World Bank.

➡ Biodiversity Conservation Network. 1997. Getting down to business. Washington, D.C.: Biodiversity Support Program.

_____. 1999a. Final stories from the field. Washington, D.C.: Biodiversity Support Program.

_. 1999b. Patterns in conservation. Washington, D.C.: Biodiversity Support Program.

Biodiversity Support Program. 2000. Joining forces: Improving the effectiveness of conservation coalitions. Washington, D.C.: Biodiversity Support Program.

Booth, G. A. 1993. Biological diversity monitoring indicators within a natural resources management framework for Sub-Saharan Africa. Washington, D.C.: United States Agency for International Development.

Brandon, K. and M. Wells. 1992. Planning for people and parks: Design dilemmas. *World Development* 20(4):557-570.

Brandon, K., K. H. Redford, and S. E. Sanderson, eds. 1998. *Parks in peril: People, politics and protected areas.* Washington, D.C.: Island Press.

Brown, L. D., and D. C. Korten. 1991. Working more effectively with nongovernmental organizations. In *Nongovernmental organizations and the World Bank*, eds. S. Paul and A. Israel, pp. 44-93. Washington, D.C.: The World Bank.

Carroll, T. F. 1992. Intermediary NGOs: *The supporting link in grassroots development*. West Hartford, Connecticut: Kumarian Press.

Carroll, T., M. Schmidt, and T. Bebbington. 1996. Participation through intermediary NGOs. World Bank Participation Series, No. 031. Washington, D.C.: The World Bank.

Cernea, M. 1988. *Nongovernmental organizations and local development*. World Bank Discussion Papers, No. 40. Washington, D.C.: The World Bank.

Clark, J. 1991. *Democratizing development: The role of voluntary organizations*. West Hartford, Connecticut: Kumarian Press.

____. 1995. The state, popular participation, and the voluntary sector. *World Development* 23(4):593-601

Cohen, J. M., and N. T. Uphoff. 1977. Rural development participation: Concepts and measures for project design, implementation and evaluation. Rural Development Committee Center for International Studies. Ithaca, New York: Cornell University.

Covey, J. G. 1996. Accountability and effectiveness in NGO policy alliances. In *Beyond the magic bullet: NGO performance and accountability in the post-cold war world*, eds. M. Edwards and D. Hulme, pp. 198-214. West Hartford, Connecticut: Kumarian Press.

Donovan, R. 1994. BOSCOSA: Forest conservation and management through local institutions. In *Natural connections: Perspectives in community based conservation*, eds. D. Western, R. M. Wright, and S. C. Strum, pp. 215-233. Washington, D.C.: Island Press.

Edwards, M., and D. Hulme. 1996a. Beyond the magic bullet: NGO performance and accountability in the post-cold war world? Lessons and conclusions. In *Beyond the magic bullet: NGO performance and accountability in the post-cold war world*, eds. M. Edwards and D. Hulme, pp. 254-266. West Hartford, Connecticut: Kumarian Press.

_____. 1996b. Too close for comfort? The impact of official aid on nongovernmental organizations. *World Development* 24(6):961-973.

Egger, P., and J. Majeres. 1992. Local resource management and development: Strategic dimensions of people's participation. In *Grassroots environmental action: People's participation in sustainable development*, eds. D. Ghai and J. M. Vivian, pp. 304-324. London: Routledge.

Elliot, C. 1987. Some aspects of relations between the North and South in the NGO sector. *World Development* 15(Supplement):57-68.

Esman, M. J., and N. T. Uphoff. 1984. Local organizations: Intermediaries in rural development. Ithaca, New York: Cornell University Press.

Fernandez, A. P. 1987. NGOs in South Asia: People's participation and partnership. *World Development* 15(Supplement):39-49.

Fisher, J. 1993. The road from Rio: Sustainable development and the nongovernmental movement in the third world. Westport, Connecticut: Praeger.

____. 1994. Is the iron law of oligarchy rusting away in the third world? World Development 22(2):129-143.

_____. 1998. Nongovernments: NGOs and the political development of the third world. West Hartford, Connecticut: Kumarian Press.

Fowler, A. 1997. Striking a balance: A guide to enhancing the effectiveness of nongovernmental organisations in international development. London: Earthscan Publications, Ltd.

Fox, T. H. 1987. NGOs from the United States. World Development 15(Supplement):11-19.

Hino, T. 1996. A tale of two projects: Lessons drawn from World Bank NGO-partnerships. Poverty and Social Policy Department Discussion Paper Series, No. 90. Washington, D.C.: The World Bank.

Hope, K. R., Sr. 1996. Promoting sustainable community development in developing countries: The role of the technology transfer. *Community Development Journal* 31(3):193-200.

Howes, M. 1997. NGOs and the development of local institutions: A Ugandan case study. *Journal of Modern African Studies* 35(1):17-35.

Hyman, E., and K. Dearden. 1998. Tracking the impact of microenterprise programs: The experience of nongovernmental organizations. Impact Assessment and Project Appraisal 16(3):195-202.

Janssens, A. 1995. Alternative financing: Cost recovery...and more. Grassroots Development 19(2):23-

Johnson, A. 1997. Processes for effecting community participation in conservation drives: A case study of the Crater Mountain Wildlife Management Area. In The political economy of forest management in PNG, ed. C. Filer. National Research Institute Monograph Series. Port Moresby: National Research Institute.

Jordan, P. L. 1996. Strengthening the public-private partnership: An assessment of USAID's management of PVO and NGO activities. Program and Operations Assessment Report, No. 13. Washington, D.C.: United States Agency for International Development.

Josiah, S. J. 1996. Local action for global change: Expanding the impacts of NGO natural resource conservation programs. Ph.D. diss., University of Minnesota.

Kajese, K. 1987. An agenda of future tasks for international and indigenous NGOs: Views from the South. World Development 15(Supplement):79-85.

Kanyinga, K. 1995. The politics of development space in Kenya. In Service provision under stress in east Africa, eds. J. Semboja and O. Therkildsen, pp. 70-86. London: Villiers Publications, Ltd.

Kleymeyer, C. D. 1994. Cultural traditions and community based conservation. In Natural connections: Perspectives in community based conservation, eds. D. Western, R. M. Wright, and S. C. Strum, pp. 323-346. Washington, D.C.: Island Press.

Kumar, K. 1989. Indicators for measuring changes in income, food availability and consumption. Washington, D.C.: United States Agency for International Development.

Little, P. D. 1994. The link between local participation and improved conservation: A review of issues and experiences. In Natural connections: Perspectives in community based conservation, eds. D. Western, R. M. Wright, and S. C. Strum, pp. 347-372. Washington, D.C.: Island Press.

Mahanty, S., and D. Russell. 1999. What's at stake? A study of stakeholder organizations in conservation and development projects. Draft.

Malena, C. 1997. NGO involvement in World Bank-financed social funds: Lessons learned. Environment Department Papers, No. 052. Washington, D.C.: The World Bank.

Margoluis, R. and N. Salafsky. 1998. Measures of success: Designing, managing, and monitoring conservation and development projects. Washington, D.C.: Island Press.

Marklein, M. B. 1991. Putting the world right side up: The grassroots perspective. Grassroots Development: Journal of the Inter-American Foundation 15(1):8-15.

McNeely, J. A. 1995. Expanding partnerships in conservation. Washington, D.C.: Island Press.

Metcalfe, S. 1994. The Zimbabwe Communal Areas Management Programme for Indigenous Resources. In Natural connections: Perspectives in community based conservation, eds. D. Western, R. M. Wright, and S. C. Strum, pp. 161-192. Washington, D.C.: Island Press.

Meyer, C. 1995. Opportunism and NGOs: Entrepreneurship and green North-South transfers. World Development 23(8):1277-1289.

. 1996. NGOs and environmental public goods: Institutional alternatives to property rights. Development and Change 27:453-474.

Mezzalama, F., and S. Schumm. 1993. Working with NGOs: Operational activities for development of the United Nations system with nongovernmental organizations and governments at the grassroots and national levels. Joint Inspection Unit. Geneva: United Nations.

Moeliono, I., and L. Fisher. 1991. Networking for development: Some experiences and observations. Paper presented at Workshop on Networking for LEISA, Philippines.

Murphree, M. 1994. The role of institutions in community based conservation. In Natural connections: Perspectives in community based conservation, eds. D. Western, R. M. Wright, and S. C. Strum, pp. 403-427. Washington, D.C.: Island Press.

Nyoni, S. 1987. Indigenous NGOs: Liberation, self reliance and development. World Development 15(Supplement):51-56.

Otto, J. 1993. Seeking success: Where and how to look for success factors in USAID/NGO natural resource management plans in Africa. Washington, D.C.: United States Agency for International Development.

- Reilly, C. A. 1992. Who should manage environmental problems? Some lessons from Latin America. In *Grassroots environmental action: People's participation in sustainable development*, eds. D. Ghai and J. M. Vivian, pp. 325-347. London: Routledge.
- _____. 1993. The road from Rio: NGO policy makers and the social ecology of development. *Grassroots Development* 17(1):25-35.
- Ridell, R. C., S. E. Kruse, T. Kyllönen, S. Ojanperä, and J. L. Vielajus. 1997. *Searching for impact and methods: NGO evaluation synthesis study.* Department for International Development Cooperation, Finland.
- Riker, J. V. 1995a. Contending perspectives for interpreting government-NGO relations in South and Southeast Asia: Constraints, challenges and the search for common ground in rural development. In *Government-NGO relations in Asia: Prospects and challenges for people centered development*, eds. N. Heyzer, J. V. Riker, and A. B. Quizon, pp. 15-57. New York: St. Martin's Press.
- _____. 1995b. From cooptation to cooperation and collaboration in government-NGO relations: Toward an enabling policy for people centred development in Asia. In *Government-NGO relations in Asia:* Prospects and challenges for people centered development, eds. N. Heyzer, J. V. Riker, and A. B. Quizon, pp. 91-130. New York: St. Martin's Press.
- Saad, S. G. 1996. Integrating gender and environment into NGO training. *Natural Resources Forum* 20(2):135-144.
- Saint-Martin, J. G. 1994. Increasing NGO influence on development policy. Peace Research 26(1):79-86.
- Salafsky, N. 1998. If I only knew then what I know now: An honest conversation about a difficult conservation and development project. *Lessons from the Field*, Issue No. BCN 1. Washington, D.C.: Biodiversity Support Program.
- Salafsky, N., and R. Margoluis. 1999. Threat reduction assessment. Conservation Biology 13(4):830-841.
- Salafsky, N., and R. Margoluis. 2000. *Measuring Conservation Project Success: The Threat Reduction Assessment Approach*. Washington, D.C.: Biodiversity Support Program.
- Salafsky, N., B. Cordes, J. Parks, and C. Hochman. 1999. Evaluating linkages between business, the environment, and local communities: Final analytical results from the Biodiversity Conservation Network. Washington, D.C.: Biodiversity Support Program.
- Salmen, L. F., and A. P. Eaves. 1989. World Bank work with nongovernmental organizations. Working Paper 305 (December), Public Sector Management and Private Sector Development. Washington, D.C.: The World Bank.
- Schmale, M. 1993. The role of local organizations in third world development. London: Avebury Press.
- Sen, B. 1987. NGO self evaluation: Issues of concern. World Development 15(Supplement):161-167.
- Seymour, F. J. 1994. Are successful community-based conservation projects designed or discovered? In *Natural connections: Perspectives in community based conservation*, eds. D. Western, R. M. Wright, and S. C. Strum, pp. 472-498. Washington, D.C.: Island Press.
- Shah, P., and M. K. Shah. 1996. Participatory methods for increasing NGO accountability. In *Beyond the magic bullet: NGO performance and accountability in the post-cold war world*, eds. M. Edwards and D. Hulme, pp. 215-225. West Hartford, Connecticut: Kumarian Press.
- Smith, B. H. 1987. An agenda of future tasks for international and indigenous NGOs: Views from the North. *World Development* 15(Supplement):87-93.
- Statham, D. C. 1994. The farm scheme of North York Moors National Park, United Kingdom. In *Natural connections: Perspectives in community based conservation*, eds. D. Western, R. M. Wright, and S. C. Strum, pp. 282-299. Washington, D.C.: Island Press.
- Steedly, H. R. and J. W. Foley. 1990. The success of protest groups: Multivariate analyses. In *The strategy of social protest*, ed. W. Gamson, pp. 182-198. Belmont, California: Wadsworth Publishing Company.
- Sundberg, J. 1997. NGO landscapes: Conservation in the Biosphere Reserve, Peten, Guatemala. Master's thesis, Institute of Latin American Studies, University of Texas, Austin.
- Tendler, J. 1982. Turning private organizations into development agencies: Questions for evaluation. Program Evaluation Discussion Paper, No. 12. Washington, D.C.: United States Agency for International Development.
- Thomas-Slayter, B. P. 1992. Implementing effective local management of natural resources: New roles for NGOs in Africa. *Human Organization* 51(2):136-143.
- Twose, N. 1987. European NGOs: Growth or partnership? World Development 15(Supplement):7-10.
- Uphoff, N. 1986. Local institutional development: An analytical sourcebook with cases. West Hartford, Connecticut: Kumarian Press.

USAID. 1995. Agency's strategic framework and indicators 1995-1996. Washington, D.C.: United States Agency for International Development.

Van der Heijden, H. 1987. The reconciliation of NGO autonomy, program integrity and operation effectiveness with accountability to donors. World Development 15(Supplement):103-112.

Vetter, S. 1987. Portrait of a peasant leader: Ramon Aybar. In Direct to the poor: Grassroots development in Latin America, eds. S. Annis and P. Hakim, pp. 17-28. Boulder, Colorado: Lynne Reinner Publishers.

Wells, M. P. 1994. Community-based forestry and biodiversity projects have promised more than they have delivered. Why is this and what can be done? Paper presented at International Symposium on Rain Forest Management in Asia, Centre for Development and the Environment, Norway.

Wells, M., and K. Brandon. 1992. People in parks: Linking protected area management with local communities. Washington, D.C.: The World Bank.

Western, D. 1994. Linking conservation and community aspirations. In Natural connections: Perspectives in community based conservation, eds. D. Western, R. M. Wright, and S. C. Strum, pp. 499-511. Washington, D.C.: Island Press.

Yadama, G. N. 1995. Tales from the field: Observations on the impact of nongovernmental organizations. International Social Work 40:145-162.

Yudelman, S. W. 1987. The integration of women into development projects: Observations on the NGO experience in general and in Latin America in particular. World Development 15(Supplement):179-187.

About the Biodiversity Support Program

The Biodiversity Support Program (BSP) is a consortium of World Wildlife Fund, The Nature Conservancy, and World Resources Institute, funded by the United States Agency for International Development (USAID). BSP's mission is to promote conservation of the world's biological diversity. We believe that a healthy and secure living resource base is essential to meet the needs and aspirations of present and future generations. BSP began in 1988 and will close down in December 2001.

A Commitment to Learning

Our communications activities are designed to share what we are learning through our field and research activities. To accomplish this, we try to analyze both our successes and our failures. We hope our work will serve conservation practitioners as a catalyst for further discussion, learning, and action so that more biodiversity is conserved. Our communications programs include print publications, Web sites, presentations, and workshops.

Visiting BSP Web Sites

We invite you to visit our general and program-specific Web sites even after the program closes down.

Biodiversity Support Program...

www.BSPonline.org

Biodiversity Conservation Network...

www.BCNet.org

CARPE: Central African Regional Program for the Environment...

http://carpe.umd.edu

KEMALA: Supporting Indonesian NGOs for Community Based Natural Resource Management... www.bsp-kemala.or.id/

BSP Listserv

Through June 2001, you can receive e-mail updates about BSP through www.BSPonline.org. To join our listsery, click on stay informed and enter your e-mail address. We will keep you posted on project highlights, upcoming events, and our latest publications.

Ordering BSP Publications

Many of our print publications are now also available online at www.BSPonline.org. At the home page, click on publications. You can view publications online or, through June 2001, order copies to be sent to you. You may also contact us by mail, phone, or fax to request copies.

Contact BSP

For more information, to give us feedback, or to order copies of BSP publications, contact us.

Biodiversity Support Program c/o World Wildlife Fund 1250 24th St. NW Washington, DC 20037 USA Phone: 202-861-8347

Fax: 202-861-8324 E-mail: BSP@wwfus.org Web Site: www.BSPonline.org

Publication Credits

Authors: Richard Margoluis, Cheryl Margoluis, Katrina Brandon, and Nick Salafsky

Project Director: Richard Margoluis Publication Manager: Sheila Donoghue

Editor: Sheila Donoghue Design: Ellipse Design

Printing: Balmar Solutions in Print

Director of Communications: Sheila Donoghue

Director of the Analysis and Adaptive Management Program: Richard Margoluis

Executive Director: Judy Oglethorpe

Photo Credits: Nancy Baron (p. 6 right); BCN Staff (p. 24); Richard Margoluis (pp. 1, 2, 4, 6 left, 9, 10, 15, 33, 35, 37, 39, 40, 42, 44); John Parks (p. 16); Nick Salafsky (p. 38). Cover photograph: Asmat, West Papua, Indonesia; © Jack Fields/CORBIS.

Please cite this publication as: Margoluis, R., C. Margoluis, K. Brandon, and N. Salafsky. 2000. In good company: Effective alliances for conservation. Washington, DC: Biodiversity Support Program.

Acknowledgements

We wish to thank the many people who contributed to this publication. First and foremost we would like to thank those colleagues who provided significant amounts of time to answer our many interview questions, including Chiranjeev Bedi, Seema Bhatt, Michael Chinaka, Hank Cauley, Jack Croucher, Chuck Encarnacion, Balachander Ganesan, Frank Hicks, Nandita Jain, Ann Koontz, Mark Leighton, Avi Mahananingtyas, Duncan Neville, John Parks, Femy Pinto, Diane Russell, Jessica Stabile, and Rudy and Alti Utama. We would also like to thank John Parks and Vance Russell for providing addition feedback, commentary, and encouragement.

We would particularly like to thank Bernd Cordes for all of his time and effort in helping us with data collection and for continually providing sound advice throughout the research process. Bernd's insights and suggestions vastly improved our research. And finally, we wish to acknowledge the superb job Sheila Donoghue and her Communications team did to bring this publication to press.

Printed on recycled paper.

This publication was made possible through support provided to BSP by the Global Bureau of USAID, under the terms of Cooperative Agreement Number DHR-A-00-88-00044-00. The opinions expressed herein are those of the authors and do not necessarily reflect the

© 2000 by World Wildlife Fund, Inc., Washington D.C. All rights reserved. Reproduction of this publication for educational and other noncommercial purposes is authorized without prior permission of the copyright holder. However, WWF, Inc. does request advance written notification and appropriate acknowledgment. WWF, Inc. does not require payment for the noncommercial use of its published works and in no way intends to diminish use of WWF research and findings by means of copyright.