

INSTITUTE OF APPLIED SCIENCES
THE UNIVERSITY OF THE SOUTH PACIFIC

Principles for Community-Base Marine Conservation in the Indo-Pacific

By

Institute of Applied Sciences and the Biodiversity of
Conservation Network

Principles for Community-Based Marine Conservation in the Indo-Pacific



Results from a June 1999 Workshop of Three Marine Biodiversity Conservation Projects

*The Institute of Applied Sciences of the University of the South Pacific
and the Biodiversity Conservation Network*

About This Document

This workshop report was made possible through the generous support from: (a) the John D. and Catherine T. MacArthur Foundation under Grant # 99-58466-GSS made to the University of the South Pacific (USP), and (b) the Office of Development Resources, Bureau for Asia, United States Agency for International Development (USAID) under the terms of Cooperative Agreement Number AEP-A-00-92-00043-00 made to the Biodiversity Conservation Network (BCN) of the Biodiversity Support Program. The opinions expressed herein are those of the authors and do not necessarily reflect the views of the MacArthur Foundation, USAID, USP, or the Biodiversity Support Program. For more information, to provide feedback, or to order additional copies of this document, please contact:

The University of the South Pacific

Institute of Applied Sciences
Marine Studies Campus; Suva, FIJI ISLANDS
Phone: +(679) 3212 440 or 3312 952
Facsimile: +(679) 3300 373
Email: aalbersberg@usp.ac.fj
Internet: <http://www.usp.ac.fj/ias>

This document is available online for download at: www.usp.ac.fj/ias or www.bcnet.org. The printed edition is produced on recycled paper.

Please cite this document as:

Parks, John, William Aalbersberg, and Nick Salafsky, editors. 2001. *Principles for Community-Based Marine Conservation in the Indo-Pacific*. University of the South Pacific Press. Suva, Fiji.

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Credits

Report Writing and Editing:	John Parks, William Aalbersberg, and Nick Salafsky
Cover Art:	Anna Balla
Layout, Production and Printing:	University of South Pacific Press
Workshop Participation and Results:	Padaido Islands Project, West Papua, Indonesia Arnavon Islands Project, Isabel and Choiseul Provinces, Solomon Islands Tikina Verata Project, Tailevu Province, Fiji Islands
Workshop Organizer:	John Parks
Workshop Facilitation:	John Parks, Nick Salafsky, and Bernd Cordes
USP Institute of Applied Sciences Director:	William Aalbersberg
BCN Director:	Bernd Cordes

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I. BACKGROUND

This document contains the summary process and results from a workshop analysis completed during late June 1999 by project representatives from the following three community-based marine biodiversity conservation projects in the Indo-Pacific:

1. The **Padaido Islands** Community-Based Marine Resource Management Project, located in West Papua, Indonesia;
2. The **Arnavon Islands** Marine Conservation Area Project, located in the Isabel Province of the Solomon Islands; and
3. The **Tikina Verata** Marine Bioprospecting and Community Conservation Project, on Viti Levu, Fiji Islands.

The locations of these three projects are illustrated in Figure 1.

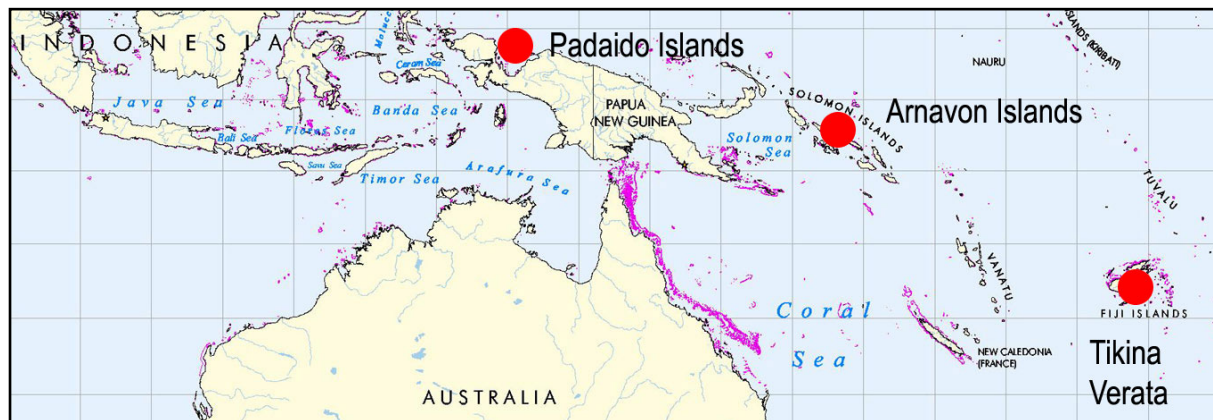


Figure 1. The location of the three BCN-supported community-based marine conservation project sites in the Indo-Pacific.

In addition to all three projects being community-based nearshore marine biodiversity conservation projects, the three projects had been supported between 1994-95 and 1999 through the Biodiversity Conservation Network¹ (BCN) of the Biodiversity Support Program. In collaboration with the Institute of Applied Sciences at the University of the South Pacific (USP), BCN organized and convened a workshop during late June 1999 toward the end of BCN's programmatic lifetime so that these three projects would be afforded the opportunity to come together to collaboratively analyze and share lessons on the relative success and challenges experienced by the three different project sites during their five years of financial and technical support from BCN.

The goal of the workshop was to provide informed guidance for conservation practitioners in the Indo-Pacific (and elsewhere) to use in their community-based marine biodiversity conservation efforts. There were three objectives under this goal for the workshop:

¹ BCN was part of the Biodiversity Support Program, managed by a consortium of World Wildlife Fund, The Nature Conservancy, and World Resources Institute and funded by the United States Agency for International Development (USAID). BCN was funded by USAID's U.S.-Asia Environmental Partnership (US-AEP) Asia-Near East Bureau, and was managed by USAID's Global Bureau under the terms of cooperative agreement number AEP-0015-A-00-2043-00. To learn more about BCN and its results, visit www.BCNet.org.

Objective 1: *Develop a set of specific, guiding principles for doing both community-based marine resource management and implementing enterprise-based approaches to marine conservation.*

Objective 2: *Present and discuss these principles with relevant, regional audiences.*

Objective 3: *Provide a collective voice in suggesting a direction for future regional marine conservation efforts within a local resource use context.*

This was the first workshop in the region where separate community-based marine biodiversity conservation projects working independent of one another came together deliberately to conduct a group analysis and systematically share experiences and lessons regarding the factors and principles for marine conservation action and success in the region.

The purpose of this document is to report on the process and outputs from this workshop.

II. A SUMMARY OF THE WORKSHOP PROCESS

A full workshop agenda of all five days of activities undertaken and their timing is provided as Appendix One of this report.

The central question that was posed to attendees during the workshop was:

“What are the factors that lead to effective marine biodiversity conservation in a community-based management setting in the Indo-Pacific?”

The workshop was held 24 – 30 June 1999 and was hosted by the Institute of Applied Sciences at USP at its main campus in Suva, Fiji. Between five to eight representatives from each of the three projects attended the workshop, including resource owners and community leaders from the three project sites and partner staff from the implementing governmental and non-governmental organizations supporting the projects. The workshop was facilitated by BCN staff. Representatives from the MacArthur Foundation also attended and participated in the workshop.

Over a period of three days in Ucunivanua Village (host village at the Tikina Verata project site), a series of participatory exercises was undertaken by the workshop participants to address this central question.

First, the group focused on generating a set of factors that had influenced conservation success at the three project sites, based on the collective experience and knowledge from these sites. From here, the group then categorized these factors into headings and prioritized the three most important factors.

Next, small groups (consisting of representatives from each of the three projects) met by factor category and completed four exercises for each of the three prioritized factors:

- (a) Defining the factor;
- (b) Stating the groups' collective beliefs (their conventional wisdom) regarding the factor that the participants had at the outset of the three projects;
- (c) Discussing what actually occurred in regard to the factor at the three sites and whether or not these experiences agreed with the beliefs that they held at the project outset; and
- (d) Developing specific, guiding principles regarding the factor to be shared with other regional conservation practitioners and used in the future.

Through this three-day process, a group analysis was conducted and results synthesized for the prioritized factors under the four factor categories.

A fourth day was used to prepare presentation of generated results and practice delivery of the group's findings by volunteers who would formally present them to the invited guests and press the following day.

The fifth and final day was used to present results and initiate discussion with invited guests at a day-long forum hosted by USP on their main Suva campus. The voices of the three marine conservation sites and their recommended success factors and guiding principles were shared with over 50 people including:

- (a) Several government representatives from the Ministry of Lands, Ministry of Fijian Affairs, and Ministry of Agriculture and Fisheries;
- (b) Members of regional environmental decision-making bodies including the South Pacific Regional Environmental Programme, the Secretariat of the Pacific Community, and the Forum Secretariat, and

- (c) Several regional conservation and development non-governmental groups, including members from the World Wide Fund for Nature South Pacific Programme and the Foundation for Peoples of the South Pacific;
- (d) Dozens of interested people from the public, including resource owners and community members from Fiji, conservation practitioners, and students representing several Pacific countries; and
- (e) Dozens of members from academia.

In addition, members of the press were invited to and attended the results presentation. Several of the workshop participants were interviewed. Mass media coverage from the results presentation included:

- (a) Articles in national Fijian newspapers;
- (b) National evening news coverage by Fiji One Television on June 29, consisting of a two-minute story with segments from Suva results presentation and interviews from three Pacific Islander attendees;
- (c) A 20-minute story in Fijian language on the national TV program "*Talanoa*" aired on 28 August 1999;
- (d) Articles in two regional USP Bulletin monthly newsletters; and
- (e) Regional circulation of a press release by Suva-based news agencies (see Appendix Two).

All results from the workshop were also made immediately available to a global audience on the BCN world wide web site, www.BCNet.org. A video recording of the results presentation was also produced by USP for documentary purposes.

III. WHAT WAS LEARNED FROM THE WORKSHOP

The analysis compared and identified shared experiences and lessons related to community-based marine conservation work undertaken during the BCN-support period of four to five years (depending on the project). The outputs from the group analysis of shared experiences and lessons include: (a) identification of 39 commonly shared factors (in four categories) influencing the success of community-based marine conservation efforts; (b) 20 guiding principles for conservation practitioners relating to prioritized factors; and (c) a set of original project beliefs, or assumptions, from each of the prioritized factors that was either upheld or revised by the end of the three to five years of project work.

It is important to point out that the results generated were elucidated through a qualitative and participatory process from only three project teams, and as such are largely subjective and are not necessarily applicable to all related sites in the Indo-Pacific. However, it should be further noted that many of the factors and principles identified were done so based on empirical evidence gathered and analyzed by the three projects involved.

While the content presented here has been edited from the original results generated by the workshop participants, it must be recognized that the factors, principles, lessons, and examples provided come from the voices of the projects themselves, and that these results come from the actual, collective learning of three projects across Melanesia and reflect the experiences of dozens of communities and partner organizations involving at least a thousand people and millions of dollars in conservation support. These results are their findings.

A total of 39 factors were identified as commonly shared between the three projects as largely influencing the efficacy and success of their community-based marine biodiversity conservation action. These factors were organized into four categories by the participants:

- **Enterprise** Factors (10 factors identified);
- **Community** Factors (12 factors identified);
- **Organizational** Factors (10 factors identified); and
- **Natural Resource** Factors (7 factors identified).

A summary of all factors identified by category is presented in the following sections. For each of the four category of factors, the top three priority factors identified are presented, including: (1) a definition for the factor, (2) a summary of the projects' initial assumptions and beliefs (conventional wisdom) that they had regarding the factor and how it would influence their projects at the outset of their work, (3) what actual lessons they learned regarding the factor's influence during the five-year timeframe of BCN support (using examples as anecdotal evidence), and (4) what specific, guiding principles the projects recommend to other community-based marine conservation practitioners to act on, based on their collective and common experiences and lessons.

It should be noted that while the factors and principles presented are largely aimed at marine conservation practitioners in the Indo-Pacific, it is hoped that the lessons can be useful to other practitioners around the world undertaking both marine and terrestrial community-based conservation work.

(A) Enterprise Factors and Principles

Under BCN's core hypothesis and programmatic mandate of support, all three projects operated "ecologically sustainable" or "eco-friendly" enterprise operations whose success as income generation operations was theoretically linked to the maintenance of *in situ* nearshore marine biodiversity and the community-based conservation efforts on site. The enterprises² operating at these three sites were: (a) dive tourism and sustainable fishing in the Padaido Islands (Indonesia), (b) sustainable deep-water fishing in the Arnavon Islands (Solomon Islands), and (c) pharmaceutical bioprospecting in Verata (Fiji Islands).

In this regard, the three project's BCN-supported enterprise operations were inherently linked to the achievement of conservation objectives at the three sites. To this end, livelihood and alternative income generation (via eco-enterprises) was a large focus of the projects experiences and their subsequent analysis of the factors that influence whether or not community-based conservation efforts can succeed in the Indo-Pacific.

A total of ten "business and livelihood" (as labeled by the workshop participants) factors were identified by the group as having influence over community-based marine conservation success in the region:

- Infrastructure/Equipment Availability
- Adequate Business and Economic Planning
- Appropriate and Adequate Product Marketing
- Regular Financial Auditing
- Community Support in Enterprise Activities
- Adequate Profit Generation
- Ease and Cost-Minimization of Transportation of Product to Market
- Appropriate Cultural "Fit" in the Community
- Adequate and Sustainable Funding/Investment in the Enterprise
- Equitable Benefit Sharing

Of these ten, three factors were prioritized as the most critical factors: (a) community support in enterprise activities, (b) adequate and sustainable funding/investment in the enterprise; and (c) appropriate and adequate product marketing. Results for each of these priority factors are discussed below.

(1) Priority Factor: Community Support in Enterprise Activities

Definition: the degree of willingness, interest, and investment put forward by community residents in their participation in a collective sustainable enterprise activity.

At the outset of the projects, it was assumed that community support was important, but that it could be gained for the enterprise during the life of the project as long as up-front a few key individuals and leaders supported it.

What was learned was much more pronounced and specific than this assumption.

Given the collective experience of the three projects the group held that in order to achieve community support, four aspects of community support had to be met before and during the lifetime of the project and associated enterprise activities:

² To learn more about these enterprises and the community-based conservation projects and partners that sustained them, visit www.BCNet.org.

- a. The enterprise and associated alternative livelihood activities should be appropriate, or 'fit', into the existing community culture so as not to be a disruptive influence, and that such cultural 'fit' would need to be reviewed and agreed upon by the community *before* an enterprise and/or new livelihood activities are allowed to commence;
- b. The community residents should be involved in all stages of the enterprise development and operation, particularly in the design and pre-implementation phase, and not just in a selected core set of enterprise activities determined by business specialists in project partner organizations;
- c. Efforts to educate and train the community about the business and its operation must be on-going, and not just a once or twice undertaken activity at a specific point in the project; and
- d. Community participants in the enterprise should have a determining voice in and understand clearly how the cash benefits (profit) is to be distributed equitably, transparently, and appropriately within the community given the customary and cultural context.

Without these various levels of community support for the business operations of conservation projects, projects felt that enterprise operations would not be socially sustainable, even if they were highly profitable and ecologically-friendly. In the case of the Arnavon Islands project, for example, it was reported that the BCN-supported deep water fishery enterprise brought into the communities by partner NGOs without adequate community review and support created problems in the community and had detrimental impacts on the project overall even before the enterprise failed.

These findings lead to the following principle:

Guiding Principle: ***Without community support from the outset, the business will not be financially, socially, or ecologically sustainable.***

It was emphasized that this principle and many of these lessons underlying it are not limited to merely the project's use of eco-enterprises or alternative income generation activities, but that they also hold for livelihood opportunities at a community level in general.

(2) Priority Factor: Adequate and Sustainable Investment in the Enterprise

Definition: Investment is the kind and amount of capital support provided to the establishment and operation of a sustainable enterprise.

At the outset, projects assumed that a single source of enterprise funding, even if limited-term, was sufficient to initiate and run the enterprise. It was noted that in the case of these three projects, this support was wholly or largely from a BCN grant.

What was experienced and learned was actually contrary to this belief.

Given the collective experience of the three projects, the group held that in order to achieve start-up and long-term fiscal viability, investment in the community enterprise requires a *mix* of *multiple* funding sources at different levels (not any one level):

- a. Community-Level: monetary (e.g., community fund) and in-kind (e.g., labor) investment should be contributed by local residents;

- b. National-Level: business loans should be secured from local or external banks; and
- c. International-Level: funding should be sought from external donors supporting international efforts (e.g., US-based private granting foundations, governmental funding support opportunities such as BCN).

This leads to another principle.

Guiding Principle: *The enterprise should be adequately supported through a variety of funding sources at different levels rather than rely on a single investment scheme.*

The projects noted that in some cases, international-level funding for community-based sustainable enterprise efforts should be made available to perspective grantees in the form of loans rather than grants as it was observed that long-term enterprise sustainability was more encouraged when local residents recognized that they had to pay back loans rather than merely receive grant monies with little corresponding accountability.

It was also suggested that in many community settings, receipt of grant monies is not culturally appropriate and can lead to a 'welfare' mentality by the local residents rather than a 'do-for-yourself' one. When grant monies are made available, it was recommended that receipt of such monies should be slow and incrementally achieved in small amounts even if the grant award is for a sizeable amount.

Finally, projects noted that while the BCN grant support was important in allowing projects to initiate and experiment with conservation-oriented and sustainable enterprises, the fact that BCN did not require other sources of matching investment at local, national, and other international levels was a mistake. It was also felt that the rapid BCN grant proposal timeframe and limited-term lifetime of investment (3-5 years maximum) necessitated project partners to bring in enterprises that would not have adequate time to both garner community support (or be rejected) and secure longer-term sources of funding support. Project representatives reported that this thereby reduced the likelihood of their enterprises being sustainable socially or financially. Representatives from the Arnavon Islands project in particular voiced how this contributed to both the demise of their deep-water enterprise and led to community dissatisfaction with the project and the partner NGOs that brought the BCN grant to the project.

*(3) Priority Factor: *Appropriate and Adequate Product Marketing**

Definition: the system through which the product of the sustainable enterprise is made available to consumers and encourages their purchase of the product

At the outset of the projects, participants assumed that if a marketable product or service could be generated through the enterprise, markets for the products and services would make themselves available and evident or be created due to economic demand. For example, in the Padaido Islands it was believed that if a dive tourism lodge was built, overseas dive tourists would learn about it and come, and if necessary, the operation could later be marketed.

The projects found that their marketing approach needed to be quite different.

Given the collective experience of the three projects, the group held that in order to produce goods or services that are marketable, many issues regarding the feasibility of moving the

product to market must be taken into consideration. Specifically, two issues were seen as particularly problematic:

a. Market Suitability/Feasibility Given Local Conditions

Assumptions regarding the steps in how the product will be made available to target markets need to be suitable and appropriate to local conditions, particularly infrastructure and culture.

An example of this was provided by representatives from the Arnavon Islands project in the Solomon Islands, who noted that their struggling, cost-prohibitive sustainable deep-water fishery was designed with international markets in mind, but that due to logistical issues such as irregular and unreliable transport of the product to market and poor infrastructure support, it was readily apparent to participating communities that the fishery would not be viable over the long-term.

b. The Need to Secure Broad, Flexible Markets

An issue raised by the three projects was that given the costs of producing and moving a product to market for even a community business was not to be underestimated by groups undertaking sustainable enterprise activities for conservation objectives, and that in particular the stability of the product's market was essential to assuring that costs would be met and a profit yielded. Market instability (particularly in Indonesia) experienced during 1997 and 1998 had profound impacts on all three project enterprises.

First, as international dive- and eco-tourism all but ended following the economic and political instability experienced in Indonesia during 1997 and 1998, the narrow international tourism target market for the Padiado Islands enterprise dried up, and the project successfully adapted its marketing to a wider national and local visitor market.

Next in the Solomon Islands, following the Asian currency crisis and economic collapse of many of the Southeast Asian economies, the international export fisheries declined significantly, and in conjunction with transportation difficulties, several tons of harvested fish rotted and were burned. The project is attempting to adapt its fishery for the national hotel seafood market instead of relying on the marginal international one.

Finally, when the intended international pharmaceutical company decided at the last minute to back out of its equitable bioprospecting agreement with Tikina Verata communities, a surrogate market had to be secured, and the answer came through an academic research institute in the United Kingdom. These three project examples were used to illustrate the need to secure a broad, flexible product market base in lieu of, or in tandem with, one that is narrow but seemingly profitable.

All of this leads to the following principle.

Guiding Principle: ***To start a sustainable community enterprise, a market feasibility study and grounded business and marketing plan must be completed prior to the commencement of the business.***

(B) Community Factors and Principles

A total of twelve "community" factors influencing effective marine conservation were identified by the group:

- Community Willingness
- Community Awareness
- Traditional Rights and Boundaries Recognition, Delineation, and Strengthening
- Appropriate Leadership
- Accountable Organizational Roles and Responsibilities
- Adequate Local Participation
- Existing Skills/Capacity
- Defining “Conservation”
- Traditional Management
- Long-Term Vision
- Inclusiveness
- Fun

Small-group analysis determined priority community factors to include: (a) appropriate leadership; (b) accountable organizational roles and responsibilities; and (c) adequate local participation. Results for each of these priority factors are discussed below.

(1) Priority Factor: Appropriate Leadership

Definition: A leader is an individual or organization providing project vision and motivation.

At the outset of the projects, the beliefs were that in Fiji and Solomon Islands, the chief must lead project activities, whereas in West Papua, the head of the village believed in the project and was responsible for motivating communities.

Much was learned on this factor by the three projects.

There was universal recognition by all project participants that when attempting community-based marine conservation projects in the Indo-Pacific, particularly in Melanesia, it is very important that project implementers and partners recognize, respect, and use the existing traditional management systems in place to identify, nurture/strengthen, and perpetuate the culturally appropriate customary leaders (both men and women). In some cases, traditional marine resource management leadership will be passed through descent lineage (genealogy) such as within the “big man” or chiefly systems of New Guinea, the Solomon Islands, and Fiji. In other cases, appropriate leadership will be or will have been identified and/or elected by the community and its chiefs within the customary management system, such as in the case of the *turaga ni koro*, or elected village leaders, system under Fiji’s village governance system. In either case, the recommendation to use this system and its designated leadership to undertake all project activities at least as a starting point was recommended by the workshop participants. This recognition led to the following principle:

Guiding Principle: ***In Melanesia, we must work through the chiefly system to ensure strong leadership, management skills, and the election of successful management committees.***

It was further noted that in some cases this will require, in particular, international non-governmental (NGO) staff willingly acquiescing project leadership from its own staff to the local leadership, and serving this local leadership rather than directing it.

Specifically in Indonesia, the *kepala desa* (traditional/elected heads of villages) are recognized as being very strong and involved at some sites in West Papua, but not at all. Further, this local leadership is recognized as being secondary to government decision makers. Therefore, secondary prioritization of leadership engagement and strengthening at the *kepala desa* level to that at a project management body or committee level that includes

government representation is acceptable because of the centralized/decentralizing management authority and nature in Indonesia. This results in the following guidance:

Guiding Principle: ***In Indonesia, we must work with community and local government to create a community-elected management body (but not necessarily with the leadership of the head of the village).***

The management committee level must therefore include provincial and local government representation in addition to the *kepala desa* and *adat* (customary chief) leadership as government influence is often more important to support conservation efforts than strictly focusing on the local community and traditional leadership. This situation would not be suitable in Fiji or the Solomon Islands, unless agreed to by the traditional leadership.

Given the centralized role of resource management at present in Indonesia, the most effective course of action on leadership recommended is to work with (or create) management committees/bodies that contain strong provincial and local government representation while simultaneously building the capacity and recognition of the *adat* leadership and local council of *adat* chiefs through the community project engagement.

(2) Priority Factor: Accountable Organizational Roles and Responsibilities

Definition: Accountability is when all project partners (including the community and outside governmental and non-governmental organizations): (a) agree to, respect, and provide a clear understanding of what each will do/lead and specifically who is responsible for ensuring which project activities and outputs result, and (b) are all held to meeting these agreements and the collective understanding through existing review, evaluation, and adaptation mechanisms. In the case where such agreements and obligations are not able to be met, partner organizations should be accountable in how to appropriately address and best resolve such delinquencies.

At the outset of the projects, the beliefs were that defining roles and responsibilities was important, but it wasn't necessary to do a complete job of it at the beginning of the project.

What was learned is quite different.

In Fiji and the Solomon Islands, a process to define the roles and responsibilities of participating project partners must be done through the leadership of the chiefly system and an elected or traditional management committee and led by the community, not partner NGOs. Customary rules and regulations should be incorporated appropriately and logically within the project mandate and plan and should be adhered to by participating organizations and partner NGOs. Overseas consultants should be given clear responsibilities on their conduct within communities and be held accountable (through contract, for example) to ensure that they do not disobey or ignore these responsibilities once they have left the country.

In Indonesia, defining clear roles and responsibilities of project partners, particularly overseas consultants and foreign-based NGOs, should be done through and with the permission of a defined management body that reflects government support, recognition, and participation. In Indonesia, the management body's structure and regulations were created in the project's second year which created difficulties later on.

This leads to a new principle:

Guiding Principle: ***Clear regulations, responsibilities, organizational structures and working relationships are necessary at project start.***

As part of this principle, projects recommended that international and national NGOs operating throughout the Indo-Pacific should have clear and fair exit strategies and timelines in the project that are defined at the outset of the project and with the approval of the community, including a succinct plan for how sustained government support of the project will be guaranteed once the NGO partners exit the project and the community. Partners and the community should have a firm and negotiated understanding of their responsibilities and authorities within the project up front before the project commences.

Also, projects learned that the management committee should hold a formal review every six months regarding the progress and accountability of local communities and project partners as to their obligations and actions. This is already being done in the Padaido Islands, allowing the community a strong voice and a degree of power over the international NGOs that have specific interests in working in the coral triangle. Roles and responsibilities should be changed and adapted based on the feedback received from such group biannual evaluations. This shared finding leads to the next principle:

Guiding Principle: ***The way in which roles and responsibilities are organized must be regularly reviewed and adapted to changing conditions.***

In the case where project partners (including the community) are found to be inadequate in meeting their roles and responsibilities, a group process within this review should be initiated to address the delinquency and provide for an avenue of rectification. In the case where repeat delinquency on project responsibilities is experienced, the partners and management committee should have the power and respect by all partners involved to take action that allows for removal or other appropriate remedial action of the delinquent partner organizations involved.

(3) Priority Factor: Adequate Local Participation

Definition: Participation is the level of involvement by the community members and leadership as well as various other local stakeholders in the management and use of the marine resources.

All three projects understand that local participation in the community-based conservation project is critical to the success of the project. However, it was believed that if the roles, responsibilities, and activities of community participants were clearly defined at the beginning of the project, there would be full participation from the community members as a result from thereon out.

What the projects learned was that while this is an important starting point, ensuring local participation requires a broader, ongoing set of activities. In particular, projects learned that local participation was not an up-front project process that can be expected to merely follow through in time from there, but that it requires ongoing work throughout the project lifetime during its various phases of design, implementation, and adaptation and maintenance.

First during the design phase, projects found that communities should be fully engaged not only in defining their roles and responsibilities in the project, but equally importantly in *how* the project is designed. For example, in the Padaido Islands it was found that one excellent method of ensuring local participation is through community mapping of resource use patterns, social institutions (such as customary tenure areas), and project area boundaries themselves using GPS and GIS. While this took more time and training resources than

simply having outside partner groups or hired expert consultants do this rapidly on their own, what was found in Indonesia was that this ensured long-term participation from the community and other local stakeholders beyond the mapping exercise.

This design participation experience was also confirmed in Tikina Verata as well. Community participants there themselves not only designed the project's management plan, but also undertook the baseline resource assessment, determined where marine protected areas were to be placed and for which species, and created a monitoring plan for these areas that would be done entirely locally by the community, with project partner monitoring to only triangulate results and support local management efforts – not lead them. In this regard, the Tikina Verata project experience was that community participation should actually *lead* the design and pre-implementation phase of the project, not merely be involved in it.

Next during the implementation phase, it was emphasized that local participation should not only be incorporated, but actually *drive* the full implementation process. It was noted that in the Arnavons where the project commenced before the communities were given full information about the work and had fully voiced their support, there was not full participation until the second year of the project. The creation of a local management committee to oversee the implementation of the project was seen by all as essential.

Finally, it was noted that local participation during the review and adaptation (maintenance) of the project was critical. In the case of Tikina Verata, because the community had designed the monitoring and evaluation process to be community-led, once the project was implemented, immediately the community began to lead the process of periodic review and adaptation of the project, leading to replication elsewhere of the approaches and tools used. This was contrasted to the Arnavons example where monitoring data were collected locally but then sent overseas to hired NGO partner consultants, slowing down or halting the local participation in evaluating and adapting the project.

This learning results in the following principle:

Guiding Principle: ***We must have participation and endorsement of community members in the project area throughout the phases of the project lifetime.***

(C) Natural Resource Factors and Principles

A total of seven “natural resource” factors influencing effective marine conservation were identified by the group:

1. Identifying and Dealing with Threats to Habitat
2. Access to Equipment and Technology
3. Management of Spawning Grounds
4. Incorporating Traditional Ecological Knowledge
5. Improving Ecological Awareness and Understanding
6. Use of Fishing Effort Rotation and Restriction
7. Management of Habitat

Small-group analysis determined priority community factors to include: (a) improving ecological awareness and understanding; (b) identifying and dealing with threats to habitat; and (c) use of fishing effort rotation and restriction. Results for each of these priority factors are discussed on the following pages.

(1) *Priority Factor: Improving Ecological Awareness and Understanding*

Definition: Ecological awareness and understanding is the level of knowledge and consciousness that the local community and user groups have of: (a) the linkages between areas (such as how land use influences inshore marine environment), (b) the feeding relationships (who eats who) between marine resources and the overall food web in the project area, and (c) the life histories and reproductive biology (like turtle nesting and spawning sites) of individual marine species and habitat types (such as people learning that corals are living animals, not rocks) in the area.

At the outset, projects recognized that there was a need for improved local environmental awareness and an increased understanding of ecology in participating communities. It was assumed that some level of ecological education would therefore need to occur within the local community and user groups during the project lifetime.

This assumption was later confirmed, but with more specific recommendations.

First, what was found by the projects is that making basic ecological information available to the community so as to raise awareness must be the first, basic step towards community-based marine conservation. However, this takes time and is not an easy undertaking. This lesson indicates that it is not simply enough to educate the community and other local stakeholders at some point along the project timeframe or during the design phase, but that this should occur before the project even enters into design.

This leads to the principle:

Guiding Principle: ***Before the community can identify their problems and take any action, they must first understand their local ecology.***

It was found that in the Arnavons, the education process at the outset of the project is not a short timeframe, and that it may require more time and patience than project partners are initially comfortable with.

In the Tikina Verata case, it was found that such education can be two-way where the community educates scientists and themselves as to the extent of their traditional ecological knowledge, rather than merely having a “school-like” setting where one person or partner organization is “teaching” the community about ecology and local biological conditions. In this regard, the Verata project found that effectively gathering information with the purpose to better understand local ecology should involve both science and traditional knowledge.

The Padaido Islands experience illustrates that understanding local ecology must be ongoing, not only at the outset of the project before the community takes action. In their case, as new information needs or ecological questions arose or were reiterated, this required new investigations and an ongoing re-education process.

Next, all three projects emphasized that awareness of ecological change must be on-going, and not just occur at the outset of the project as a one-time training. As confirmed by the Verata and Padaido cases, community participation in the project’s biological monitoring allowed for an ongoing investigation and self-education process to be perpetuated locally. It was recommended that such community-based monitoring be shadowed by separate, external, scientific monitoring efforts in order to have an independent measurement of community findings and to ground-truth the messages that were coming from this self-education. In the experience of all three projects, trained community volunteers were clearly capable of doing scientifically-based community monitoring that led to increased ecological awareness at the local level. This leads to the following:

Guiding Principle: ***Biological monitoring is necessary to ongoing ecological awareness and must be done at a community-based level.***

It was also noted that monitoring methods must be simple and based around the daily activities and local knowledge of community members in order to optimally raise awareness.

The Arnavon Islands project further emphasized that if outside scientists joined in the community monitoring, information collected should remain in the community and not be sent away with the outsiders once they have left the community. Although it was not recommended, if outside scientists must oversee local monitoring or conduct their own monitoring, the project also stated that the data collected and the results should not leave the community or at a minimum should be returned in a timely or immediate manner to the wider community so that they can be interpreted locally and used to revise management plans.

As a result of improved ecological awareness and understanding in the Tikina Verata project representatives saw positive changes in natural resource use and an opening of the minds of the local people as to how they view their natural heritage. Similarly in the Arnavons and Padaidos, this led to greater community commitment to the project and willingness to share and teach what was learned with others locally. As a result, there are now conservation awareness efforts underway in both sites regularly.

(2) Priority Factor: Identifying and Dealing with Threats to Habitat

Definition: Threats are human activities that could (or actively) degrade or destroy the habitat and marine and upland/nearby terrestrial resources at the project site.

Projects believed at the beginning of their project work that these threats had to be identified and addressed in order for the project to be successful.

The projects confirmed that this assumption was not only correct, but that in order to happen (at least in Melanesia) it requires a level of community control that should be mandated by the government.

Before the projects began, many of the community residents were unaware of all of the threats that were operating in their area, or had not thought of destructive human activities as threatening to their natural heritage. For example, in Verata before the project began, the people noted declines in their marine resources but did not recognize why these declines were happening or what potential solutions there were to address the threats.

Government and NGO partners had more recognition of the threats at project sites, but it required community input and dialogue to fully understand the scope of them. In some cases, this dialogue allowed for truths about the extent of threats to emerge. For example, in the Padaido Islands, community residents and local fishers denied that the coral reef was being damaged or that fish stocks were being reduced in areas where dynamite fishing occurred until project partner NGOs held discussions of the threats present with the community.

In other cases, this community dialogue on threats fed into the project's design. In Verata, for example, a first community workshop was on ecology and environmental awareness. As part of this, participants from the various villages in Verata went to the sea together and assessed their marine resources. From this, they identified over 13 threats and prioritized the top six. By informing the rest of their community about these findings, this led to broader

discussions regarding the types of management solutions that could be taken including marine protected areas and eventually resulted in project design. A similar approach was used in the Padaidos and Arnavons, where marine ecology workshops led by NGOs gave way to a discussion on threats and resource depletions, eventually leading to discussions on planning for local action and partner outreach.

All of these experiences lead to two related principles:

Guiding Principle: ***The community should identify the threats operating in the project area with partner organization support before the project begins.***

Guiding Principle: ***To adequately address threats, full awareness and recognition of them among the local people is a key requirement.***

Next, representatives from the three projects found that it is not enough for the community to have participation in local resource management and decision making, but that if external threats (i.e., detrimental activities done by outsiders to the local community) were to be addressed adequately, it would require a level of community control and authority with recognition by the government.

For example, in Fiji, local marine resource rights and customary fishing area boundaries are recognized by the national government. This allowed the Verata project to control external threats through such actions as banning further licensing of outside commercial fishers in their fishing grounds, which was a major contribution to overfishing threats of certain species before the project began. Likewise, the participating communities in the Arnavons project negotiated with the national government on how to gain enforcement authority of the area (by trained local marine rangers) to stop international poachers and ensured that both the local (including traditional leaders) and national governments must agree before management decisions for the area are approved upon. This leads to a third principle for this factor:

Guiding Principle: ***The community must have control over their resources and government recognition of management rights in order to be able to deal with external threats.***

In Indonesia, because of the centralized nature of resource management decision-making, the role and rights of the community in management are still not fully resolved in the Padaido Islands. The threats of outside commercial fishers and poachers cannot be addressed or enforced locally. As a result of the decentralizing nature of marine resource management underway in Indonesia, coupled with the strengthened local government recognition of the local community's mapping of its traditional rights to the project area, it is hoped that one day soon the Padaido Islands might serve as a test site for decentralized marine resource management in Indonesia at a local level with government support.

(3) Priority Factor: Use of Fishing Effort Rotation and Restriction

Definition: Fishing Effort is both the power (number of boats and fishers, types of gear) and time (number of days/hours) invested in marine resource harvesting in the project area. Rotation is restricting this effort to certain locations that are changed and alternated through time. Restriction is limiting (licenses, numbers of boats, type of gear) or prohibiting (no-take or species-specific areas) fishing effort.

The projects assumed that at the outset of their work that fishing effort rotation and restriction (particularly marine protected areas containing no-take zones) would need to be used within the project area.

This assumption was validated in terms of use, and specific lessons were identified as to how to use such tools.

First, projects recognized that while restricting fishing effort is important, such restricted areas should not preclude local communities from meeting dietary needs or food security. For example, in the Arnavon Islands project, hand line fishing by local communities for personal consumption is permissible in the core conservation area where no commercial fishing activity is allowed. This resulted in the following guidance:

Guiding Principle: ***When selecting a tabu site as a marine protected area, the need for the local fishers to continue subsistence harvesting must be recognized and accommodated, if necessary.***

In the case of the Verata project, allowing subsistence fishing in restricted areas was not necessary. In fact, the community itself decided to forbid even subsistence harvesting of certain species within its *tabu*, or no-take, areas as these areas were not so large that they did eclipse most of the fishing grounds for such species. The community actually found through gathering quantitative monitoring evidence in terms of biological survey and catch-effort interviews that spillover from these no-take areas actually increased subsistence catches nearby such areas and boosted, not reduced, the local subsistence take.

A second major shared lesson was in regard to protected area design.

Particularly in the Arnavon Islands project, but across all three projects it was found that in order for areas of fishing effort prohibition (marine protected areas) to be observed and therefore successful, they should be designed largely through community processes and with full local participation, and not determined by outside partner organizations with token community input into the process. In the Arnavons case, it was voiced how the lead partner NGO on the project brought in international protected area experts to design the conservation area, with some community input and support. But because this was the approach taken, later after the area was declared the community members somewhat resented the process undertaken and grew distrustful of the partner organization. This led to protest via overt poaching by local community members within the conservation area.

In the Padaido Islands, because the community mapped and designed the protected areas with scientific partner support, they themselves delineated the project areas where cyanide and dynamite use was banned as well as certain fishing gear and small mesh nets in addition to no-take zones, going beyond what project partners had assumed was feasible. The community itself also delineated specific areas where less harmful gear could be used. The same approach was used in Verata, where the community both designated and later replicated where no-take tabu sites over certain species or all species would be.

This learning resulted in the generation of a second principle:

Guiding Principle: ***Community-based marine protected areas should be designed by the community with support from scientific experts and partner groups, not visa versa.***

These project examples clearly illustrate how, by allowing for the community direction of marine protected area designation with appropriate scientific partner input and support, this

can enhance the project's ability to reduce fishing effort and improve overall conservation impacts attained.

(D) Organizational Factors and Principles

A total of ten "organizational" and institutional/governance factors influencing effective marine conservation were identified by the group:

1. Internal/External Regulations and Enforcement
2. Community Skills Building and Training Opportunities
3. Adequate Planning, Monitoring, and Evaluation
4. Dissemination/Communication Process
5. Availability of Equipment and Infrastructure
6. Control of Outsiders (Users and Partners) in the Project Area
7. Constructive Working Partnerships with Others
8. Dependency on Funding
9. Project Learning (Seeking Out Lessons)
10. Long-Term Vision

Small-group analysis determined priority community factors to include: (a) adequate planning, monitoring, and evaluation; (b) constructive working partnerships with others; and (c) internal and external regulations and enforcement. Results for each of these priority factors are discussed below.

(1) Priority Factor: Adequate Planning, Monitoring, and Evaluation

Definition: Planning, monitoring, and evaluation are the steps needed to do good marine natural resource management for sustainability.

At the outset of the projects, the beliefs of the projects were that: (a) marine resources will not continually or dramatically decline, even if they were observed from time-to-time to do so and even if they continue to be harvested without controls, and (b) planning, monitoring, and evaluation are not relevant or necessary for participating communities to undertake in a project context.

Contrary to these initial beliefs, what was found is that a number of marine resources were actually declining due to uncontrolled harvesting and that such declines would continue without action to otherwise control harvest rates. For example, in the Arnavon Islands local harvest of beche-de-mer and turtles and turtle eggs for market sale was uncontrolled and assumed to be able to be continued. The fact that such unrestricted harvesting is not sustainable was learned by communities through their participation in monitoring of resources, and therefore an overall planning, monitoring, and evaluation cycle was engaged in. The projects voiced that this should be done regularly by communities, leading to the following principle:

Guiding Principle: ***Planning, monitoring, and evaluation should be done regularly at a local level.***

Also, projects found that it is difficult to do planning, monitoring, and evaluation without adequate skills and know-how. Therefore, such management skills are critical for the project to acquire at a local level if it is to be assumed sustainable and successful. This leads to a related, second principle:

Guiding Principle: ***Local training and know-how in planning, monitoring, and evaluation are important to project success.***

Assuming that appropriate training can be provided to participating communities and project partners, the projects learned that in reality the community members themselves can do good quality monitoring, providing that intermittent, appropriate, and on-demand technical support is provided through partnerships. This allows for the sharing of project management responsibilities and the empowerment of local decision-making and adaptive management.

Because of this important finding, a third principle is derived:

Guiding Principle: ***Planning, monitoring, and evaluation should be done by the community.***

Related to this, the projects also found that when local people do the work themselves (instead of by outsiders or only partner staff), they are more likely to use the results with their communities. Even in cases where outsiders conducted monitoring work, when the results were shared in a timely and appropriate manner with the resident communities, this led to improved support and management of the project. As a result, another principle is generated:

Guiding Principle: ***Information from monitoring should be shared with all the community and used by them to take action.***

(2) Priority Factor: Constructive Working Partnerships with Others

Definition: One definition of “others” is the outside communities, fishers, and commercial operators who are using the marine resources contained within the community’s waters.

At the outset, the projects believed that they must identify and work with all of these outside groups in order to effectively manage and conserve their marine resources.

What the projects found was that, yes, if they are working in small islands and the “others” are neighboring communities and users, then the projects should and will likely be able to approach and try and work with these outsiders to undertake project work and develop and respect protected areas.

For example, in the Padaido and Arnavon Islands projects, outside communities to the project area who used the resources contained therein were successfully approached, consulted, and eventually merged into the project as supporters.

In the case of the Arnavons, it was learned that this may be harder to do when the neighbors are from a different culture than the one of the project community. In this case, what was found as the key to success is respect and patience. Experiences in Indonesia confirm this finding. This results in another principle:

In Verata this meant making presentations at the provincial meetings about their regulations and making traditional requests for nearby outsider villages to respect their ban on coral harvesting.

Guiding Principle: ***It is important to maintain respect between neighbors, especially with different cultures. This takes extra work.***

In other cases, the definition of “others” could be foreign fishing companies. In such cases, the projects found that they cannot work with these outsiders without national government support. In the Arnavon Islands, for example, the partnership with the national government allowed local management representatives and wardens to patrol and address the international commercial fishing operators that were unaware of, and in some cases overtly not respecting, the conservation area boundaries and regulations. Successful national prosecution of repeat violating foreign companies with government support resulted. This results in another principle.

Guiding Principle: ***Work in partnership with the national government in trying to stop foreign companies from illegally fishing restricted areas.***

Finally, another definition of “outsiders” is the international conservation NGOs and donors that communities undertaking conservation projects often work with.

At the outset of the three projects, community members believed that they needed international NGOs to provide not only financial support, but also to help to lead and implement conservation activities.

What community members from the three projects found was that if communities receive the proper training, then they can run and manage their marine conservation project largely on their own and effectively oversee local resource management. Moreover, in the Padaido and Arnavon projects, too much reliance on outside NGO partners not only did not lead to long-term resource management, but also created unnecessary dependencies that built community distrust and resentment for NGO participation. In the case of the Arnavons project, representatives reported that sometimes waiting for outside NGOs to do something that could have been done locally ends up taking too much project time and upsets community participants.

These lessons lead to two related principles.

Guiding Principle: ***Get training, but do the work yourselves.***

Guiding Principle: ***The community can do it!***

(2) Priority Factor: Internal/External Regulations and Enforcement

Definition: Regulations are the rules to manage marine resources for sustainability (community & national). Enforcement is the policing of rules and punishment.

At the outset of the projects, the beliefs were that: (a) regulations would ensure that communities will sustainably manage their resources, (b) that the community can do policing on their own, and (c) that the general public will follow community rules.

What was found was that not all people abide by the regulations, and that some people (mostly outsiders, but also occasionally insiders) will not follow regulations. It was also found that with management support, many customary rules could be useful tools for encouraging internal compliance with regulations, when still adequately respected. Projects found that some of these customary practices could compliment contemporary management approaches when integrated appropriately and openly with local residents. This leads to another point of guidance:

Guiding Principle: ***Revitalize customary practices within the community.***

It was also found that it can be difficult to punish outsiders who violate the rules, particularly if they have little respect for community regulations. With the partnership of the government and its recognition of local regulations, outsiders were found to be more easily persuaded to obey local regulations, but only when they knew that violations would be prosecuted through assistance from the government. Therefore:

Guiding Principle: ***Government must recognize local regulations and authority and enable the community to take legal actions against the intruders.***

It was also learned that rules and enforcement are not effective unless there is public awareness (via a mass media general awareness campaign or through schooling). This leads to a final principle:

Guiding Principle: ***Promote public awareness so people appreciate the reasons for the regulations.***

(E) Group Conclusions

Following the results presentation of the priority factors and guiding principles by project representatives to regional peers and the media who attended the last day of the workshop, a plenary discussion followed involving all present. Reaction and contemplation regarding the results presented, as well as the comparison and corroboration of these findings based on others' similar experiences and learning, occurred. From these group discussion, five general conclusions/needs regarding community-based marine conservation were drawn.

(1) Need for Respect of the Community

The first general conclusion voiced by the group was that the nature and substance of the guiding principles derived suggested that respect for the community involved in the conservation project was at the heart of successful grassroots conservation efforts.

In particular, two aspects of community respect were identified as being consistent themes to the success factors and guiding principles presented: (a) respect for the community's cultural heritage and beliefs (as evidenced through the project process), and (b) respect for the "driver" role that communities should play in such conservation projects, with "passenger" partner organizations doing all they can to empower the community in its informed and equitable direction of the project process.

(2) Need for True and Sustained Leadership

The second theme that emerged from the group's reflection and discussion of the results presented was the emphasis on the importance and critical role that effective leaders play in community-based conservation projects, at the community, government, and non-government level. Members of the audience highlighted, based on the results presented, how dependent the success of community-based marine conservation projects are on the presence of effective and consistent leadership at these levels. It was also pointed out by project representatives how in each of the three projects there were one or two key influencers whose leadership had a significant role in the success experienced by the project, and that how without these one or two key people it is clear to all that the project will not succeed at its conservation objectives. A remark was made from a Fijian Government representative how this need suggests the prioritization for the creation and implementation

of a regional conservation leadership program to bring such individuals together, build and strengthen their capacities, share lessons and experiences, and recognize, reward, and encourage their sustained leadership roles into the future.

(3) Need for Improved Teamwork and Networking

A third overall conclusion was voiced for the need to build effective teams within the community projects, between the communities and their project partners, and among conservation sites operating similar projects.

Building a team of leaders and representatives within the community itself was seen as an obvious and yet often overlooked step in community-based conservation projects. It was pointed out that often communities are assumed to have such teams of individuals by partner organizations when in fact they may not exist.

Secondly, the less obvious point was made that often true teamwork between communities and their partners does not exist, or perhaps only at a superficial level. The criticism was raised by a few attendees how some NGO partner organizations merely assign their staff to community-based projects without first thinking through how the individuals interact with others, whether or not they have demonstrated a willingness to serve as a teammate and not a sole or rogue leader, and how often such staff may have a strong scientific background but may not have strong training or skills in interpersonal dynamics and team-building.

Finally, discussion was generated on how to continue the type of cross-project analysis and learning that had occurred between the three marine conservation projects during the week. It was voiced that while site-based success was important, learning and success replication beyond a specific site or handful of sites had to occur to meet the existing conservation needs. Networking and teambuilding between existing community-based marine conservation sites in order to increase impact and improve replication of results was seen as an important first step in this process.

Based on this, BCN and USP staff presented a concept of how a broader, long-term team of community-based marine conservation projects operating in the Indo-Pacific (including participation from the Padaido Islands, Arnavon Islands, and Tikina Verata projects) could be potentially initiated in the coming months more formally. The MacArthur Foundation then expanded on this concept in presenting some thinking of how a formal “learning network” would be able to continue and expand such cross-project capacity-building, analytical exchanges, and learning using a more rigorous analytical approach that could hone the precision of learning on success factors and guiding principles.

There was strong support voiced for this idea among both the three project representatives and the attending peers and public. A working group led by John Parks (BCN), Nick Salafsky (MacArthur Foundation and formerly BCN), and William Aalbersberg (USP) was identified to further explore this concept with interested parties in the region. The Padaido Islands project team formally voiced their interest in participating in such a “learning network” and offered to host the first cross-site visit between Tikina Verata and Padaido Islands project representatives to further this aim, particularly in regard to biological monitoring by the community.

(4) Need for Positive Stakeholder Relationships and Communication

Closely related to the third overall conclusion and generated from the discussion of it was the need for all stakeholders involved at the site and in the project (including the community, outside marine resources user groups, the government, NGOs, academics, and project

donors) to maintain constructively critical and positively influential relationships. This needed to be based on clear, transparent, and consistent communications and opportunities for communications between stakeholders involved.

(5) Need for Integration of Enterprise and Conservation Efforts

Finally, the group recognized that despite being designed on paper and assumed to be fully integrated, community-based micro enterprise efforts and conservation project activities were not always fully integrated, resulting in either the failure of the enterprise or limiting the success experienced. While the group did not have recommendations on how exactly to go about this, it recognized that further investigation and study into how to do it (similar to the BCN approach) should be attempted in the coming years after BCN's closure. It was strongly encouraged that as a starting point, those business specialists and community entrepreneurs involved with the operations of the community enterprise should take and be given more responsibility to look after the *in situ* marine resources as well as increased engagement in other conservation design and implementation aspects of the project.

IV. WORKSHOP EVALUATION

At the conclusion of the workshop participants evaluated the extent to which the original three objectives for the workshop were achieved. A summary account of the degree to which each objective was achieved follows.

Objective 1: *Develop a set of guiding principles for doing both community-based marine resource management and implementing enterprise-based approaches to marine conservation.*

All participants indicated that they believed this objective was achieved. However, it was noted that ideally (time permitting), that all factors (not just the priority ones) and resulting principles could have been fully fleshed out for practitioner reflection and use.

It should also be noted that BCN staff performed an independent analysis of the factors influencing community-based conservation success and resulting guiding principles for practitioners based on a quantitative and qualitative analysis of all 48 enterprises at 20 projects in 39 sites that it supported across seven Asia and Pacific countries. These final analytical results³ and guiding principles can be downloaded online at: <http://www.bcnet.org/bsp/bcn/results/analytical.pdf> .

Objective 2: *Present and discuss these principles with relevant, regional audiences.*

This objective was achieved. The success factors and guiding principles resulting from the analysis of shared experiences and lessons were perceived by both workshop participants and the results presentation attendees as useful. In addition to the dissemination of results and stories on the final day with attendees the regional public was also reached via mass media including television programs and newspaper and newsletter articles.

Workshop results have been collated within this document published by USP in an effort to disseminate these findings to other community-based marine conservation practitioners operating in the Pacific Islands, the wider Indo-Pacific, and globally. It is hoped that if even one of the guiding principles can help even a few of these practitioners more effectively undertake their community-based conservation work, the workshop efforts will have been justified. To this end, USP strongly encourages the candid feedback by practitioners (where ever they may be) on the usefulness of the factors and principles presented herein.

Objective 3: *Provide a collective voice in suggesting a direction for future regional marine conservation efforts within a local resource use context.*

The resulting guiding principles have been encouraged by the participating projects to be used by other community-based marine conservation projects, particularly those in the Indo-Pacific region for which much of the socioeconomic setting is similar to that of the three projects from this set of lessons. The three projects recommended that they continue to maintain a professional exchange of information and experiences through which common principles can continue to emerge for the benefit of those participating in the exchange as well as other projects external to this process. The Tikina Verata and Padaido Islands project teams identified the need for a follow-up cross-site visit to Indonesia to further expand on the lessons that emerged.

³ Salafsky, Nick, Bernd Cordes, John Parks, and Cheryl Hochman (1999) *Evaluating Linkages Between Business, the Environment, and Local Communities: Final Analytical Results from the Biodiversity Conservation Network*. Biodiversity Support Program, Washington, D.C., USA.

One of the most exciting and potentially rewarding outputs from the workshop is in regard to the recommendation that was voiced to expand and formalize the group learning process that was undertaken for the workshop. During the ensuing discussion following the presentation of the priority factors and guiding principles, several comments were made by attending guests as to the unique nature of this type of cross-project analysis. They strongly encouraged the need to continue and expand this type of innovative cross-project learning. At the same time, feedback was also given that the 20 guiding principles were based on the summary experience from only three project sites, and that such principles derived from a larger collection of projects would lend much greater credibility to the results and encourage a broader adoption of such lessons.

Based on this, the suggestion was offered by BCN, USP, and MacArthur Foundation staff to consider creating a more permanent learning opportunity between community-based marine conservation practitioners through which broader collective learning could occur rather than merely a one-off cross-project workshop. This discussion culminated in the concrete recommendation by BCN and USP staff to expand the group learning process that had been achieved over the course of the workshop into a longer-term, formal “learning network” effort between as many community-based marine conservation projects in the region as would be interested, through which this group could collectively ‘test’ some of their shared assumptions in regard to which factors lead to effective marine conservation. From this, a more systematic and robust process to derive guiding principles for marine conservation practice would be developed. A common marine conservation theme needing further investigation and improvement that was strongly voiced by the three projects and other attendees was in regard to the effective use of direct protection in coral reef ecosystems. As a result, participants agreed that a formal collective learning focus to determine the conditions under which locally-managed marine protected areas can be effective tools for sustainable fisheries and biodiversity conservation was needed.

BCN, USP, and MacArthur Foundation representatives offered their leadership in working with other interested parties on exploring this formal learning network idea further, and suggested that in roughly a year’s time the three projects could reconvene with a wider set of interested and related community-based marine protected area projects from across Southeast Asia and the Western Pacific to discuss how to create such a learning network.

V. CONCLUSION

The workshop was seen as a success by those who participated in that the intended aim to generate a set of success factors and guiding principles and all objectives were achieved. More importantly, the workshop is seen today as an important milestone in that it served as a catalyst in creating a larger, more formal, and longer-term learning network between community-based marine conservation projects working in the Indo-Pacific. This more formal learning network was being formed at the time of this report writing, and the interest and volunteer participation of dozens of community-based marine protected and conservation area projects throughout the Indo-Pacific in this effort has been developed through the working group identified from the workshop. The success factors and guiding principles arising from the shared experiences and lessons of these three projects during the 1990s are hoped to be further tested and refined through time through this potential formal learning network. Through such expanded regional coordinated learning, it is believed that the practice of marine conservation can be improved, leading to enhanced conservation success in the Indo-Pacific and around the world.

⁴These meetings were held in Fiji and the Philippines in August, 2002 which has led to the foundation of such a "Learning Network". See www.LMMANetwork.org or contact Asovatabua@hotmail.com.

APPENDIX ONE: Workshop Agenda

University of the South Pacific & The Biodiversity Conservation Network

***Sharing Local Experiences and Lessons on
Community-Based Marine Conservation in the Indo-Pacific***

Final Workshop Agenda

Location

Days 1 –3: To be held in Ucunivanua Village, Tikina Verata
Days 4 & 5: To be held on the USP Suva Campus
Day 5: Presentation of results to public and invited guests

Day 1 (Thursday, 24 June 1999)

Morning *Arrive at Workshop Venue at Tikina Verata; Traditional offering of sevusevu*
13:30 *Welcome and Introductions – Paired interviews icebreaker*
14:00 *Workshop Overview – Workshop goals and objectives.*
15:00 *Project Overviews – Introductory presentations of project settings and histories (30 - 45 minute slide presentations for each project).*
Evening *Welcoming Reception and Dinner*

Day 2 (Friday, 25 June 1999)

09:00 *Review of Previous Day's Activities; Daily Objectives*
09:30 *Analysis Introduction – BCN analysis background; define terms to be used*
10:00 *Factor Identification and Categorization – What influences community-based marine conservation success? (plenary activity)*
11:30 *Lunch*
13:00 *Working Sessions – Breakout Groups divided by factor category; choose priority factors; for each priority factor, determine the following:*

- What is it? (define the factor)
- What did we believe? (state the groups' collective beliefs regarding the factor at the outset of the three projects)
- What happened? (discuss what actually occurred in regard to the factor at the three sites and if these experiences agreed with beliefs held at the outset)
- What did we learn? (develop guiding principles to be used in the future)

15:30 *Media Training – Interviewing techniques and practice interviews*

Day 3 (Saturday, 26 June 1999)

08:30 *Review of Previous Day's Activities; Daily Objectives*
09:00 *Kaikoso clam survey in protected seagrass beds – group survey activity, led by the Tikina Verata Monitoring Team*
11:00 *Working Sessions (Cont'd) – Breakout groups complete factor analyses*
12:00 *Lunch*
13:00 *Presentations to Plenary and Roundtable Discussion – Breakout groups present results to plenary and discuss (30 min each, plus discussion).*

15:30 *Review of Monday's Activities and Presentations Preparation*
Afternoon *Travel option back to Suva*

Sunday, 27 June 1999 (optional day)

09:00 *Lotu participation, traditional farewell and lunch*
14:30 *Travel back to Suva*

Day 4 (Monday, 29 June 1999) USP Science Lecture Theater, Suva

09:00 *Review of Guiding Principles and Recommended Action Items Generated*
10:00 *Working Group Presentation Preparation – by factor category; presentations prepared on computer in MS PowerPoint format*
12:00 *Lunch*
13:00 *Working Group Presentation Preparation (Cont'd)*
15:00 *Practice Presentations: Project Introductions (3)*
17:00 *Practice Presentations: Factor Categories (4)*

Day 5 (Tuesday, 30 June 1999) USP Science Lecture Theater, Suva

08:30 *Opening Remarks – USP Vice Chancellor*
09:00 *Welcome and Introduction – BCN Staff*
09:20 *Project Overviews – Introductory presentations of project settings and histories*
10:30 *Presentation of Lessons Learned – Factor categories and guiding principles*
12:00 *Discussion and Next Steps – Discussion of ideas presented and future work.*
13:00 *Luncheon and Media Interviews*
14:30 *Next Steps Planning – Meeting of all attendees to discuss and finalize recommended follow-up actions.*
15:30 *Closing Kava Ceremony and Workshop End – at the USP traditional bure*
Evening *Final Dinner – Suva*

APPENDIX TWO: Press Release

30 June 1999

For Immediate Release

SUVA, Fiji Islands – What steps can community-members take to manage their marine natural resources? This was the main question discussed at a meeting held at USP on Tuesday.

The meeting brought together community representatives from projects in Indonesia, the Solomon Islands, and Tikina Verata here in Fiji. The groups met for three days in Tikina Verata to share their experiences and analyze their findings. The groups then came to present their results to government officials, conservation workers, researchers, and representatives of other villages.

In Tuesday's presentation, members of the different community groups first presented the basic results of their projects.

The Indonesian group told about their experiences setting up dive tourism businesses on small islands. Although they are facing many threats including bomb fishing and the construction of a large hotel, the community businesses are starting to promote conservation awareness.

The Solomon Islands group talked about their project setting up the first community-managed marine conservation area in their country and setting up a community fishery.

Finally, the Fiji project told the audience about their work in setting up a project that involves creating a deal between the local community and international drug companies interested in obtaining samples of different animals and plants to test them for their medicinal properties. The group focused on some of the exciting work that the community has been doing monitoring the results of their project and the marine protected area that they have established.

After the initial presentations, the groups then presented the results of their analyses over the past few days. They presented important principles that they developed by sharing and comparing their experiences. Key principles presented by the project representatives included: 1) local communities can manage their resources if they are given proper training, 2) biological monitoring can and should be done by the communities themselves, and 3) community-based fishery enterprises should be supported through a variety of funding sources, not being reliant upon either donor contributions or loans alone.

When asked what he appreciated most about his opportunity in sharing experiences and lessons with others in the Indo-Pacific doing locally-based marine conservation, Pio Radikedike from Tikina Verata said "I really liked the workshop – it really helped me learn things about other projects. It was also really great to have our chiefs participate and learn from the results." Chief Leslie Miki from Kia Village in the Solomon Islands added, "I think it is very important to share our differences between the projects, as well as the good side of them, so that we can better understand each other in our work."

"The workshop was interesting because it included people from the villages, people with limited education, and allowed their voices to be heard and to increase their knowledge and skills," said Pak Tera, who works in the Padaido Islands. Ibu Oemi, Pak Tera's colleague, added, "It was very interesting because it gave us an opportunity to share our experiences, and from those experiences, we could develop ideas and principles for conservation."

Additional information on the workshop is available on the web at www.BCNet.org.

The three projects had been funded by the Biodiversity Conservation Network (BCN), a USAID-funded initiative managed through a partnership between the World Wildlife Fund, The Nature Conservancy, and World Resources Institute. BCN is studying what it has learned from the twenty project sites it has supported across Asia and the Pacific. As part of this effort, the BCN secured funds from the MacArthur Foundation to bring together these three marine conservation project communities in Fiji to compare their assumptions with those obtained through the over-arching BCN analysis.

The workshop was facilitated by the Institute of Applied Sciences at the University of the South Pacific. A video is available of the seminar.