

SOCIAL CAPITAL AND VANUA:
CHALLENGES TO GOVERNANCE DEVELOPMENT IN A COMMUNITY-BASED
NATURAL RESOURCE MANAGEMENT PROJECT IN CUVU TIKINA, FIJI
ISLANDS

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Professional Paper

presented in partial fulfillment of the requirements
for the degree of

Master of Science
in Resource Conservation, International Conservation and Development

The University of Montana
Missoula, MT

Spring 2008

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Social Capital and Vanua: Challenges to Governance Development in a Community-Based Natural Resource Management Project in Cuvu Tikina, Fiji Islands

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Indigenous Fijians believe that survival of their culture is inextricably linked to their position as land and resource owners. This is summed up in the dual meaning of the term '*vanua*', which literally means land but also symbolizes the cultural and socio-political traditions of the people. These traditions form the basis of Fiji's natural resource management system and the production of social capital in Fijian villages. Due to legally recognized resource tenure and the communal nature of village living, Fiji has been a popular site for community-based natural resource management projects (CBNRM). The aim of these projects is to empower local communities and leaders with knowledge and resources to improve the management and governance of their natural resources. Despite a significant amount of time and effort put into governance development, many CBNRM initiatives fail to achieve their goals.

The purpose of this study is to identify challenges faced by Partners in Community Development-Fiji in implementing governance development activities during the Coral Gardens Initiative in Cuvu Tikina from 1999-2003 and to also explain why these challenges emerged during the project. Using the framework of analytic ethnography, data gained through PCDF's project documents, semi-structured interviews, and participant observation are used to identify and explain the challenges. Ten challenges are identified that show how the interactions between key players affected, and continue to alter, the results of the project. These challenges were created by a combination of influences including PCDF's approach, pre-existing social tensions amongst the stakeholders, and cultural and location-specific constraints. The impact of pre-existing social capital and how the project affected this social capital is also examined. Seven specific recommendations are offered to CBNRM facilitators and village participants, including the importance of understanding community dynamics, building strong internal and external networks, utilizing the pre-existing governance institutions, and using an asset-based approach.

ACKNOWLEDGEMENTS

This study would not have been possible without the assistance of many people on both sides of the Pacific Ocean. First, I thank Ratu Sakiusa Makutu, Na Turaga na Kalevu, Ratu Tevita M. Volavola and Ratu Timoci Volavola, and all of the people of Cuvu Village and the other villages in Cuvu Tikina, who not only participated in this research but also gave their time in implementing numerous environmental-related activities during my two years as a Peace Corps Volunteer in Fiji from 2005-2007. A special thanks to Dr. Austin Bowden-Kirby, Fulori Nainoca, and Etika Sing from PCDF and Dr. Bill Aalbersberg, Batiri Hughes, Alifereti Bogiva, and Sakiusa Fong from the Institute of Applied Science at the University of the South Pacific for teaching me so much about community-based projects in Fiji and giving me the opportunity to work with their organizations. Finally, I thank Erami Seavula and other civil servants at the Nadroga/Navosa Provincial Office for their input.

I'd also like to recognize my advisor, Dr. Neil Moisey, and other committee members, Dr. Jill M. Belsky and Dr. George Stanley, for their flexibility and willingness to work with me despite very busy schedules off-campus. And last but of course not least, I thank my family, Peace Corps volunteers in Fiji, and fellow graduate students who endured many discussions concerning my research without complaint and provided valuable feedback and insight into the subjects presented in this paper. Vinaka vakalevu!

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CHAPTER 1: INTRODUCTION TO COMMUNITY-BASED NATURAL RESOURCE MANAGEMENT IN FIJI

In a coastal village in Fiji in the 18th or 19th century, the yams, taro, and sweet potatoes have already been harvested from the plots surrounding the village and piled high in the air, suggesting that a feast is about to occur. Perhaps the tribe (yavusa) has just won a battle against rival neighbors, or maybe the high chief (turaga ni vanua or Tui) has a daughter or son getting married. The Tui calls his spokesman (matanivanua), to send a message to the head of the fisherman clan (gonedau). The crops are ready, now this feast needs its main course from the sea, including turtle, parrotfish, and grouper among others. He declares that the tabu has been lifted from the fishing grounds (iqoliquoli) for this feast. Not a soul dared to fish in the iqoliquoli lest he or she face physical and spiritual harm; if they eat a fish from the tabu area, sickness and probably death will soon follow. The chief of the gonedaui rounds up his fishermen and together they prepared the tools of their trade, spears and nets made of sinnet and coconut leaves.

They set out into the iqoliquoli to practice their trade, using knowledge and expertise passed on through generations and spiritually imbued with a preternatural understanding of this environment. Shaking the net as they go, the fish are confused by the shimmering reflections and panic, 'running' away from the immediate threat and into the corral the gonedaui are creating, spearing the fish as they go. Another group has been sent out to the deeper area to hunt for sea turtles (vonu), the sacred chiefly food for this feast. Fishing now complete, the head of the gonedaui returns to the village and formally presents the Tui with the entire catch. The Tui praises the gonedaui and the women burst out in praise and song. Once the feast is prepared, all of the food is offered to the Tui, who dutifully doles it out to his people, for the chief is nothing without his people, and his people nothing without their chief. The festivities will last for days.

This rendition of a village scene was derived from stories told by present-day villagers in Cuvu Village as well as descriptions from modern and historical sources (Veitayaki 2002, Williams 1985). While Fiji has changed greatly since the days when its reputation gave it the name of 'Cannibal Isles', the past continues to be reflected and represented in the present. Despite the effects of Christianization, colonization, and globalization, the daily lives of indigenous Fijians (hereafter 'Fijians') are still shaped by their communal traditions and the resources upon which these traditions are based. If a visitor travels to Fiji and happens upon a ceremony in a village, the scene may not be too different from the one described above.

Fijians believe that their very existence as a people is based on their access to land and resources (Lal 2003, Srebrnik 2002). In an oft-quoted description, Ravuvu (1983, 30) explains the interconnection of the people and land through the complex meaning of the Fijian term, *vanua*:

Vanua literally means land, but also refers to the social and cultural aspects of the environment. On the social plane it includes the people and how they are socially structured and related to one another. On the cultural plane it embodies the values, beliefs and common ways of doing things.

In short, *vanua* encompasses what it means to be Fijian; the term *vakavanua* means that something exists or is done in the Fijian way. Because of this perception, access to and ownership of natural resources has been jealously guarded throughout the colonial (1874-1970) and independent era; even the distant threat of estrangement of Fijians from their land directly led to two coups in 1987 and one in 2000, and indirectly to one in 2006. It is safe to say that land and marine resources are two of the most potent and controversial issues in Fiji to this day (Lucas et al. 2003). It is also safe to say that due to the importance placed on the link between Fijian culture and the land, village-based Fijians will be the primary managers of natural resources into the future.

Traditional management and governance of natural resources has a strong tradition across the islands of Oceania, including Fiji, but has recently come under pressure due to a number of external forces. It is important here to differentiate between governance and management. In this paper I follow the definitions given by Kearney et al. (2007, 82):

Research on governance points to the need to distinguish between *governance* itself—the mechanisms and processes by which power and decision making are allocated among different actors—and *management*, involving decisions about use patterns as well as about transforming the resource by making improvements.

With these definitions in mind, we can see that colonialism has had an influence in both governance and management structures in Oceania. Heterogeneous traditions that once separated the various tribes were re-shaped in ways that conformed to, in the case of Fiji, British colonial policies; whereas localized rules in all their variety once dominated, both governance and management structures became more homogenous and centralized. Although there is concern that traditional methods have been declining, many countries formally recognize indigenous ownership of or customary rights to their resources (Johannes 1978, Johannes 2002, Caillaud et al. 2004). Different governance mechanisms at different scales are used to manage resources, usually providing communal ownership or access to resources within a larger co-management structure. Fiji provides a good example of this type of system. Since the beginning of the colonial era, the government has managed commercial aspects of land and marine resources while Fijian social units are registered as owners of the resources. Customary marine tenure is legally recognized in Fiji through codification of the *iqoliqoli* system (Cooke et al. 2000, Fong 2006). Overall day-to-day management is left to the resource owners and their governance structures, though natural resource legislation is still supposed to prevail (Evans 2006).

Although a co-management system is in place in Fiji, there is concern that rather than having two different arms of management the current system results in a situation where there is effectively none, particularly concerning marine resources (Muehlig-Hofmann 2007, Virdin 2000). Local communities struggle to effectively manage resources in a sustainable manner because of both external and internal pressures including destructive fishing and overfishing, the emergence of and further integration into the market economy, and the erosion of respect towards cultural traditions among

others (Veitayaki 1998). On the other hand, the central government lacks the resources necessary to adequately provide on-site management and often encourages further exploitation of resources without due regard for environmental consequences (Lane 2006, Turnbull 2004). Lower-level government offices are also not empowered with the resource or knowledge capacity to meet management obligations. The weaknesses of both parties in the co-management system may thus lead to a ‘tragedy of the commons’ situation despite the expected benefits of the existing communal property structure (Feeney et al. 1998).

Recognizing the need to empower local communities with the knowledge and capacity to manage resources, and to strengthen ties between international organizations, government offices and the villages, nongovernmental organizations (NGO) have played an increasingly significant role in Fiji’s co-management system (Lane 2006). Community-based natural resource management (CBNRM) projects can now be found in nearly every area of Fiji, particularly on the two main islands of Viti Levu and Vanua Levu. Many facilitating organizations are global or regional leaders in resource conservation and management, including the Worldwide Fund for Nature (WWF), the Wildlife Conservation Society (WCS), the Fiji Locally Managed Marine Area Network (FLMMA), Partners in Community Development-Fiji (PCDF), the Secretariat of the Pacific Community (SPC), the Organization for Industrial, Spiritual and Cultural Advancement (OISCA), the South Pacific Region Environment Programme (SPREP) and the Institute of Applied Science (IAS) at the University of the South Pacific (USP). While the staff members implementing CBNRM projects are mostly from Fiji, the theory,

methods and motivation are usually generated externally, either by offices in developed countries or through foreign subject matter experts.

Although some effort is given towards strengthening the co-management structure in Fiji, mainly through building networks between villages and government offices, most CBNRM projects focus on the villages' role in management. A primary goal of CBNRM projects is to teach Fijian resource owners and users about innovative methods to manage their land and fishing grounds without dismantling traditions and customs. In this way, NGOs try to bridge the gap between modern management practices and Fijian traditions in order to raise awareness, improve the standard of living, and prevent environmental degradation. By empowering the resource users it is hoped that networks and governance mechanisms will continue to develop after the NGO departs. Despite using a number of well-tested strategies, NGOs often struggle to meet their stated goals.

One powerful determinant in the success of CBNRM projects is the local communities' level of social capital, or the value of the structure of relations between and among participants in the project (Ostrom 1999). Some of the most important characteristics of groups that lead to the production of social capital are strong networks, social norms, trust, and reciprocity (Pretty and Ward 2001). The given cultural context is also a critical factor that influences how social capital may be produced and employed, especially in places like Fiji where cultural institutions are formally and informally recognized. It is fairly easy to see how this relates to Fijian villages and activities that occur within their space. For one, the daily lives of Fijians in a village setting are driven by the complex network of social relationships through kinship and traditional ties that make the Fijian culture so pervasive. Second, resources are communally-owned and

often used directly or indirectly for communal purposes. Third, when an external agent, be it a government or non-government entity, becomes involved in this communal context, the dynamics between actors in the social network may be altered by the new players, possibly improving (as the NGO hopes) or damaging (as often happens) existing networks. Thus, conclusions made in this paper are premised on the notion that the ability of an NGO to develop long-term governance structures concerning environmental or natural resource matters is based at least in part on its ability to strengthen social networks, and that pre-existing social capital is necessary for this to happen.

The objective of this study is to identify specific challenges that Partners in Community Development-Fiji (PCDF) faced in making these measures sustainable (here to mean merely surviving the NGO's departure) and show why these challenges emerged during the Coral Gardens Initiative, a CBNRM project implemented in Cuvu Tikina from 1999-2003. This study took place while I was a Peace Corps Volunteer assigned to Cuvu Tikina as an environmental advisor and educator from August 2005 to August 2007. After discussing the historical evolution of Fiji's natural resource governance structure, I explain the importance of social capital in CBNRM initiatives throughout the South Pacific and the influence of the Fijian culture in shaping how social capital is produced and utilized (chapters 2 and 3). Next, using the framework of analytic ethnography, data gained through PCDF's project documents, semi-structured interviews, and participant observation are used to explain the root causes of the challenges that PCDF faced when developing local natural resource governance (chapter 6). I also show how the interactions between key players affected, and continue to alter, the results of the project.

The next chapter deals with the project's effect on social networks and structures in Cuvu Tikina, and in turn how the challenges were shaped by the pre-existing social capital (chapter 6). To show how aspects associated with the development of social capital may be utilized in this specific context, I provide an example of a natural resource decision made without external assistance. In the last chapter, recommendations for both CBNRM facilitators and village-based participants are provided to guide future projects that include community-based governance development activities and mitigate the challenges identified in this study (chapter 7). Because numerous Fijian terms are used throughout the paper, a list of terms and their meanings in English are given in Appendix A.

CHAPTER 2: CODIFYING VANUA - THE EVOLUTION OF FIJIAN NATURAL RESOURCE GOVERNANCE

An Overview of the Fiji Islands

The Fiji Islands are located between 15-23°S and 177-178°W, composed of about 330 islands totaling close to 18,500km² of total land (a bit smaller than New Jersey). Though the total land mass is small, Fiji's coastline (1130km) and Exclusive Economic Zone (1.29 million km²) are significant (CIA 2005, Vuki et al. 2000). Approximately one-third of the islands are inhabited with 90% of the population on the two largest islands, Viti Levu and Vanua Levu. The estimated population from the 2007 census is



Figure 2.1. The Fiji Islands. Note the location of Cuvu Tikina in Southwest Viti Levu, about 10 km west of Sigatoka Town. Source: Fong (2006).

860,743, with native Fijians accounting for 56% and Indo-Fijians 36% of the total population. The remaining 8% constitutes a mix of other Pacific Islanders, Chinese and Europeans (www.statsfiji.gov.fj). Population trends show that the Indo-Fijian population is decreasing while the other two groups are increasing. The Indo-Fijian population is focused primarily in urban areas and in the major sugarcane growing areas, while the native population is more spread out and is still predominantly rural. The vast majority of both groups live along the coast, here defined as the entire area from the base of the mountains to the outer slope of the reefs. Consequently, the most important industries, agriculture and tourism, are concentrated along the coastline. Indo-Fijians along the coast work primarily in the agriculture industry or small business, while most Fijians maintain a subsistence lifestyle and live in villages, though they also continue to be integrated into the cash economy through commercial fishing, business and government jobs, and the expansion of tourism on native land. There is still significant economic stratification within both groups, with the rural population generally poorer and less educated than their urban counterparts (www.statsfiji.gov.fj, Sriskandarajah 2003).

Fiji uses a constitutional parliament system based on the British model, but also diverges from this model in a number of ways. The Constitution has undergone several changes since independence, thanks to the unstable nature of Fijian politics. Following the first coup in 1987, the initial Constitution was scrapped and replaced by a new one in 1990. This second document was amended in 1997, and, despite being challenged by coups in 2000 and 2006, remains as the governing Constitution. Elections are scheduled every five years and all Fiji citizens must be registered to vote according to the 1997 Constitution (Fiji Ministry of Information 2005). An elected prime minister runs the

affairs of the nation while the president is the executive authority of the country and the commander-in-chief of the military. Parliament is separated into a house of representatives whose members are elected, and a senate, made up of individuals appointed by the president. These appointees are recommended to the president by the prime minister, opposition party leader, and the Great Council of Chiefs (GCC, in Fijian, the *Bose Levu Vakaturaga* (BLV)). Ministries manage the government's affairs and report to parliament. Before the 2006 coup, there were 22 ministries, but this number has been reduced to 17 by the interim government.

One peculiarity in the Fijian government system is that while the population is largely bi-racial, there is a separate administrative network that is concerned only with indigenous Fijian matters. At the top of this chain is the GCC, which consists of 55 members, mostly chiefs from the provinces, and plays an important advisory role in all matters that affect the indigenous Fijian population. Originally created in the first years of the colonial era to oversee native matters, the GCC's role in legislative matters has waned over time, but it still appoints the president and vice president to five year terms (Ministry of Information 2005, Nayacakalou 2001). The GCC advises the Fijian Affairs Board, who in turn provides guidance to Fijian councils at the provincial, district, and village levels. Provincial offices are led by a *roko tui*, and assistant *roko tui* are appointed to regions within the province. There are also Fijian councils at the district (*tikina*) and village (*koro*) level. The village is the basic unit of organization for Fijian socio-political affairs (Nayacakalou 2001).

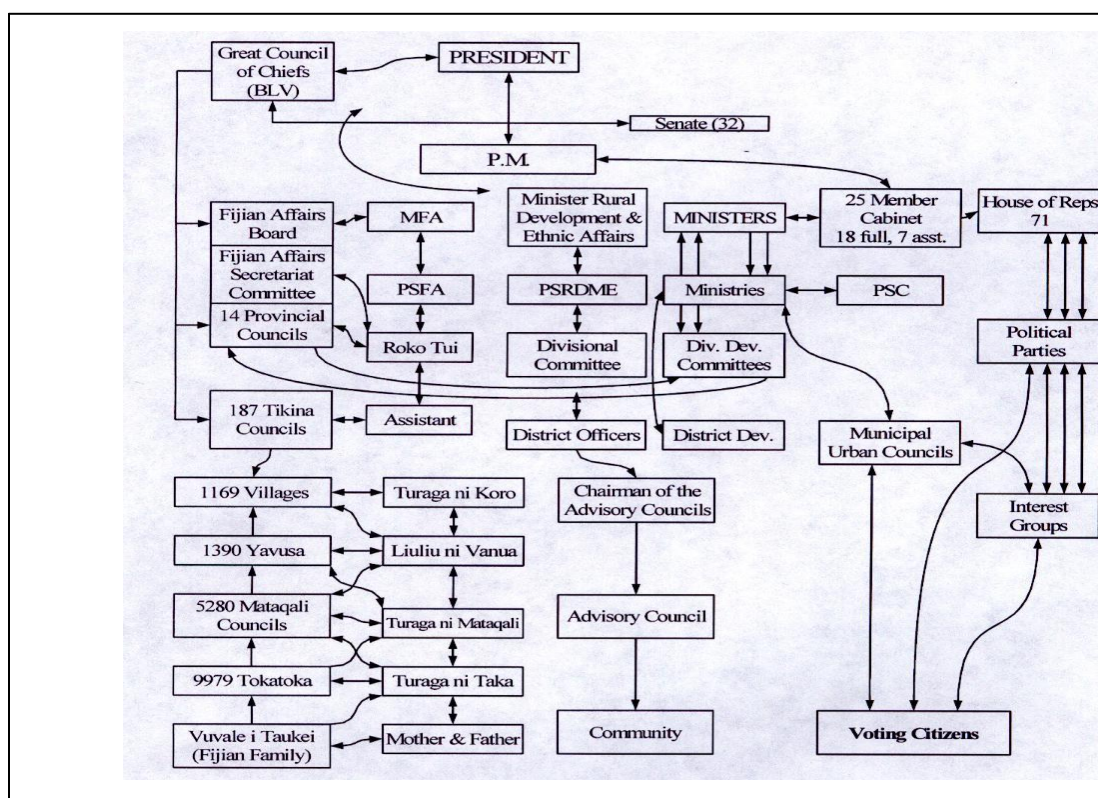


Figure 2.2. The modern governance structure in Fiji. The two columns on the left show the institutions concerned with indigenous Fijian matters. Source: Lucas et al. (2003).

The country is divided into four divisions and fourteen provinces. Ministries generally have offices at the division level that oversee administrative matters, while some ministries have field offices at the provincial level. Provinces are further separated into 187 districts. Although there are district councils that oversee Fijian village affairs, there is no government administration at this level. 88% of the land is owned by Fijians and managed by the Native Land Trust Board (NLTB). Land ownership follows traditional Fijian social-political organization as recorded by the British colonial administration in the early twentieth century (Nayacakalou 2001). At the highest level is the *vanua*, which usually encompasses several villages or districts. *Vanua* are made up of associations of *yavusa*, or tribes, which are usually found in one to several villages. Customary fishing rights are usually consolidated at these larger social groups (Veitayaki,

1998). The primary land-owning unit is the *mataqali*, or clan, of which there are one to several found in a village. At the lowest level of Fijian socio-political organization is the *itokatoka*, a kinship group based on common ancestral brothers.

Four percent of the land is still held by the State, including the foreshore areas, and is administered by the Department of Lands and Surveys. The other 8% is freehold land, mostly acquired prior to cession to Britain in 1874. Only about 16% of the land is arable, virtually all of it along the coast, and is currently used for agriculture (Fiji Ministry of Information 2004). Most of the freehold land is also used for agriculture and constitutes a sizeable amount of Fiji's total arable land (Fisk 1970). While natives own the land, Indo-Fijians have been able to lease farming plots through the Agricultural Landlord and Tenants Act (ALTA) of 1976. Overall, 46% of native-held land is leased, mostly for agriculture but also for other activities (Sriskandarajah 2003). The tourism industry, for instance, relies heavily on leases; nearly 50% of resort facilities are on native land (Narayan and Prasad 2003). Mining and timber activities are also found on native lands. Overall, the natural resources sector of the economy constituted 25% of overall GDP in 2004 and significantly impacts native-held land (Fiji Ministry of Information 2005).

The condition of the coastal seascape, which consists of mangroves, seagrasses and coral reefs, varies throughout the country. In more densely populated areas, such as the capital of Suva, increased runoff, pollution, and resource extraction (including mangroves, fish and live coral) resulting from land-use change and immersion in the market economy are all putting immense stress on coastal ecosystems (Vuki et al. 2000). The coastal landscape is also being stressed by intensive agriculture and urbanization.

There is increased concern amongst Fijian resource owners that the NLTB has been overly zealous in promoting the exploitation of resources, resulting in increased degradation both inland and along the coasts (*Fiji Times*, 28 January 2008). Many Fijians also feel that overfishing and destructive fishing currently have the most negative impact on their livelihood (World Bank 2000). For many of the rural native villages, fishing is their sole livelihood, providing both subsistence and cash. Climate change is another pressing socio-ecological issue in Fiji; increased sea surface temperatures, sea level rise and more strong storms may severely degrade the coast (Hay et al. 2001). Overall, Fijians rank the degradation of coastal resources as the greatest climate change threat (Agrawala et al. 2003).

Vanua: the evolution of Fijian governance and resource co-management

In order to better understand the current local governance structure in Fiji concerning natural resources and how the notion of *vanua* became so important, it is necessary to explore the forces that shaped the institutions through time. Two historical threads are particularly important to follow from the pre- to post-colonial eras. First, the British colonial administration's approach to native land and resource tenure established the co-management system still in place today. Second, the development and codification of Fijian communal traditions through an alliance between the colonial government and Fijian chiefs has shaped the contemporary local (province to village level) Fijian governance structure. While the notion of *vanua* is considered to describe pre-contact Fiji, modern expression of the term is largely a result of events since 1874. The following section provides a brief history of colonial policy in Fiji, as well as a look at how resource tenure over land and fisheries has continued to be a source of

controversy since Fiji became independent in 1970. I finish with a review of the contemporary co-management system, the local Fijian governance structure, and list a few of these institutions' limitations.

Foundations of *vanua*: Pre-colonial Fiji and the Deed of Cession

The socio-political situation in Fiji prior to becoming a British colony was hierarchical and dynamic. In pre-colonial days, a chief's control of power and resources was absolute, though the power of any given chief was in constant flux due to internecine warfare and increasingly intricate kinship ties through intermarriage of chiefly families. This dynamism meant that new social and political ties constantly formed within and between villages. It is likely that a common Fijian would have been hard-pressed to identify the name of his *itokatoka*, *mataqali*, or *yavusa* (Nayacakalou 2001).

Nonetheless, daily activities were defined by one's traditional role in the communal system. Certain bloodlines produced chiefs, while others were priests, warriors, fishermen, heralds, spokesmen, ambassadors, and carpenters (Lucas et al. 2003). Thus, every person in the village knew his or her proper role. In some areas the tradition of '*lala*' was used as a way for a chief to bring people and resources together to accomplish large undertakings (Deane 1921). As part of *lala*, chiefs also received the first portion of any harvest, and could order the *lewe ni vanua*, or people of the land, to do work at his request. On the issue of land tenure, different tribes across the islands had a variety of systems in place, some quite centralized while others gave more freedom to individual *mataqali* and *itokatoka*. Obligations to the chief and the extent of *lala* also varied (Lal 1992).

Observers of pre-cession Fiji wrote about the dynamic nature of chiefly leadership, how chiefs rose to power and then were eliminated through treachery or defeat in battle (Williams 1985, Lockerby 1925, Derrick 2001). If a village was defeated, they would present an *isoro*, or offering of apology and submission, to the victor in return for mercy. The *isoro* was often a basket of soil, signifying that the tribe or clan's resources now belonged to their new high chief (Derrick 2001). Except for owing tribute to their new ruler, which might be a heavy burden depending on the conquering chief, the defeated tribes were usually allowed to continue living on their land and using the resources as they saw fit.

In an attempt to establish a governing system across this socially-varied landscape, the Deed of Cession and early colonial administrative policies established the foundation of resource tenure and traditional governance structures still in place today. As tensions rose between paramount chiefs in eastern parts of Fiji and between Fijians and European settlers, Fiji was ceded by thirteen paramount chiefs to Britain in 1874, giving the Crown ownership of the land, waters, reefs across the islands. But due to the voluntary nature of the cession agreement and the placement of Sir Arthur Gordon as the first territorial governor, Fijians were spared the common colonial shock of being removed from their land. Article IV of the Deed of Cession states that 'the Crown should hold such lands in trust for, and leave them for the present in the occupation of, the tribes, families, or chiefs, by whom it is at present possessed' (quoted in Legge 1958, 180). Gordon's affinity for the concept of home rule meant that Fijians were effectively restricted from losing their land. He argued, "if the existence of a native race in any country is to be preserved, and its rise into the scale of civilization rendered possible, it

must be permitted to retain in its hands a large amount of the land originally possessed by it” (quoted in Legge 1958, 182). Realizing that they could lose access to land and the potential effects of alienation, Fijian chiefs gained a new understanding and appreciation of the idea of land tenure. Land, the chiefs argued in accord with Gordon, was the only sure way of preserving what it meant to be Fijian.

Codifying *vanua* : establishing Fijian tradition as law from 1874-1970

In preserving Fijians and their traditions, Gordon’s policies also meant that certain customs were codified and made universal. Gordon, and his successor as governor, John Thurston, established the Native Lands Commission (NLC) in the 1880s to demarcate legal boundaries and determine the proper legal landowning unit. The *mataqali* became the primary land-owning unit, a tradition in some, but by no means all, of the areas in Fiji. Also, by deciding ownership based on lineage alone, the NLC inadvertently formalized otherwise loosely-understood and flexible kinship ties (Nayacakalou 2001). The same could be said for the chiefly system as well; lineages that currently held power as the Commission was delineating boundaries became fixed as chiefly families, and regulations were created to ensure that commoners were subject to the rule of chiefs. Lal (1992, 16) describes the effects of the colonial policies prior to 1900:

Colonial officials found convenient allies in the high chiefs of coastal and maritime kingdoms, with whom they developed a mutually advantageous relationship by, among other things, making the chiefs the arbiters of Fijian customs. Their dominant role in Fijian affairs was thus ensured and backed by the full force of colonial law and administrative machinery. All of this is to underline the basic point that the “Fijian way of life” as it was sustained and even romanticized by the colonial government was based on highly selective principles that did little justice to the enormous diversity and fluidity of precolonial Fiji.

The basic administrative structure in colonial rural Fiji was also established in the late nineteenth century. At the top of the native hierarchy was the *Bose Vakaturaga*, or Great Council of Chiefs (GCC), a body of paramount chiefs from around Fiji.

Established in 1876, the GCC met annually to discuss issues affecting the Fijian people with colonial administrators. Fiji was split into seventeen provinces (*yasana*), which were further divided into numerous *tikina*. Most of the provinces were headed by their traditional chiefs who were given the title of *roko tui*, a titular position on Bau Island. At the district level, a *buli* was appointed to implement regulations and oversee village activities for the *roko tui*. The Native Regulations, designed to preserve the traditional Fijian socio-political arrangement, provided a stringent set of codes that controlled the daily activities of Fijian villagers and were implemented by the *turaga ni koro*, or village headman (Lal 1992). Thus, early colonial efforts codified the hierarchical nature of resource management and governance but eliminated the variety and flexibility that existed prior to cession. Although Gordon meant his policies to provide temporary protection to Fijian traditions, the evidence of these structures in Fiji today attest to the lasting influence of the early colonial years.

At the turn of the century, officials critical of the communal nature of Fijian society who were sympathetic to calls for greater freedom for individuals attempted to roll back some of the policies of the Gordon-Thurston era. Governor Sir Everard Im Thurn, the official most closely identified with this reform agenda, passed an ordinance in 1905 which allowed Fijian landowning units to sell land to the Crown. He also established the practice of '*galala*', which gave individual farmers tenure over sections of *mataqali* land for commercial farming purposes. Some chiefs were amenable to leasing or even selling off the land that was not being used by villages, though others continued to fear eventual alienation if they started down that path (Lal 1992). Governor Im Thurn also repealed some of the Native Regulations, giving Fijians a greater opportunity to

engage in economic activities outside of the village. In the early part of the twentieth century, then, it appeared that the communal nature of Fijian culture and society would eventually disappear.

A return to tradition, however, was right around the corner, led by the grandfather of modern Fiji, Ratu Sir Lala Sukuna. Oxford-educated and a decorated war veteran, Sukuna was also from the chiefly lineages of both Bau Island and the Lau Group; he was bestowed with the highest chiefly titles from the latter. Having held positions with the Native Lands Commission and the Legislative Council, he emerged as the leading voice on Fijian issues, advocating for the maintenance of communal living and preservation of traditions. Sukuna argued that individuality and its corollaries of democracy and wage-earning jobs were antithetical to the Fijian way of life (Lal 1992). The colonial government agreed and passed a series of acts that reversed the earlier trend towards individual freedom and, in doing so, entrenched the communal nature of Fijian society.

The Fijian Affairs Act (Cap 120) was passed in 1944, establishing the Fijian Affairs Board (FAB) to oversee all Fijian matters throughout the colony. The FAB was the legislative and administrative arm of the GCC, and both of these organizations were chaired by Ratu Sukuna, the Secretary for Fijian Affairs. A new set of regulations under the Act repealed Im Thurn's reform agenda and regulated Fijian village life to the same degree as before the turn of the century. Provincial and district councils, under the guidance of the FAB, were given statutory powers to regulate village rural activities, collect taxes and other financial requirements, and punish transgressions (Lal 1992).

As at the national level, the Fijian Administration became increasingly integrated with the traditional chiefly system of leadership at the local level as well (Nayacakalou

2001). Traditional chiefs, not eager to see their prestige diminished, often resisted institutional change. Local level administrators such as the *turaga ni koro* and *buli* were vested with the authority of the colonial government, but could not act contrary to the wishes of traditional chiefs. To avoid this tension, however, chiefs also held these administrative positions, eliminating the possibility of conflict between the government and traditional arms of governance. This increased the Fijian Administration's influence in provincial and village affairs. Also, traditional chiefs made up the provincial and district councils, bodies that represented rural Fijians and advised the FAB and GCC, which in turn directed the Fijian Administration. By combining the two, individualistic villager behavior was restricted from both the traditional and governmental angle.

Nayacakalou (2001, 135) explained how the leadership system then in place preserved tradition:

This was regarded as a task of the Fijian Administration – to protect the Fijians and their way of life. Little wonder, therefore, that the Fijians, through their normal channels of administrative and political communication, appeared conservative. In view of the nature of the machinery available to them they could not be otherwise, despite a considerable popular desire for change.

Whether they desired it or not, Fijians were bound to the communal lifestyle and its governance system.

In the decade prior to independence, the Fijian Administration's power over rural Fijian life was significantly weakened with the removal of many of the regulations instituted in the 1940s. These regulations were eliminated based on recommendations from a series of reviews by European researchers who were concerned that the communal system inhibited the progress of economic development and modernization (Overton 1999). The GCC could no longer pass laws or regulations that governed Fijian activities (Fiji Ministry of Information 2005). The powers of the *roko tui* and *turaganikoro* were

also diminished, and the position of *buli* removed. Rural Fijians were thus free to pursue wage earning jobs and their obligations to the village were imposed socially rather than legally (Nayacakalou 2001). Because traditional and administrative leadership had become interwoven, chiefly power may also have been weakened, at least in the eyes of the villagers. It also provided a clearer separation between governmental and traditional lines of authority and leadership. Some have argued that the elimination of this system helped to erode Fijian traditions and created a vacuum of legal authority and guidance at the local level (Tomlinson 2006, A. Bogiva, pers. comm.). Despite the removal of legal authority, however, traditional leadership and the pressure of communal obligations still determines to a great extent the activities and behavior of Fijian villagers, including natural resource management. The colonial era made a lasting impression on the Fijian people, establishing the dominance of a traditional construct codified by early colonial governors and sustained by the chiefly elite who had a vested interest in its survival (Ghosh 2003, Overton 1999, Srebernik 2002).

Protecting *vanua*: land and resource tenure from 1940-present

In the 1940s, three critical acts institutionalized the land and fisheries management systems still in place today. Land tenure continued to be a controversial issue during the middle decades of the colonial era. Faced with the demand for land from an increasing Indo-Fijian population, colonial administrators, including Ratu Sukuna, began devising a system of land tenure that included guidance on leases. The first act passed, concerning the recognition of native land, was the Native Lands Act (Cap 133). This act determined once and for all the inalienable nature of native land tenure, giving traditional landowning units rights to occupy and use the land, but restricting them from

selling any part. The Native Lands Trust Act (Cap 134) regulates the use of the land, outlining policies for land leasing. The Native Lands Trust Board (NLTB) was created through the NLTA with the consent of the GCC, to manage all native lands and promote the development of unused lands. All native lands fell into two categories, reserve and non-reserve. Non-reserve land could be leased or licensed out, but only so long as it could be shown that the landowners would not need the area for the duration of the lease (Fiji Ministry of Information 2004). This system effectively restricted chiefs from selling land out from under the village and also gave Indo-Fijians leasing the land greater security. The NLTB continues to facilitate lease transactions, keeping 25% of the lease payment for administrative costs with the rest going to the chiefs of the landowning units (Lal 1992). The fact that chiefs were now able to earn money from the land, and were under no obligations of accountability, led to increased distrust in the traditional leadership and is still an issue today (Turnbull 2004, Nayacakalou 2001). Nonetheless, the NLTA settled the land tenure issue in favor of native owners.

The other two acts, concerning the *iqoliqoli*, was the Fisheries Act of 1942 (Cap 158) and the State Lands Act (Cap 132). The Fisheries Act gave legal recognition to the customary fishing rights for Fijian kinship groups, usually at the *vanua* or *yavusa* level, while the State Lands Act reiterated that the Crown owned the fishing grounds. Anyone not listed in the registry of these groups was required to receive a permit from the divisional fisheries office to fish in the *iqoliqoli*. Although commissioners on the Native Fisheries Commission granted permits, they were supposed to consult with the customary fishing rights holders before doing so (Evans 2004). The act also granted the Commission the ability to designate fish wardens to enforce the fisheries regulations. Other management tools in the Fisheries Act include the prohibition on taking fish by the use

of dynamite or other explosive substances except with the approval of the Minister concerned. Additional fisheries regulations, passed in 1965, include provisions on prohibited fishing methods and areas, as well as granting some protection to certain species such as sea turtles and giant clams (Fong 2006, Veitayaki 1998).

The Fisheries Act charged the Native Fisheries Commission to demarcate *iqoliqoli* boundaries and register the appropriate users for each *iqoliqoli*. The undertaking was substantial. A total of 406 *iqoliqoli* were established by 1994 and formally recognized by the government in a manner similar to land tenure. The difference, however, was that customary fishing gave only usufructuary rights to the landowning units. The Crown, followed by the Fijian government, continued to own the submerged land up to the high water mark, as well as the water and reefs within the *iqoliqoli* based on wording in the Deed of Cession and the State Lands Act (Cap 132). This has been a contentious issue among Fijians since then, as they argue that when the chiefs ceded Fiji to the Queen in 1874, they expected to have all of their lands returned to them, including the *iqoliqoli* (Evans 2006, Baba 2006).

A number of other resource management acts were passed during the last two decades of the colonial era. These acts covered commercial activities such as logging, mining, large-scale fishing, and land development, and therefore did not relate directly to rural subsistence activities that fell under the Fijian regulations of the FAB (Evans 2006). Many other acts are also connected to resource use, but a detailed look at all legislation is beyond the scope of this paper. Instead, it is important to understand the impact of the Fijian Affairs, Native Lands Trust, Fisheries, and State Lands Acts in establishing the natural resource governance system that is, for the most part, still in place today.

Despite the political turmoil over its 37-year history since independence, and the centrality of the land and resource tenure issue to this turmoil, little of substance has

changed regarding Fiji's natural resource governance system. Parliament passed two bills in 2002, amending the Native Lands and Native Lands Trust Acts. Parliament also tabled two controversial bills in 2004, the Indigenous Claims Tribunal Bill and the Qoliqoli Bill (available at www.parliament.gov.fj), but these were both halted by the 2006 coup. The latter's aim was to return ownership of foreshore land and *iqoliqoli* to the social units with customary fishing rights on the Native Fisheries Commission documents. Land use reform is on the agenda to this day, as the interim government has set up a Committee on the Better Utilization of Land (CBUL), which is currently reviewing the land tenure system, including lease tenure and the role of the NLTB, among other things (*Fiji Times*, 15 January 2008). Through all of this instability, the traditions, cultural norms, and social structures in Fijian villages have not changed a great deal. In fact, thanks to the polarized nature of discourse surrounding Indo-Fijians and threats to the Fijian way of life, Fijians today may cling even more tightly to their traditions than before.

In summary, the Deed of Cession that handed Fiji and its inhabitants over to Britain set in motion a series of events that still resonate loudly today. To bring administrative order over a multitude of disparate tribes with a variety of socio-political institutions, a few of these institutions were selected and codified by early colonial administrators. These efforts created the foundation on which present-day natural resource governance and Fijian socio-political and cultural institutions now rest. Legislation passed in the 1940s was also instrumental in establishing village life and the co-management system based on earlier colonial decisions. The importance of chiefly authority and communal living has been sustained despite the efforts of other colonial

administrators and Fijians who saw these institutions as a hindrance to progress. Largely shaped by these historical processes, Fijians today generally see their culture and rights to natural resources as both inextricable from each other and critical to Fijians' survival as a people in general. Thus, the dual meaning of *vanua* is as relevant today as ever.

Vanua today: co-management and governance in a Fijian village

The co-management system

The co-management system established in the colonial period remains in place. At the national level, the name and duties of ministries continues to be in flux due to political instability, but this has not changed the nature of the management structure. A newly designated Ministry of Forests and Fisheries, which falls under the Ministry of Primary Industries, oversees fisheries activities as well as coastal forests, including mangroves (www.fiji.gov.fj). Divisional offices continue to issue permits while provincial field offices usually provide technical support and training. The NLTB still manages native lands and administer leases, though one part of the CBUL's mission is to review this body's duties. The NLTB distributes money to landowners semiannually at a meeting in the chiefly village of the area.

Provincial offices oversee Fijian activities within each of the fourteen provinces, administering the regulations set forth by the Fijian Affairs Board. These offices are led by a *roko tui*, though this individual is now just as likely to be a commoner as a chief. He or she is supported by assistant *roko tui* who are assigned to oversee parts of the province. A *matanitikina*, elected by the district council, acts as liaison between each *tikina* and the provincial offices, and coordinates activities on behalf of the *turaga ni koro* from the villages. Any villager, however, can go meet with members of the provincial

offices. Each village elects its own *turaga ni koro*, who receives a small stipend to attend meetings and perform other duties.

The local Fijian governance institutions

The provincial, district, and village councils are the bodies responsible for governance at their respective levels. Through these bodies, traditional authority and protocol are recognized and given power. Provincial councils (*bose ni yasana*) are the most powerful institutions, given the authority to enact land taxes, create subcommittees, and develop formal local by-laws according to the Fijian Affairs Act regulations (Cap 120, sec. 6, 1996). Representatives meet at least semiannually, and are chosen by each *tikina*, though often they are traditional chiefs. Although the chair of the *bose ni yasana* is chosen by the council, it is usually the paramount chief of the province if that position is filled, as is the case in Nadroga/Navosa Province. At the district level, the highest chief in the district is the chairman of the district council (*bose ni tikina*), which meets quarterly. This group is vested with specific powers to implement guidelines from the provincial council and assist in enforcing statutory law. Financial issues such as fundraising and development projects as well as district primary school issues are commonly discussed, though other matters also come up as necessary. Women are represented on the two councils by the head of the women's group (*soqosoqo vakamarama*) at each level. Regulations also state that at least one person under age thirty will attend meetings to represent the youth on these councils.

Village councils (*bose vakoro*) are made up of representatives, usually the elders, of the various *itokatoka* and *mataqali* in the village and are headed by the highest chief, similar to the district councils. Leaders from the church and several youth

(approximately under age 35) also regularly attend these meetings, the latter usually helping to mix and serve *yaqona* (*Piper methysticum*, or kava). The *bose vakoro* is supposed to meet weekly, facilitated by the *turaga ni koro*, to discuss all matters concerning the village, including the village development plan and enforcement of both the law and traditional protocol. For instance, a *bose vakoro* may put a restriction on certain activities like drinking *yaqona* on Sundays or prohibit inappropriate attire within the village. At these meetings, villagers may also bring up requests to use *mataqali* land or to obtain the help of the village in some activity (i.e. picking up rubbish or preparing for a ceremony). In short, daily life in the village is governed by the *bose vakoro*. If a village does not have a functioning council, it is a possible sign that there are leadership problems within the village.

Each *iqoliqoli* is also administered by a committee, the *bose ni qoliqoli*, though its level of activity, as with management of the customary fishing grounds in general, varies widely throughout the country (Cooke et al. 2000). The *iqoliqoli* committee is usually comprised of the chiefs from each *yavusa* or *mataqali* listed on the Native Fisheries Commission's register of customary fishing rights (Kalevu, pers. comm.).

Limitations of the co-management system

Although the Fijian Affairs regulations are clear on the structure and power of these councils, there are not any regulations that clearly define the responsibilities of these groups concerning land and resource management in any of the legislation (Prasad 2003). Although some regulations, such as the 1965 Fisheries regulations, have restrictions that apply to customary owners as well, most current resource laws are outdated and have little language that may provide guidance to native use (or abuse) of

their resources (Evans 2006). Even the Environmental Management Act (2005), probably the most progressive legislation in Fiji regarding environmental protections, will not likely affect village activities to a great extent, as it contains specific language that excludes village activities. Furthermore, legislation passed to meet the requirements of being a signatory to international treaties is usually only implemented in a fashion that benefits the native landowners, thus restricting the effectiveness of the laws. Where legislation might challenge Fijian customary practices, it is rarely enforced (Turnbull 2004). Also, ministry field extension offices have limited resources and personnel, making it nearly impossible to monitor daily fishing activities. The Department of Environment does not even have field offices; as of 2005, the entire department only had thirty employees. The wording of the laws, limited resources, and deference to traditional authority and practices all limit the effectiveness of the Fiji government's ability to manage natural resources.

On the other side of the co-management structure, villages are faced with significant pressures that often put economic development ahead of conservation. The NLTB encourages development opportunities while failing to educate local landowners on the pros and cons of these activities (Cuvu Villager, pers. comm.). Chiefs are once again in a potentially difficult position; their traditional duty is to make decisions in the best interest of the people under them. But because they benefit financially from allowing fishing permits and land leases, it is easy to see how corrupt chiefs might turn a blind eye to environmental degradation (Turnbull 2004). Of course they might also be advancing the sincere desires of the people as well; integration into the cash economy has provided Fijian with an opportunity to purchase material goods and has also raised the

financial obligations of each household for village and ceremonial purposes. Population increase in villages puts pressure on *iqoliqoli* resources as well (Matthews et al. 1998).

In short, without clear guidance from the government, and with clear short-term incentives to exploit their resources, Fijians find themselves in a potential ‘tragedy of the commons’ situation.

CHAPTER 3: LITERATURE REVIEW – SOCIAL CAPITAL AND COMMUNITY-BASED NATURAL RESOURCE MANAGEMENT PROJECTS

The concept of social capital

Based on the description above, natural resources owned by native Fijians are managed through a communal tenure structure. Because of the relatively closed nature of the resource access and legally-defined tenure, communally-owned resources are potentially less vulnerable to many of the challenges outlined in research on common pool resources (CPR) (Feeney et al. 1998). In other ways, however, the institutions governing resource use in a communal system are still driven by the same factors as other, more open CPR situations. Dolsak and Ostrom (2003) show that one important variable is the characteristics of resource users, including group cohesion, trust, size, and homogeneity. Agrawal (2001), in a review of frameworks on CPR institutional designs, also lists shared norms, past successful experiences, appropriate leadership, and interdependence among group members as important group characteristics for successful management to emerge. Lastly, it is increasingly understood that external agencies such as international and local NGOs also play a role in the governance of communal resources (Morrow and Watts Hull 1997, Dolsak and Ostrom 2003).

Frameworks in CPR theory thus point to an important factor concerning resource management and use: the social capital of a given group of appropriators (Agrawal 2001). Ostrom (1999, 176) defines social capital as the “shared knowledge, understanding, norms, rules, and expectations about patterns of interactions that groups of individuals bring to a recurrent activity.” Given its link to economic theories concerning other forms of capital, it is suggested that individuals or groups gain something through the existence of social capital; social capital is a means of production and without it certain ends may

not be achievable. Unlike natural or physical capital, however, social capital is an intangible resource that gains value as it is used and loses value through disuse. It is also often generated as a by-product of activities meant to achieve gains in other types of capital (Onyx and Bullen 2000).

Although scholars approach the study of social capital from different perspectives and definitions vary, a few critical aspects of social organization show up in virtually all descriptions. Coleman (1988) identified three important aspects of social relations, focusing primarily on the individual benefit of social capital. First, individuals may benefit from a shared understanding of obligations, expectations and trustworthiness within a social arrangement, especially those in positions of power who are thus able to call in a high number of 'credits' from other members of the group. The second aspect is information channels, whereby an individual can increase her knowledge by interacting with others in a group and avoid the cost of independent learning. The last has to do with social norms and effective sanctions. Norms, if recognized and followed by the group, can act as powerful inhibitors to sanction unwelcome behavior and motivate other behavior through rewards. A norm that a person should act in the interest of the group rather than his own interest is a particularly strong tool for social capital (Onyx and Bullen 2000). Finally, Coleman (1988) argues that closure of a social structure is an important element for creating effective norms and sanctions. Closure is created through links and bonds between individuals in the group that prevent negative externalities caused by defection from the group or dismissal of the group's rules. Internal conflict resolution tools can help create closure by defusing tensions that otherwise may erode a sense of inclusion in the group (Warner 2000).

Putnam (1993, 2000) also mentions that benefits may be private or public in nature and that trust and norms are important, but focuses much more on the effect of networks within and between groups. He identifies specific and generalized reciprocity as critical in building both forms of social capital. Whereas specific reciprocity refers to a situation where participants in the interaction expect immediate benefit or repayment, an arrangement where the notion of generalized reciprocity exists means that the interaction need not follow a *quid pro quo* format. Rather, the member who gives expects only that he will be repaid some time, believing his good deed today will benefit him somehow in the indefinite future because of his inclusion in the network. He also divides social capital into two categories, bonding and bridging. Interactions between individuals within a group generate the former, while interactions with external individuals or groups form the latter. Conflict resolution mechanisms are important tools in maintaining these bonds, especially as groups interact under new conditions, like starting a business or working with external organizations (Warner 2000).

Pretty and Ward (2001) provide a typology of different types of connections within and between groups. Pretty and Ward (2001) list five elements of connectedness: 1) local connections between individuals and within local groups, 2) local-local connections between groups within a community or between communities, 3) local-external connections between local groups and external organizations, 4) external-external connections between external organizations, and 5) external connections between individuals within external organizations. Akin to the benefit of networks, as connectedness increases within networks, especially two-way relationships that are updated regularly, so too should the production of social capital.

These studies also mention that there is a dark side to social capital. While adherence to social norms and obligations can empower individuals and groups, it can also lead to the exclusion of outsiders from the group, create excessively burdensome claims on group members, restrict individual freedoms, and lead to downward leveling norms (Portes and Landolt 1996, 2000). There is a danger that strong cohesiveness within a group will create an 'us vs. them' perspective, potentially leading to xenophobic notions about other racial, ethnic or religious groups (Putnam 2000, Portes and Landolt 2000). In such a situation, there is little chance that an outsider will ever be accepted as an 'insider', leading to greater social segregation and potential conflict. In communal or developing sites around the world, financially successful individuals are constantly pressured to provide food and other material items for social obligations concerning religious and cultural ceremonies (Portes and Landolt 2000). Gangs and dictatorships use social capital to consolidate their power, mostly by creating fear within members that conforms group behavior (Ostrom 1999, Coleman 1988). Strong norms and rules also help to ossify hierarchical structures that benefit an elite group while subordinating other groups, such as women or youth. In situations such as these, change is difficult to create, especially if those at the top stand to lose power if new rules are implemented (Pretty and Ward 2001, Dolsak and Ostrom 2003).

Another problem with social capital, in theory and practice, is an inherent tension and confusion about its impact at different social scales. The concept of social capital originally focused on the benefits that an individual accrued by being part of social networks (see Coleman 1988), although these sociologists also acknowledged the influence of social capital at a larger scale as well. The term was later expanded, without

theoretical adjustments, to include benefits accrued by entire communities, cities, and even nations. In fact, these macro-social levels became the main theme in future works by sociologists and political scientists, most famously by Putnam (2000). As Portes and Landolt (2000) point out, while social capital at the individual and community level may be compatible in some instances, at other times they may be at odds. Examples of the dark side of social capital listed above show that sometimes individuals may benefit at the cost of the larger group, while at other times restrictions created by strong social bonds may restrict individual behavior and accomplishments. It must be understood that there are both costs and benefits to having strong social networks and communication links, a sense of duty based on trust and reciprocal obligations, and identification with a particular stance or group. Furthermore, one must also recognize that these social mechanisms are a means by which resources may be utilized by an individual or community and do not independently produce material resources. Thus, there are significant limitations to social capital as a tool for community development activities, particularly those initiated from the outside.

Although social arrangements are heavily influenced by external forces such as national and regional government, it is difficult to construct social capital through external interventions (Ostrom 1999, Warner 2000). Both the idea of bridging social capital and the different types of connectedness show that external groups play a major role in networks. Many examples from CPR literature show that local institutional designs that are supported or legitimized by government or international organizations, either through legal recognition or financial support, have a higher chance of succeeding (Berkes 2003, Dolsak and Ostrom 2003, Agrawal 2001). On the other hand, external

organizations often fail to appreciate the networks that are already in place. In these cases, outside support can easily create dependency on external resources, increase expectations, or erode a functional pre-existing network (Ostrom 1999, Schmink 1999). These results are usually unintentional and even directly contradict project goals as they lead to a reduction of social capital.

One problem is that NGOs and other outside agencies are often not privy to a full understanding of a community's dynamics before beginning a project; in other words, it is difficult to know how much social capital is available. A second challenge is that they are also usually tied to a funding and reporting timeline, often two to three years, which precludes long-term assessment of the groups that will be involved. This once again shows the problem of actors working at different scales; a community-based project will likely focus on that level at the cost of considering the impact on individuals, and must also work to maintain its own networks (higher NGO officers, donors, etc.) Despite the difficulties inherent in trying to develop social capital from the outside and juggling the impact at different scales, most observers agree that it is an important goal in community-based projects, as functioning networks are a vital component for the success of any endeavor. They also agree that this aspect of a project also requires a great deal of time and resources. In general, external agencies should expect to spend as long as ten years to build and strengthen new networks to be sustainable (Lucas et al 2003, Berkes 2004, Pretty and Ward 2001). Overall, the success of projects aimed at governance or management development at the community level relies both on an understanding of the pre-existing group dynamics as well as how their inclusion in the social network may influence a group's characteristics that are tied to social capital development.

Social capital and Fijian culture

The influence of Fijian culture on social capital production

Social capital is clearly important to the functioning of Fijian society because of the communal nature of living and resource tenure structure. Because of the influence of their culture in the daily lives of Fijians, the inherent tension between benefits accrued by individuals and their social groups may be mitigated more than in a multi-cultural and individualistic environment like an American city, though it still exists. Kinship groups and village or district-level activities make up the heart of social interactions, but other forms of association stretch beyond blood ties to include all '*Kai Viti*', or Fijian people. When two Fijians meet for the first time, they will follow a standard pattern of 'small talk' to figure out how the two are linked, similar to tribes in Papua New Guinea studied by Diamond (1999). Even if they find no direct kinship bonds, there are other socially important connections that they can rely on based on geography and history. For instance, if a man from Nadroga/Navosa province and the island of Vanua Levu meet, they will call each other '*Dreu*', signifying a historical traditional link between the two regions, often following lineage back to ancient origin gods, or '*Kalou Vu.*' If the Nadroga man meets someone from Kadavu Island, they will regard each other as '*Tau*', a reciprocal relationship that brings about teasing and a sense of closeness greater than the *Dreu* relationship. To be respectful, it is important for a Fijian to recognize these links and accept the stranger as 'kin.' In this way, all Fijians are connected to all other Fijians through historic bonds that continue to be important today (Ravuvu 1983).

Fijian culture acts upon social structures in a way that creates closure, unifying all the people under a common understanding of the social norms and relationships that

shape social interactions. Surprisingly, the literature on social capital does not generally discuss the influence of culture, defined as “a set of attitudes, practices and beliefs that are fundamental to the functioning of different societies...expressed in a particular society’s values and customs, which evolve over time as they are transmitted from one generation to another” (Throsby 1999, 6). But by examining the definition of culture here with the aspects of society considered important for the development of social capital, parallels are clear. The literature, then, implies that culture could be an extremely powerful modifier on how social capital is created and used. Culture may not be discussed in social capital literature in part because it has been treated as a separate form of capital (Throsby 1999, Berkes and Folke 1992), or because it is too difficult to quantify in multi-cultural regions such as the United States. But within an individual ethnic group where a certain cultural homogeneity exists, I believe that examining the impact of culture as a factor in the shaping of society is a useful way to approach the intangible nature of social capital.

Because of the power of Fijian culture, we may generalize to some degree about social interactions between Fijians (Nayacakalou 2001). Katz (2000, 117) states that social capital acts as “the material base of the normative superstructure.” Conversely, the normative superstructure also determines the shape of the material base. Therefore, when exploring social capital in a Fijian village, one must understand certain components of the historical and contemporary cultural context. In the previous section, I attempted to show how notions of resource tenure and traditional authority were codified during the colonial era and strengthened since Fiji became independent in 1970. Traditions and ethnic identification have become even more crucial to Fijians thanks to the perceived threat by

Indo-Fijians concerning land and political power (Tomlinson 2006, Lal 2003). Thus, close identification with ethnicity and culture catalyze production of social capital in both positive and negative ways, leading to greater group cohesion but at the cost of decreased individual freedom and multicultural tolerance.

Important components of Fijian culture for social capital production

There are many aspects of Fijian culture that are instrumental in shaping individual and group behavior within a village or district, but three stand out as potentially the most important through time. First, the chiefly system continues to dominate local politics despite pressures from post-independence democratic politics and centralized government. Second, the well-being of the community is still considered more important than individual achievement; the communal spirit is still strong in many places. Third, social gatherings and ceremonies constantly renew networks and act as a forum for the next generations' cultural education. All three of these aspects are under pressure from the introduction of western ideologies that elevate the position of the individual, including freedom to pursue wage earning jobs and legal and human rights. Nonetheless, traditions continue to remain valuable in the eyes of Fijians.

The chiefly system. Fijian chiefs are the physical and symbolic leaders of their people. In pre-colonial society, people were nothing without their chief, and a chief was nothing without his people (Ravuvu 1983). Chiefs came into power as much through gaining the respect of the people as by lineage. As we saw earlier, the colonial government strengthened the chiefly system through policies and regulations that fixed power in titular positions. Presently, deference to traditional leaders is still a strong

element of Fijian culture that shapes behavior within social groups, especially in groups closely affiliated to paramount chiefs.

Ravuvu (1983) points out that the spirit of '*vakaturaga*', literally to act in a chiefly manner or as if a chief were present, stands as the ideal for Fijian behavior, chiefs or otherwise. To be *vakaturaga*, a Fijian should know his proper role and position in the social hierarchy, showing respect to both those above and below him. Furthermore, she should focus on service to others and remain humble, no matter her rank or power. Thus, chiefs and commoners alike are to act in a *vakaturaga* manner, showing the importance of reciprocal respect and communal service. Fijians tend to embrace the system overall even if they are skeptical of the chief currently in power; they understand that *vakaturaga* is the proper way to behave and thus chiefs and elders must be respected. For many rural villagers, the traditional system of governance is better understood than the government structures. Despite the hierarchical nature of the system, they still feel that chiefs have a better understanding of village needs and represent the people better than does the government (Lucas et al. 2003).

Many observers around the country fear that the emergence of cash economy and other western influences are eroding traditions in general, and the chiefly system specifically (Ravuvu 1983, Lal 2003, Muehlig-Hofmann 2007). This is also much debate about the usefulness and legitimacy of the chiefly system. Critics argue that the lack of transparency in a chief's decision-making makes the institution ripe for corruption, especially since titular chiefs earn money through land leases and fishing permits. While chiefs are supposed to consult with other leaders in the community before making decisions, this step has been neglected in many cases (Fong 2006). Furthermore, more

chiefly positions are currently not filled due to disputes over who is the rightful heir. This occurs at all levels of the social structure, from *mataqali* to *vanua*, but has become especially common at the highest levels, including the Tui Kaba, or titular head of the Kubuna confederacy, the highest traditional position in Fiji (Tuimaleali'ifano 2007). Vacant positions and disputes over titles have been shown to degrade social structures, suggesting that the well-being of the chiefly system is still a strong factor (Muehlig-Hofmann 2007).

Communal spirit. Fijian culture tends to downplay individual achievement and encourage service to the larger social or kinship unit instead. Encouraging characteristics such as humility (*yalo malua*), respect (*veidokai*), and obedience (*talai rawarawa*) reduces an individual's desire to stand out from his group. Deane (1921, 109) noted the challenges to individual endeavors in colonial rural Fiji:

Individualism has had to fight for its existence in Fiji, as perhaps in no other community. Under the ancient system of communism, there was no room for personal initiative. Want of time was one main obstacle, and public opinion another.

If a Fijian strives on behalf of a village or kinship group, he is recognizing the importance of *veinanumi* (consideration or thoughtfulness of others) (Ravuvu 1983, Fong 2006). To try to rise up and be better than one's peers shows a lack of these characteristics, and instead suggests that one is *viavialevu* (arrogant), a biting insult in the Fijian context. An old proverb sums up the proper condition of a group: *e dua ga na ua* – “of one wave” (Raiwalui 1992).

Thus, rural Fijians tend to work in groups, and by regulation all villagers should dedicate at least one day per week to village work. The *turaga ni koro* leads this effort, which may include beautification around the village or district school, preparation for ceremonies, development projects, and a host of other activities. In one example, all men

in a village on Vatulele Island work together to prepare an individual's garden plot for a day, then move on to another plot once work is complete. This concept of working together for the benefit of the group rather than monetary or individual gain is called *solesolevaki*. In pre-colonial days, each of seven clans knew their specific role in the village structure. For instance, the *turaga* were chiefs, the *bati* were warriors, and the *gonedau* the fishermen; each had a specialized duty that, if done properly, filled an essential role and strengthened the social structure within the group (Lucas et al. 2003).

Modern wage jobs and increasing urbanization has certainly acted to erode this aspect of Fijian society and culture, though it has by no means vanished. In villages close to urban areas or in major tourism locations, a large amount of a village's work force is lost to wage-earning jobs six days a week for eight hours per day. There is also concern that villagers are losing the community spirit in the face of outside work. Still, most work done in the village is group-oriented, and it seems that Fijians are happiest when working together. It is extremely rare to see a Fijian working alone in a village. Thus, the communal spirit is still alive in the village context, and social capital increases as work is done together to benefit the kinship group or village.

Ceremonial events and other social gatherings. Along with the benefits of communal work to prepare for them, the numerous social events, to include weddings, funerals, and fundraising events as well as the *bose vakoro* and *bose ni tikina*, also provide an academy for Fijian cultural norms, where youth watch as their elders perform traditional ceremonies or discuss important matters. These ceremonies follow strict patterns of protocol that reaffirms the social structure and the importance of all groups within that structure. Further, the ideals of Fijian behavior are also reiterated, particularly

notions of respect to each other and traditions in general (Ravuvu 1987). In these forums, young Fijians participate by taking care of logistical matters and absorb all that takes place. The learned behavior then permeates the other facets of their life; they understand that there is a right and wrong way to behave as Fijians, and what their role is within a group (Williksen-Bakker 2004). If a given group (i.e. *itokatoka* or family) is not present for an occasion, their absence is almost always unhappily noted by the host group. It is in these social events where reciprocity is manifested to its greatest extent; all kinship groups should work together to meet traditional obligations of any single group.

The bulk of a village's resources go towards fulfilling ceremonial duties both in the local area and around the country. Weddings, funerals, and fundraising events bring together people from many different villages, where they engage in feasting and socializing around the kava bowl for hours. Through these engagements, different groups or members within a group continuously renew and strengthen their social bonds. Information and opinions are also shared in both formal and informal gatherings. While many villagers often complain about the rising costs of meeting these obligations and their inability to escape from them, they still participate in the activities to the fullest extent possible. If someone is not helping out, the rest of the group will look unfavorably upon him and he will feel ashamed (Williksen-Bakker 2004). Thus, the benefits of being an active participant in social engagements tends to be outweigh the costs. Nayacakalou (2001) argues that native ceremonial persists even in commercial and urban areas because the participants derive psychological benefits from these activities.

Summary of social capital in a Fijian context

The existence of social capital is critical for local governance to function smoothly, and one important tool for creation of this capital is through Fijian culture. Chiefly authority, emphasis on communal interests, and social ceremonies all strengthen the influence of the Fijian culture as an element of societal closure. If these cultural elements are adhered to and acknowledged, traditional governance bodies are more likely to be trusted. Where chiefs are in place and making decisions based on consultation through proper channels, villagers are more likely to respect the traditions upon which the chief's power is based. Where individuals and groups know their role and conduct themselves in a *vakaturaga* manner, especially in social settings, villages can achieve ends that might otherwise be out of their reach. Respect for traditions can also give force to informal rules where there are no legal sanctions (Katz 2000). Through a steady stream of social interactions, group work, and respect of traditions, Fijian communities at the village to the provincial level have the means to build and maintain a large amount of social capital

At the same time, the power of culture on the individual may have negative consequences as well, showing that there is a dark side to such strong cohesion. Many Fijians are discouraged by the continued potency of the aspects of their culture described above. Here we see a good example of the tensions between the influence of social capital at the individual and group level. All of the requirements surrounding cultural behavior strictly limit what people can and cannot do in the village context, and may erode their desire to try to achieve more on an individual basis, such as attending tertiary education or filling leadership positions. Even those who have received degrees and worked as civil servants find that when they return home, their role in the village has not

changed and sometimes feel ashamed of their achievements outside of the village.

Unfortunately, women and youth are also more or less relegated to subordinate roles in terms of planning and decision-making. While Fijian culture can create respect for and adherence to strong networks, it also limits what individuals within that network may do. And as with traditions in general, Fijian culture tends to resist change. Thus, the power of social norms and rules can both benefit and hurt governance mechanisms initiated either internally or externally.

CBNRM in the South Pacific: challenges and successes

Advantages and problems with CBNRM

Community-based management of resources has become a prominent development strategy around the world over the past two decades (Kellert et al. 2000, Leach et al. 1999). The presence of legally-defined customary tenure and traditional community structures, combined with generally weak national resource governance structures found in most countries in the South Pacific has made this area a popular ground for CBNRM projects. In Fiji alone, there are dozens of local, regional and international NGOs that are currently active in promoting and implementing CBNRM initiatives, particularly in the field of marine resource management (Thaman and Aalbersberg 2004, Agrawala et al. 2003, Vuki et al. 2000, Turnbull 2004).

In general, CBNRM is seen as an improvement over top-down, centralized approaches for several reasons. First, in decentralized or co-management systems, local or indigenous knowledge may be utilized and the socioeconomic needs of the local communities are recognized (Berkes 2003, Drew 2005, Kellert et al. 2000). Second, community-based approaches can be implemented more easily since the resource users

are making management decisions in the specific local context, in turn empowering rural communities to improve their own livelihoods (Lane and MacDonald 2005, Pretty and Ward 2001). Lastly, using participatory approaches to learning during all phases of the project, to include planning, will improve the local governance structures and increase the overall management capacity of resource users (Keen and Mahanty 2006, Lane and MacDonald 2005, Fong 2006, Lucas et al. 2003). Overall, it is hoped that CBNRM projects will lead to more knowledgeable communities and leaders, as well as more sustainable use of resources by linking traditional and scientific approaches.

CBNRM projects have also come under a great deal of criticism, both in theory and practice. The most common argument against this method is that the idea of community is oversimplified. NGOs and the donors that fund them approach 'community' as an ideal entity that is homogenous, harmonious and well-defined entity. In fact even defining what constitutes the community is fraught with uncertainty (Agrawal and Gibson 1999, Leach et al. 1999, Kumar 2005). By not appreciating the dynamics between different groups within communities, CBNRM projects end up exacerbating pre-existing tensions created by struggles over power or economic gains. Often, some groups manage to benefit from the project while others either remain *status quo* or become even more marginalized (Li 2002). Internal conflicts over mismanagement of funds, corruption of chiefs and other leaders, and the breakdown of traditional leadership and structures have at times resulted in the withdrawal of villages, NGOs, or donors from projects (Warner 2000).

Another problem with CBNRM methodology is that local communities are never truly empowered with decision-making. This creates resentment towards or dependency

upon the continued presence of the external facilitating organization. Arnstein (1968) provides a typology of participation ranging from manipulation to consultation and finally to actual delegated power and control over decision-making. When participation in CBNRM projects falls into the lower levels of this typology, local communities are not empowered. Examples where participation did not lead to local empowerment include the failure of government to hand over management authority to a Maori village in New Zealand (Coombes 2007) and where NGOs retained decision-making authority to a degree where a Samoan village decided to end the project (Elmqvist 2001). Projects may also create a sense of dependency on the facilitating organization for both funding and decision-making. Turnbull (2003) argues that a perceived need for technical expertise in conservation projects provides the *raison d'être* for foreign intervention. She contends that “it makes Pacific Islanders look vulnerable and in need of help to ensure they interact with nature in appropriate ways. They are portrayed... as victims of their geographical circumstances, their own actions, and lack of expertise” (Turnbull 2003, 11).

Although it is doubtful that NGOs and donors intentionally establish this dependency, we can say with more certainty that the discourse concerning resource management suggests that the local communities cannot go it alone. Combined with this problem is the fact that external actors have an agenda of their own to implement and follow (Lane 2006, Roue 2003, Fernando 2003). NGOs are obligated to show their donors that funding has been used effectively, and are not able to delegate this accountability to the community. Dependency and a real or perceived maintenance of the *status quo* in terms of power structures between stakeholders are two of the most difficult challenges facing CBNRM practitioners.

Challenges in CBNRM projects in Fiji

All of these challenges have prevented CBNRM projects implemented in Fiji over the past five years from achieving their goal of stronger village-based resource management and governance. First, two waste management projects resulted in increased internal divisions. In one case, two adjacent villages disagreed over what and how activities should be implemented, preventing the village from receiving a F\$50,000 grant (Villager, Rewa Tikina, pers. comm.). In another, individuals within a village ended up pointing fingers at each other during the final project review over where pollution was coming from, an issue that the NGO-facilitated project failed to resolve. There have also been several examples where villagers engaged in ecotourism projects began arguing over the distribution of benefits (Warner 2000, Malani 2001). Finally, one project facilitated by FLMMA was endangered by disputes over who was the high chief in the area. Not aware of this division, FLMMA inadvertently worked outside of the existing leadership structure during the early planning phase, which initially reduced participation by some villages (Fong 2006).

Second, several village-based projects funded by government agencies or NGOs, started strong but have since stalled once external funding was no longer available. In one case, a village received a loan from the Fiji Development Bank to buy a new boat to facilitate day trips from large resorts on Viti Levu. They bought the boat and started operations, only then realizing that they needed to purchase insurance as well (Peace Corps Volunteer, Vatulele Island, pers. comm.). In another case, a village on Vanua Levu leased a tract of rain forest to the National Trust of Fiji, a statutory body under the National Trust for Fiji Act (Cap 265), to establish a rain forest park as an ecotourism

attraction. Some village youth received training as rangers and guides, and a few kilometers of trails were cut, but the National Trust has given little assistance (outside of payments for the lease) for further development of the park infrastructure or for advertising (Peace Corps Volunteer, Waisali Village, pers. comm.). Elsewhere, an ecotourism project funded by an intergovernmental organization was premised on the idea that conservation would be funded by tourists. This result, however, has not eventuated, leaving the villages dependent on donor funding and with increased expectations about future incomes (Turnbull 2003).

Finally, many of these CBNRM projects fail to empower the villages with increased motivation or knowledge. In most cases, a select few village participants learn about conservation ideas and are motivated to continue work, while the rest of the resource users are not fully engaged in the project. Without strong internal communication links and inclusion of different groups during planning, projects may face problems in implementation and enforcement of decisions. At one FLMMA site, a survey showed that most people in the village did not understand the fishing regulations or purpose of the *tabu* area, suggesting that too few members of the village actively participated in the planning process and that those who did failed to effectively disseminate the message (Middlebrook and Williamson 2006). Indeed, NGOs often struggle in their efforts for greater inclusion in project planning and decision-making bodies, especially participation by women and young people, despite this being a stated goal of the project (Lucas et al. 2003, Keen and Mahanty 2006, Middlebrook and Williamson 2006). In another FLMMA site, once villagers saw the benefits of using *tabu* areas to restock fisheries, many wanted to immediately reap the benefits rather than

understanding the value of continued conservation (Keen and Mahanty 2006). Lastly, both WWF staff and project leaders from villages in a different coastal district on Viti Levu expressed their frustration that activities in a five-year resource management plan developed in 2001 had not been implemented, citing as the main problem a lack of commitment by the majority of villagers. Both legal and illegal fishing continued to occur in the *tabu* area, and that there was little that could be done to prevent these transgressions (WWF staff, pers. comm.; Villager, Tikina Wai, pers. comm.).

Successes of CBNRM in South Pacific

Fortunately, there have been success stories as well in the South Pacific. Project sites with positive results have been able to succeed by utilizing, and strengthening, the existing governance structures. In Samoa, a government-facilitated program brought fisheries staff officers together with local *fono*, or village councils, and chiefs to establish village by-laws concerning marine resource management (King and Faasili 1999). Over forty villages established conservation rules for marine resource management through a similar demand-based program in Vanuatu (Hickey and Johannes 2002). Despite the problems mentioned above, FLMMA has received significant attention and praise internationally, as it has been successful in establishing *tabu* areas and improving local livelihoods by strengthening local governance structures and internal-external networks (Gombos 2007, Tawake and Aalbersberg 2002). In Korolevu-I-Wai Tikina, research showed that household income had increased and *iqoliqoli* health improved due to the project (Fong 2006). One factor that contributed to this success was the participation of chiefs in the district. Their participation in resource management and communication

links between the villages and government offices was of demonstrated importance in other areas of Fiji (Cooke et al. 2000).

Indeed, the importance of chiefs goes beyond the village level. In Macuata province, the high chief of the province initiated a project in conjunction with WWF to protect the Cakau Levu, the third longest barrier reef in the world (Ministry of Fijian Affairs 2006). The Tui Macuata has also been lauded for his decision to treat all people living in his province as members of a single community, meaning that Indo-Fijian populations are represented in traditionally all-Fijian venues like the *bose ni yasana* (Lucas et al. 2003). In two other cases in Fiji, programs developed at the provincial level have provided benefits for the village and districts. The Kadavu *Bose ni Yasana*, fisheries office and FLMMA have created the Kadavu Yaubula Management Support Team that travels to villages to help survey and monitor protected areas and also provides awareness training. Based on this example, the Cakaudrove *Bose ni Yasana*, in collaboration with IAS staff, has established its own support team in 2007 (*Fiji Times*, 30 July 2007). In both of these cases, there was strong support and active participation from the traditional authorities in the *Bose ni Yasana*. Overall, functional traditional leadership structures at various scales have been a key component in successful CBNRM initiatives throughout the South Pacific and Fiji particularly where government offices are also stakeholders in the projects.

Summary of CBNRM in the South Pacific

In summary, CBNRM projects in the South Pacific have struggled to achieve lasting results for many of their project goals. All of the projects listed above, like the Coral Gardens Initiative, relied on the existence or development of strong local

governance institutions. Except for a few successful cases, however, most projects fail to create a strong conservation ethic or sense of project ownership among local leadership. Common challenges include pre-existing internal divisions and a poor understanding of these local dynamics, failure to create good communication between local and external groups, problems with enforcement of informal rules and decisions, and lack of motivation and/or participation from local authorities and villages. As projects proceed, all of these things can lead to dependency on outside motivation and money. Also, where leadership is not actively involved, or disputes exist over leadership, then externally-facilitated projects are not likely to succeed. On the other hand, if chiefs and other traditional leaders are involved and communication networks function within and between villages and external organizations, then there is a much better chance that all stakeholders will benefit from the project. A particularly important external link is with government offices, especially in countries like Fiji where a legally-defined co-management system is in place.

At the village level, then, the success of governance development in CBNRM projects relies greatly on utilizing social capital. And as mentioned above, social capital in a Fijian village rests in large part on how well cultural institutions are functioning. In areas where CBNRM facilitators have found strong advocates in the traditional leadership, other cultural institutions will likely support rather than hinder new approaches to resource management. NGOs must have a foundation of pre-existing social networks upon which to build, otherwise it is extremely hard to create. Furthermore, any exit strategy must depend on the successful development of networks built on strong leadership, lines of communication, mutual respect between stakeholders,

and external links to government offices or businesses. In short, social capital is both a prerequisite for and an essential output of externally-facilitated CBNRM projects in pursuit of improved local natural resource governance and management. At the same time, facilitators must also understand that the benefits derived by building social networks may affect individuals and groups within the network differently.

CHAPTER 4: SETTING

Cuvu Tikina

Demographics

Cuvu Tikina, one of nine coastal districts in Nadroga/Navosa Province, stretches for eight kilometers along the Queen's Highway, the main road that runs along the southern coastline of Viti Levu. It is 70 km southeast of the international airport near Nadi Town and its easternmost point is 5 km west of Nadroga/Navosa Province's hub, Sigatoka Town.



Figure 4.1. Topographic map of Cuvu Tikina (outlined in gray), including the iqoliqoli. Source: Fiji Land and Survey Department (1992)

Cuvu Tikina is comprised of seven Fijian villages, all located on the coast. From east to west these villages are: Yadua, Naevuevu, Sila, Tore, Cuvu, Rukurukulevu, and Hanahana. All but Yadua are situated along the 'old road', the main thoroughfare until

the 1980s when the Queen's Highway was built. There are also two settlement areas within the district, one adjacent to Hanahana called Naidovi and another inland named Navovo. The estimated total population, based on statistics at the Cuvu nurse station compiled in 2002, is around 2500-3000, with populations in villages ranging from 75 to 400. Naidovi has a mixed population of Fijian and Indo-Fijian, with many residents working at the Shangri-La's Fijian Resort, but some working in Sigatoka and in Naidovi itself at small businesses. There is also an Indo-Fijian-run primary and high school in Naidovi. Scattered across the inland area are individual farm plots, held mostly by Indo-Fijian settlers who are leasing the land from *mataqali* in the Tikina. Adjacent to Cuvu Village are the district primary school and provincial high school, both with all-Fijian student bodies.

Land and Fishing Grounds

Much of the land in Cuvu Tikina is under cultivation, including sugar cane on commercial farmland leased by Indo-Fijians, and plots surrounding the villages tended by Fijian families primarily for subsistence and ceremonial purposes, though there is some commercial farming by individuals in each village. Around the cultivated areas are mixed landscapes of scattered forest, primarily in the low-lying areas, and grassland along hill slopes and ridges. There are patches of dense broadleaf forest along creeks near Yadua and Hanahana, and a mangrove forest extending along a creek that abuts Naevuevu to the east and north. A fringing reef runs along the entire coastline broken by narrow passages at Yadua, Naevuevu and Cuvu Harbor between Cuvu and Rukurukulevu Village. The lagoon area ranges from 200 meters to a kilometer from shore to reef and makes up the *iqoliqoli* shared by registered *itokatoka* in the *Vanua* of Yavuasuna and

Voua. A baseline survey conducted in 2004 by Coral Cay Conservation found higher than average live coral coverage as compared to the rest of the Coral Coast (5.93% compared to 2.7%), but that algae (*Sargassum*) dominated the benthic environment. Higher than average densities exist for several important finfish species, including parrotfish (*Scaridae*), grouper (*Seranidae*), and wrasse (*Labridae*) but low densities were found for invertebrates such as sea urchin (*Tripneustes* sp.) and *Octopus* (Rowlands et al. 2005). Cuvu Tikina shares the *iqoliqoli* with Voua Tikina to the west.

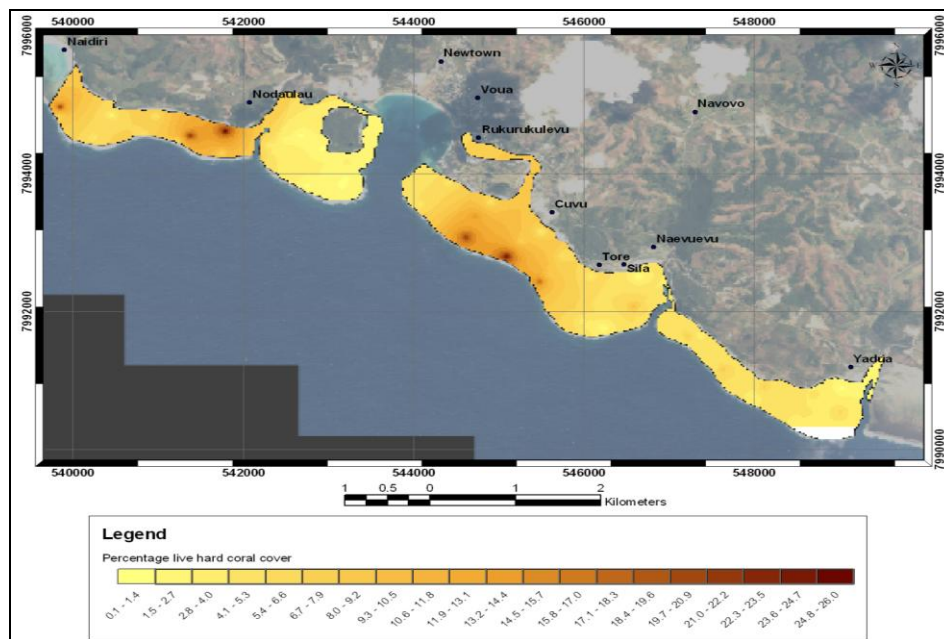


Figure 4.2. Live hard coral cover in the iquiliqoli shared by Cuvu and Tuva Tikina. Live coral cover is low, averaging 5.9% of total area. Source: Rowlands et al. (2005).

Economic development and pollution

The primary source of income is the Shangri-La's Fijian Resort, built on Yanuca Island between Cuvu and Rukurukulevu and connected to the mainland by a short causeway. Built in 1966, it has grown to be the largest resort along the Coral Coast, with over 550 rooms and a staff nearing 900 when the hotel is at full occupancy (Human Resources Assistant, Fijian Resort, pers. comm.). The hotel leases the land from an *itokatoka* in Cuvu Village for over F\$2 million (~US\$1.2 million) per year. There are

also a number of other small resorts and businesses along the coast, including a high-end furniture store specializing in coconut products. Other villagers work in Sigatoka Town or other urban areas in businesses and government positions, with non-residents (who are officially ‘from’ the village through kinship ties but living elsewhere) bringing income to the villages through remittances, particularly for ceremonial and fundraising purposes. Overall, the villagers in Cuvu Tikina are generally more integrated into the cash economy than the average Fijian because of the proximity of employment opportunities, and thus the expectation to contribute financially is also greater. Cuvu Tikina is considered a very wealthy place by other Fijians from all around the country.

Due to increasing development in the area, a number of environmental problems have emerged. Population has increased significantly in both villages and settlements, mostly due to the increase in job opportunities in the tourism industry. This has led to an increase in both solid and liquid waste that contributes to the degradation of the marine ecosystem (Ministry of Environment 2007). A study conducted by the Institute of Applied Science at the University of the South Pacific along the Coral Coast estimate that about 50% of nutrients found in aquatic ecosystems near populated areas come from village-based sewage, 40% from piggeries that are usually near creeks or the ocean, and about 10% from resorts (Mosley and Aalbersberg 2004).

Land-based pollution, combined with overfishing of herbivorous species such as grazing fish and sea urchins, has led to increased algal (*Sargassum*) growth and decreased live coral cover (Mosley and Aalbersberg 2004). Overfishing in Cuvu can be attributed to a number of factors including population increase, improved technology that leads to larger catches, and greater numbers of commercial fishermen. These factors

are common across Fiji and other areas in Oceania in general (Tawake and Aalbersberg 2002, Johannes 2002, Veitayaki 1998). Also, destructive fishing practices such as the use of fish poison (*Derris trifoliata*), trampling on coral and substrate, spear fishing and dragging gillnets also contribute to the degradation of the *iqoliqoli*. Solid waste can be found in many areas along the coast, particularly the beach areas near Naidovi settlement. It is not an uncommon practice for villages and settlements to dispose of garbage directly into the water or mangroves to simply get it out of site of their houses.

While there are regulations (i.e. Fisheries regulations (1965) and Public Health Act (Cap 111)) prohibiting many of the above activities, they are not actively enforced. Local residents and businesses are presented with an incentive to pollute and overfish because it costs them more to follow the rules. Thus, CBNRM projects have focused on increasing awareness of problems associated with environmental degradation and assisting villages and other stakeholders in developing solutions that can be implemented locally. Due to the amount of development along the Coral Coast and the negative impact on marine ecosystems, along with the potential number of project stakeholders and visibility as the heart of the tourism industry, the area has been a popular site for CBNRM projects. Since 2000 there has been at least one project in each district along the coast of Nadroga/Navosa province (Thaman and Aalbersberg 2004).

History of Cuvu

To better appreciate the context of this study, it is important to understand the cultural and socio-political historical context of the area. The paramount chief of Nadroga/Navosa is from Cuvu Village and holds the title of Na Turaga Na Kalevu na Tui Nadroga (hereafter Kalevu). Traditionally, the Kalevu was the paramount chief of the

entire western half of Viti Levu, though subordinate to Rewa in the east (Derrick 2001). This pre-colonial alliance has continued in modern-day politics, as the chief of Rewa province, the Roko Tui Dreketi, is the traditional leader of the Burebasaga confederacy, which includes all of western Viti Levu.

The holder of the Kalevu title hails from the *Itokatoka* Nakuruvakarua in the *Yavusa* Louvatu (Volavola 2005). While most chiefly titles are passed on through generations of the original landowners, the accession of the current chiefly family did not follow this pattern. Instead, as noted by Nayacakalou (2001), relative newcomers may be given the chiefly title or invaders may usurp it through some form of domination. According to the Native Lands Commission's study in the early 20th century, the chiefly title of Kalevu was gained in the following way:

About the middle of the 18th century a number of yavusa had established themselves at Lomolomo, a village on the Sigatoka River, and had decided to elect a common chief. It is not quite clear who was selected...In the course of the preparations for the installation ceremony, a fishing party went down to Cuvu to get fish for the usual feast. On a point of the island of Yanuca, they found a stranger who had been cast up by the sea....He appears to have been a man of striking appearance and personality for he was regarded by those who found him as a 'god'. They conducted him to Lomolomo where he was at once hailed by all as their chief and placed on the Vatu ni Veibuli or coronation stone, and installed with all due ceremony as their Kalevu. (Council Paper No. 27 of 1914, quoted in Nayacakalou 2001)

Later, probably sometime in the 19th century, the chiefly village moved from near the Sigatoka River to a site where the Kalevu Centre, a cultural attraction for tourists, rests today, and then to its current location of Cuvu Village, about 300 meters to the east (Cuvu villager, pers. comm.).

At present, the Fijian population of Cuvu Tikina is composed primarily of two *yavusa*, Yavuasuna and Louvatu. The *Yavusa* Yavuasuna is the traditional landowning unit (*tauvei ni qele*) for most of the territory of the district and for the *iqoligoli*, while the *Yavusa* Louvatu are relative newcomers. But as part of a 'coronation' of a paramount

chief, with the drinking of a bowl of *yaqona*, all the riches of the land are given to the chief, who in turn has a responsibility to look after all aspects of the *vanua* (Ravuvu 1983; Nayacakalou 2001). Thus, ownership of and authority over the land and *iqoliqoli* is held by the Kalevu. The center of power has remained in Cuvu Village, which is considered the traditional headquarters of Nadroga/Navosa province. This also explains why a single *itokatoka* in Cuvu Village from the *Yavusa* Louvatu receives the lease money from the Fijian Resort. Villagers in Cuvu, Tore, Sila and Naevuevu are part of the *yavusa* Louvatu while those in Yadua and Rukurukulevu make up the *Yavusa* Yavuasuna. Hanahana is a relatively new village and has residents from various parts of the country. Because of the prestige that Cuvu Village continues to enjoy both economically and politically, there is some resentment and animosity towards the chiefly village from some of the traditional landowners. While the rest of the country considers Cuvu Tikina to be wealthy, villagers within the Tikina say the same thing about the people of Cuvu Village. These historical complexities create tension within social networks.



Figure 4.3. The 'Were Levu' in Cuvu Village. This building is used for the Kalevu's official business and functions.

The Coral Gardens Initiative and other CBNRM Projects in Cuvu Tikina

Six different organizations have facilitated community-based natural resource projects in Cuvu Tikina in the decade from 1997-2007, but one stands out as the most intensive effort at governance development: the Coral Gardens Initiative facilitated by Partners in Community Development-Fiji (PCDF). Four other nongovernmental organizations, a government agency, and staff from the Institute of Applied Science (IAS) at the University of the South Pacific (USP) also facilitated projects in the area. Other NGOs besides PCDF include the Organization for Industrial, Spiritual and Cultural Advancement (OISCA), and Seacology. The IAS department at USP facilitated the Integrated Coastal Management (ICM) project. The Ministry of Tourism also funded an ecotourism project in one village.

The intensity (number of activities and resources used) and duration of each project varied widely, as did the goals and strategies. Of the six projects, only PCDF and ICM included governance development in their goals and devoted resources and time to that effect. ICM's focus, however, was at the provincial and national level and did not directly attempt to develop governance at the village level through on-site activities. Nonetheless, each project included measures meant to sustain the project once the external organization left the site. While PCDF's efforts are the focus of this research, it is useful to at least gain an understanding of all the projects and their various strategies, as they provide other models of community participation. Also, there was some coordination and overlap of activities in the projects that have affected and may continue to influence the sustainability of each organization's efforts.

PCDF: Wai Bulabula and the Coral Gardens Initiative

According to its website, PCDF's mission is "to empower people to make informed decisions and working in partnership with communities to achieve equitable, holistic and sustainable livelihoods" (www.fspi.org.fj). Various projects have focused on health and community awareness, sustainable management of natural resources, good governance, human rights and small business development.

The Wai Bulabula ("Living Waters") and Coral Gardens Initiative in Cuvu Tikina began in 1999, designed as two branches of a holistic approach to coastal resource management and restoration, and rather abruptly ended in 2003 after continued funding from the Shangri-La's Fijian Resort did not materialize. Cuvu Tikina was selected as the project site because the Fijian Resort agreed to match funds. Of all of the projects discussed in this paper, PCDF's work was the most intense in terms of activities conducted and resources spent. Most of the project staff members, including the manager, were Fijians, though an American marine scientist was the project scientist and provided many of the ideas for strategies and activities. Managers from the Fijian Resort were also active in the project until a managerial staff changeover in 2003. One PCDF staff member was assigned to work at the resort for eight months in 2003 on a number of sustainable tourism initiatives, and was active there until funding ceased.

The Wai Bulabula project's aim was to decrease nutrient loading into the aquatic environment of Cuvu Tikina to help restore coral reef, mangrove and stream health (unpublished overview). The main activity of this project was the construction of an artificial wetland at the resort to reduce liquid waste release into the lagoonal area. After the Wai Bulabula project started, the Coral Gardens Initiative was initiated to engage the

local villages in marine resource management. Its goal was to develop a community-based model of coral reef management and marine resource recovery by empowering the resource-owning communities (villages) through existing traditional and governmental structures (PCDF project review). Though these two projects were separate, it is difficult to separate village-based activities into either project, though for reporting purposes they were listed under the Coral Gardens Initiative. These activities included eight participatory action and learning (PLA) workshops and nine waste management workshops, where villagers offered their input on environmental problems they were facing, along with five management planning workshops. There was also a seaweed farming trial, establishment of a mangrove nursery, a coral farming training workshop, and creation of an Action Community Theatre group. A number of scientific experiments and active marine restoration activities also were completed during the project. This included the construction of fish houses at the resort to raise money for conservation and restore fish habitat in damaged areas of the lagoon, the removal of thousands of crown-of-thorn starfish, restocking of giant clams (*Tridacna*), and a hydrological restoration plan.

As mentioned in the project goal, the Coral Gardens Initiative also sought to create governance mechanisms to allow villagers to better manage their resources. Five specific activities focused on this goal: 1) creating an environmental committee, 2) selecting and training fish wardens, 3) creating a system of ‘*tabu*’ or marine protected areas, 4) developing a five-year management plan, and 5) establishing an environmental trust fund. First, the Cuvu-Tuva Tikina Environmental Committee was established and approved by the *Bose ni Tikina* to suggest and oversee project activities and to act as the

primary forum for resource management in the future. The Environmental Committee was also supposed to act as the liaison between the villages and the resort and other external agencies. Second, fish wardens were selected by each community and PCDF facilitated two workshops to teach them about fishing laws and their duties and responsibilities as volunteers. Third, three ‘*tabu*’, or marine protected areas (MPA), were established, three in the lagoon adjacent to Cuvu Tikina, one in the lagoon adjacent to Tuva Tikina, and one mangrove protected area adjacent to a village in Cuvu. These areas were meant to be permanent, with ‘refrigerator’-style *tabu* areas (open and close) on either side that would rotate on a yearly basis to provide buffer zones. Fourth, PCDF and the Environmental Committee drew up a five-year management plan for Cuvu Tikina listing environment-related guidelines and activities to be implemented in collaboration with PCDF, other NGOs and government agencies (Cuvu Environmental Management Plan, 2001). The *Bose ni Tikina* and the Kalevu signed the management plan on 4 July 2001. Lastly, to fund future environmental activities, PCDF worked with managers at the resort to set up an environmental trust fund, with the idea that a small portion of receipts from each visitor would go towards conservation activities.

The Coral Gardens Initiative and Wai Bulabula project received significant national and international attention. PCDF used the site as an example for projects elsewhere in Fiji and Tuvalu, as did the EU in their Coral Gardens Initiative in the Solomon Islands, Vanuatu, and Kiribati. The UNEP also selected the site as a “model site for coral reef conservation” and declared it an official ICRAN site, reconfirmed by an ICRAN official visit in 2006. The Asia Development Bank created a 30-minute documentary in 2003 that was shown globally on BBC World twice in August of 2003.

Thus, the methods used in the Coral Gardens Initiative have had an impact both regionally and globally.



Figure 4.4. Tabu areas designated during the Coral Gardens Initiative.
Source: Cuvu Tikina Environment Management Plan.

After funding ceased and PCDF left, however, most of the governance measures became ineffective. The Environmental Committee has not met since 2003 and fish wardens have also not been active, citing lack of resources and no funding as the main challenges. The *tabu* areas are still in place and recognized by villagers, but fishing has often been allowed to provide food for traditional ceremonies, usually with permission from the Kalevu. In other words, they have been treated more like traditional *tabu* areas rather than permanent no-take zones as the management plan described. This is probably because villagers were not convinced or aware of the long-term benefits of keeping the areas closed to fishing, or were not willing to lose short-term benefits to achieve these ends. Also, the environmental management plan was not distributed widely and thus was not an important instrument in guiding resource management decisions. The environmental trust fund was never established at the Fijian Resort, though a separate

agreement with the dive shop has continued to pay an allotted amount for each diver to the resource owners.

Other CBNRM projects in Cuvu Tikina

IAS: The Integrated Coastal Management (ICM) Project. The ICM project began as a joint project between USP and the University of Rhode Island's Coastal Resource Center (CRC) in 2003, using the Coral Coast of Viti Levu as its pilot site. The project's goals and strategies emerged from a national three-day workshop in April 2002, which included multi-level consultation, planning, and implementation of coastal activities; the need for communities to make resource management decisions supported by government and civic bodies; and that ICM decisions should also reflect the economic needs of communities. The overall stated goal was to "improve the planning and management of coastal resources in Fiji using an integrated approach" (ICM 2006).

The project created three different consultative bodies in an attempt to include as many stakeholders as possible to direct activities: a National ICM Committee with members from applicable ministries, particularly the Ministry of Fijian Affairs, and other organizations; a Coral Coast ICM Committee with representatives from tourism businesses, coastal districts, and NGOs; and later, in 2005, the Coral Coast Region Coastal Resources Management Committee consisting of representatives from every coastal district in Nadroga/Navosa province. The project was coordinated through the Nadroga/Navosa Provincial Office for all projects along the Coral Coast. A Peace Corps Volunteer was also assigned to the Provincial Office in 2003 to assist in facilitating activities. Besides funding various small projects, ICM also sought to coordinate efforts of various NGOs, consultants and businesses for community-level projects, including

FLMMA, OISCA, Coral Cay, WWF, and to a lesser extent, PCDF. In short, rather than being a separate CBNRM project, ICM attempted to coordinate all environmental activities along the Coral Coast.

At the national level, ICM worked to develop guidelines for village governance and by-laws (*lawa lailai*) to be enacted through the Fijian Affairs Board and Provincial Office. Along the Coral Coast, ICM implemented or facilitated a number of activities mostly aimed at improving waste management and thus reducing aquatic pollution from piggeries, villages, and resorts. Although Cuvu Tikina had representatives at various workshops and meetings since 2003, the first ICM-coordinated community activity, a waste management workshop facilitated by Peace Corps Volunteers, occurred in September, 2005. In 2006, ICM gave a presentation to the Kalevu, a protocol measure previously ignored. They also presented to the *Bose ni Yasana* again in 2006 (first time was in 2003), where they decided that a subcommittee should be formed to look at recommendations from ICM.

ICM staff hoped that district representatives would be the spokesmen for ICM activities and would present recommendations for activities at their respective District Council meetings. After the initial two-year project, it was hoped that the Provincial Office would take over the active management of activities. Unfortunately for the project, neither of these things occurred. Although Cuvu Tikina sent representatives to both the CCRCRM and Coral Coast ICM Committee meetings, these representatives did not speak about environmental activities at the District Council meeting, though they did discuss the topics in informal gatherings and actively worked with me on several projects. At the Provincial Office, the ICM coordinator was not the Roko Tui or Assitant Roko

Tui, positions that have both authority and recognition by the communities in their respective districts. Thus, ICM activities tended to take the back burner due to lack of support by the office as a whole (ICM staff member, personal comm.).

ICM staff members have indicated that while activities along the Coral Coast will continue to be supported on a demand basis, the focus of the project will shift to the national level. There was general frustration with the Nadroga/Navosa Provincial Office's seeming indifference towards taking ownership of the project and with the ineffectiveness of CCRCRM meetings. Still, the ICM coordinator at the Provincial Office is continuing to advocate environmental management and to include such measures in each district's five-year development plan.

OISCA: Children's Forest Programme, Mangrove Planting, Coral Restoration.

OISCA International is a Japanese NGO, founded in 1961, active in many countries from Southeast Asia through the South Pacific. Their stated mission is to “contribute to Humanity's environmentally sustainable development through a holistic approach emphasizing the interconnectedness of agriculture, ecological integrity, and the human spirit” (www.oisca.org). OISCA engages both children, through schools, and adults through hands-on activities to help empower local communities in developing countries.

Of the projects discussed here, OISCA was the first to be involved in Cuvu through their Children's Forest Programme in the mid-1990s. As part of this program, students and teachers at Cuvu District School assisted with pine and fruit tree planting around the school compound to prevent air pollution. Their next project in the district was an afforestation project in Yadua Village where they planted coconut palms and mangroves along the coast and pine saplings further inland. A few years later, more

mangroves were planted near one village and a mangrove nursery established in the mangrove *tabu* area designated in PCDF's project. Upon starting the coral restoration project in 2001, the coordinator of the mangrove afforestation requested to be part of the project as part of a village-owned ecotourism project then, and still, under construction near Tore Village. Tore also received mahogany saplings and planted them in a communally-owned forest in 2006. For both the mangrove and coral activities, one or two OISCA reps came to teach the proper methods and then assisted in planting the mangroves and creating the structures used in coral replanting. OISCA reps then came by occasionally to check on the status of the projects, and were generally available if villages requested assistance.

The pine saplings did not succeed in either location, though the coastal trees, mangroves, and fruit trees are all growing well. The first coral replanting stock was washed away during intense tidal activity and another rack had not yet been completed during this research. OISCA's work has focused on tangible, hands-on activities and has not included any attempts at governance development, though they have increased awareness of and motivation for environmental activities in Cuvu Tikina.

Seacology: Marine Protected Area for Community Hall. On its website, Seacology, a U.S.-based NGO, states that it is the "world's premier nonprofit environmental organization with the sole purpose of preserving the highly endangered biodiversity of islands throughout the world" (www.seacology.org). They seek to achieve biodiversity conservation through the establishment of locally-controlled land and marine reserves in return for community development projects, typically school buildings and community halls. It has funded projects around the world, including

dozens in the South Pacific. It has completed twenty projects in Fiji, with the earliest starting in 1999. Seacology has one representative in Fiji who gathers and processes requests, then facilitates implementation of approved development projects. The communities sign a contract acknowledging their commitment to respecting the reserve for an allotted number of years. At the same time, Seacology commits to maintaining the buildings for the same number of years. There does not seem, however, to be any verification mechanism that the reserve is being respected. Rather, it is the village's responsibility to govern itself and uphold its end of the bargain (Sila villager, pers. comm.).

Through a loose kinship bond between the Seacology representative and a villager in Cuvu Tikina, Sila Village heard about the NGO's activities. Through consultation with first one villager, then the *Bose Vakoro*, Sila agreed to establish a ten-year, 24,710 acre marine protected area in return for the construction of a community hall after receiving permission from the Kalevu. Construction of the hall began in 2005 and was completed in April 2007. In April 2007, the Seacology chairman and around 400 representatives from Nu Skin Enterprises, a skin care corporation which funded the project, came to Sila for the grand opening. The actual location of the *tabu* area is the same as one of the *tabu* areas established during the Coral Gardens Initiative project six years earlier. During the grand opening, the Seacology chairman announced that the Kalevu told him that the *tabu* area actually stretched from Sila Village all the way to the Fijian Resort, which was true as of the previous month when the Kalevu made the entire *iqoliqoli* off limits to fishing.

Ministry of Tourism and Tore Village: Veitoba Backpacker's Resort. The Ministry of Tourism provides ecotourism grants to villages and Fijians to help develop tourism ventures in rural areas. The goals of this program, initiated in 2002, are to attempt to integrate rural Fijians into the tourism industry and help to grow the tourism sector in general (www.fiji.gov.fj). The program is administered by the Ecotourism Unit, an office within the Ministry of Tourism. Tore Village applied for and received a grant of F\$20,000 to build four small traditional Fijian *bure*, or thatch homes, on their native land known as Veitoba, located between Cuvu and Tore Village. The leader of the youth group and veteran of the tourism business led efforts to build the *bure*, with the idea that this would be a project for the village youth to implement. Four *bure* were completed using the grant money. At that time, the board of directors did not include traditional leaders, as it was considered important to keep business and traditional matters separate. In 2006, the project manager found a temporary job in tourism in another country for six months. He hoped to raise enough money to finish the project upon his return and open up the backpacker resort for business.

When he returned, however, he discovered that a new board of directors had been chosen. This time, traditional leaders were part of the board. These leaders felt that the youth group leader was not the right person to be in charge of the project; at least one felt that the former project manager was only concerned for his own welfare. The former project manager was offended by his removal and did not want to participate any further in the project. In late 2006, Tore Village planned to raise around F\$3000 to purchase a lease for the land in order to get a loan from the bank for further development of the backpacker resort. They succeeded in raising the money, but then it was used for

other purposes. As of August 2007, no further work had been done at the site. The former project manager found another job opportunity outside of the country. Aside from supplying the seed money, the Ecotourism Unit did not provide any other kinds of support in the project.

CHAPTER 5: METHODOLOGY

Ethnographic approach

This study focuses on the activities related to governance development that took place during the Coral Gardens Initiative from 1999-2003, primarily through the scope of participants' memories and my observations of their current activities. It specifically seeks to answer two related questions. First, what were the challenges that PCDF faced when implementing governance development mechanisms? Second, why were these challenges present during this project? It is important to recognize that the subject of the study does not just include an assessment of the actual governance activities that took place during the Coral Gardens Initiative, though that provides the framework for the research. In other words, this paper is not only about the results of PCDF's work in Cuvu Tikina. It also examines how the interactions between key players affected, and continue to alter, the results of the project, as well as the impact of cultural constructs.

I chose an ethnographic approach to examine these social dynamics and better understand both what happened and why. Ethnography, in general, is a process that attempts to interpret and describe social interactions between people or institutions through immersion of the researcher in the research setting (Berg 2004). In ethnography, it is essential that the researcher place himself within the context of what he is studying and understand that he becomes an active participant in the social setting (Berg 2004, Burawoy 1998). By doing this, the researcher should gain a better appreciation of the forces at play in the given social phenomenon. This approach comes naturally as a Peace Corps volunteer living in a village setting and engaged in environmental activities and discussions. My research and analysis has generally paralleled the strategy of analytic ethnography as defined by Lofland (1995, 30):

I use the term “analytic ethnography” to refer to research processes and products in which, to a greater or lesser degree, an investigator (a) attempts to provide generic propositional answers to questions about social life and organization; (b) strives to pursue such an attempt in a spirit of unfettered or naturalistic inquiry; (c) utilizes data based on deep familiarity with a social setting or situation that is gained by personal participation or an approximation of it; (d) develops the generic propositional analysis over the course of doing research; (e) strives to present data and analyses that are true; (f) seeks to provide data and/or analyses that are new; and (g) presents an analysis that is developed in the senses of being conceptually elaborated, descriptively detailed, and concept-data interpenetrated.

By acknowledging the importance of these ‘variables’ in research design and trying to implement them during the study, the researcher should develop a thorough understanding of the issue based on the site and context where the study takes place. From this specific context, one can then make broader generalizations by identifying broad propositions that link this case to others. While Lofland (1995, 30) speaks about ‘propositional answers’ as broad or even universal characteristics of humanity, my scope is limited to Fiji since the Fijian culture is a critical component of the analysis.

Qualitative methods were used to gather data concerning the governance development activities and to understand the larger forces that also influenced the results of the project. A qualitative approach allows researchers to gain a deeper understanding of the subject, and enables the emergence of a more descriptive and complex picture of the participants and setting (Berg 2004). In order to engage the complexities of governance development, an in-depth analysis of both the participants and their cultural and socio-political setting is necessary. It is important to not only hear what NGO staff and village participants say about the project or observe their behavior and actions (data), but also to seat those comments and actions within the context of social interactions shaped by local politics and the Fijian culture in general (concept). While the basic organization of the study was generated prior to collecting data, the research question also was not fully developed at the beginning of the study nor was it taken from any

study of theory on the subject. Rather, the patterns that emerged during ongoing reflection and analysis defined the question.

Research methods

A number of research methods were used to collect data. I conducted twenty semi-structured interviews in June 2006 and July 2007 with a total of twenty-two key participants in the projects from both the villages in Cuvu District and PCDF (Figure 5.1). Participants were chosen using snowball sampling in June 2006 to identify people who participated in governance development activities. A total of eighteen participants were interviewed in June 2006. I began the process by selecting key informants from Cuvu Village suggested by PCDF staff because I interacted with them on a daily basis and they held important positions on the Environment Committee. These informants then suggested other members of the committee to interview, including people from every village. Committee members then identified fish wardens and other participants. At least one participant from each village was interviewed, though the participant in Hanahana stated that his village did not actively participate in the project so was not included in the analysis. I selected the three PCDF staff members to interview based on their participation in the project and availability. Interview participants included nine environment committee members, four fish wardens (two were also on the committee), eight project participants (including one group of three as a single interview), and three PCDF staff members.

To ensure that certain issues were addressed, an interview guide provided by PCDF was generally followed (see Appendix B, 131). At this point, I asked participants questions about a wide range of topics related to the project to provide feedback to

Date	Village	Gender	Position Held (EC: Environment Committee)
June 06	Cuvu	Male	EC Chairman until 2004
June 06	Cuvu	Male	EC Chairman since 2004, fish warden
June 06	Cuvu	3 Males	Project participants
June 06	Tore	Male	EC member, fish warden
June 06	Tore	Male	EC member
June 06	Sila	Male	EC member
June 06	Naevuevu	Male	EC member, hotel liaison
June 06	Naevuevu	Male	Fish warden
June 06	Naevuevu	Male	Fish warden
June 06	Rukurukulevu	Male	EC member
June 06	Rukurukulevu	Male	Fish warden
June 06	Naidovi Settlement	Female	Project participant
July 06	Voua (Tuva Tikina)	Male	EC member
July 06	Yadua	Male	Project participant
July 06	PCDF – Suva City	Male	NGO project facilitator
July 06	PCDF – Suva City	Female	NGO project facilitator
July 07	Cuvu	Male	EC Chairman since 2004 (repeat interview)
July 07	Cuvu	Male	Project participant
August 07	PCDF – Suva City	Male	Lead project scientist
August 07	Yadua	Male	EC secretary 1999-2007

Figure 5.1. A list of participants during round one (June-July 2006) and round two (July-August 2007) interviews during the study. See Appendix B for the interview guides used during these interviews.

PCDF. My research questions were also not yet fully developed. I asked interview participants about perceived changes and impacts on the village and villagers due to the CGI, environmental impacts of the work, and the effectiveness of governance structures. Within this last category, questions focused on the fish warden system, environment committee, and support from the traditional leadership, especially the Kalevu. Questions about the management plan and *tabu* areas fell under the discussion of environmental impacts. During the interviews, hand-written notes were taken but interviews were not recorded. After completing the first round of interviews, notes were typed up and merged into one document in outline form for analysis. An assessment of the results of the study was prepared and sent to PCDF.

For the second round of interviews, I selected the individual participants based on their experience with the project but who were not available during the first round of interviews. A different interview guide was used in the second round because the nature of the research question had been narrowed to look at the NGO-village interaction process and governance issues (see Appendix B, 132). The first three interviews were recorded and transcribed, but I then determined that participants seemed more nervous about the interview so returned to the writing notes. One other limitation of data gathered from interviews is that only two women were interviewed. This is also an indication of the lack of female members of the Environment Committee. All but four of the interviews were conducted in English or mixed English and Fijian. For the four interviews where only Fijian was spoken, I had assistance from one of the villagers in Cuvu.

This study also included two years of participant observation. Observations were used to develop the broader conceptual context to describe how social, economic, political and cultural forces influence natural resource management decisions (Mason 2002). Participants may often overlook these forces in interviews because they are fundamental in everyday life. Also, to better understand the interactions between and the forces acting upon project participants, it is critical to enter into the community and participate in the activities that define their lives. Goffman (1989, quoted in Lofland (1995, 45)) mentions how this perspective is useful in achieving ‘deep familiarity.’ He defines participant observation as:

Getting data...by subjecting yourself, your own body and your own personality, and your own social situation to the set of contingencies that play upon a set of individuals, so that you can physically and ecologically penetrate their circle of response to their social situation...you're artificially forcing yourself to be tuned into something that you then pick up as a witness – not as an interviewer, not as a listener, but as a witness to how they react to what gets done to and around them.

As a Peace Corps volunteer assigned to Cuvu Tikina as an environmental advisor and educator from 2005-2007, I attended meetings, workshops, village and district council meetings, and numerous formal and informal social events. I also participated in other CBNRM projects around the Coral Coast and interacted with other participants throughout my two years at the site. Because of my position in the district, people were more likely to talk to me about environmental issues. Notes from some meetings and discussions were recorded in a personal journal and other notebooks. While some events were recorded in notes, others were not, so I had to rely on my memory to reconstruct that event. This limitation is somewhat mitigated in two ways. First, much of the data used in the analysis comes from redundant events whose importance rests in consistency of form rather than uniqueness of a single occasion. One example is how planning took place in village council meetings. Second, where I attempt to make broader

generalizations about the Fijian culture, I provide authoritative sources that supported particular observations. I refer specifically to the works of Nayacakalou (2001), Williams (1985), and Ravuvu (1983) and Williksen-Bakker (2004) in my findings section.

I also reviewed documents concerning the Coral Gardens Initiative and gathered information from PCDF's website. Documents provided by PCDF included workshop minutes, informational handouts, donor reports and project reviews. These helped identify organizational missions, project goals, challenges faced and outcomes of work in Cuvu from PCDF's viewpoint during implementation of the project.

Analysis

Analysis was continuous during the research. This approach allows the broader concepts to evolve from the data (Berg 2004). Before interviews were conducted, I had gained a thorough understanding of Fijian culture and history during my first year living Cuvu Tikina (August 2005 – May 2006), which guided my approach to the subject. At PCDF's request, I then initiated research on the Coral Gardens Initiative in June 2006. I first reviewed project reports and documents to identify project goals and results as of 2003. Next, the interview guide provided by PCDF staff gave the assessment a primary direction by identifying key issues that the project was concerned with. Once this assessment was complete in August 2006, I focused my research more specifically on governance issues. Using results on challenges to governance development from the project assessment as a guide, further participant observation then verified the identified challenges and added richness to my understanding as to why interviewees mentioned

these issues. The second set of interviews (July-August 2007) provided more data to support the results found in the assessment.

Once final observations and data collection were complete, I finished analysis of the data and compiled a list of fifteen challenges to governance development that I observed and that were mentioned in interviews. This list was reduced to ten by consolidating similar challenges. For example, I initially had two challenges related to the Fijian culture (the issue of '*madua*' and a focus on today) as separate, but later included these into the larger topic of the difficulty of selecting leaders. Once the list of challenges was complete, I then considered how these challenges were related to Cuvu District's level of social capital. In other words, tying findings from this analysis to the larger theoretical framework of social capital occurred after data collection. In doing this, I attempt to follow an inductive approach to the topic and try to ensure that the research is as 'unfettered' by pre-conceived theoretical explanations as possible (Lofland 1995). Finally, when writing up the results, following the seventh 'variable' of analytic ethnography, the analytical and conceptual aspects of the research are blended in the findings section. For some of the challenges, I include both specific data and descriptions of the larger context, especially issues concerning Fijian culture. The result is a richer, clearer picture of the specific challenge and shows that while a given challenge emerged in this specific historical event, it is not likely unique to that event (Lofland 1995, Berg 2004).

CHAPTER 6: FINDINGS AND DISCUSSION

Challenges to Governance Development

I identified ten challenges to governance development through interviews, participant observation, and a review of project documents. These challenges are: 1) internal divisions between and within different groups, 2) ineffectiveness of communication links, 3) the lack of participation from the Kalevu, 4) difficulty of selecting leaders, 5) problems with project funding, 6) local mismanagement of funds, 7) cash economy expectations decrease volunteerism 8) the complexities of protocol, 9) legal and cultural limitations of enforcement, and 10) project and planning process was controlled by PCDF. While these challenges are discussed individually for the sake of clarity, they are all interrelated, overlapping and often reinforcing.

PCDF's governance development measures did not, in general, outlive the end of the Coral Gardens Initiative. While it is rather easy to identify this outcome, it is more difficult to understand just why these attempts were unsuccessful. We could simply put the blame on PCDF and argue that their methods were inevitably going to lead to undesired results. The truth, however, is that a number of forces played a role in creating challenges to governance development, including the level of available social capital. PCDF's methods, the Fijian culture, pre-existing local conflicts and site-specific socio-economic conditions all played a role in shaping the local results of the Coral Gardens Initiative. The following section attempts to explain how all of these factors impacted the project in an interrelated manner. The challenges are not necessarily in order of importance as it is difficult to determine the exact level of influence of any given challenge. I will describe how these challenges are related to social capital in the discussion of the findings.

Challenge	Governance Development Mechanism Affected	Source of Data
Internal divisions	EC, EMP, ETF, FW, TA	I, PO, PD
Ineffective communication links	EC, EMP	I, PO, PD
Lack of participation from the Kalevu	EC, EMP, FW, TA	I, PO, PD
Difficulty of selecting leaders	EC, FW	PO, I, PD
Problems with project funding	EC, EMP, ETF, FW	I, PD
Local mismanagement of funds	EC, EMP	PO, I
Cash economy expectations	FW, TA	I, PO
Legal and cultural limitations to enforcement	FW, TA	PO, I
Project planning controlled by PCDF	EC, EMP	PO, I
<p>Abbreviations for governance development mechanisms: EC – Environment Committee; EMP – Environmental management plan; ETF – Environmental trust fund; FW – fish warden system; TA – tabu areas.</p> <p>Abbreviations for sources of data: I – interviews; PO – participant observation; PD – project documents.</p>		

Figure 6.1. Summary of the challenges to governance development identified in this study, the governance mechanisms each challenge affected, and the data sources used to identify the challenge. Data sources are listed in the order of importance for identifying the challenge.

Internal Divisions

Based on interview responses and observation, a variety of divisions between stakeholders significantly impaired to governance development. In a study of conflicts in community-based projects in Papua New Guinea and Fiji, Warner (2000) listed different categories of conflicts based on the individuals or institutions involved. These include both micro-micro (within and between villages) and micro-macro (between villages and

external organizations) conflict. Each of these types emerged during PCDF's work, along with conflict between external organizations (macro-macro).

Inter-village conflict (micro-micro). Four notable conflicts between villages were mentioned in interviews, all relating to Cuvu Village. First, there were questions about who should receive benefits accrued by the work done in the waters around the Fijian Resort. Rukurukulevu Village, while acknowledging the paramount position of the Kalevu in resource ownership, still lays claim to traditional ownership of the *iqoliqoli* while an *itokatoka* in Cuvu Village currently earns all the annual lease money given by the hotel, none of which is directly for use of the *iqoliqoli* waters. Furthermore, one of the *tabu* areas designated during the Coral Gardens project covers a large section of Rukurukulevu's traditional *ikanakana*. Thus, Rukurukulevu did not fully support the project, evidenced by their fish warden destroying the fish houses and suspicion from other participants that they harvested the restocked giant clams. Cuvu is also still the only village that receives free rubbish pick-up from the Fijian Resort, while the rest of the villages must pay F\$2 per household per week for pick-up. This just adds to the resentment generated by the fact that a single *itokatoka* already receives the lease money from the hotel and could easily, it seems, pay for their own rubbish removal.

Second, a committee member from Tuva Tikina complained that his district's concerns were always subordinated to those of Cuvu Tikina in general and Cuvu Village specifically, including the benefits accrued from the project. He felt that conversations were always one-sided and his input was not considered. Villagers from Yadua also expressed their frustration over what they considered was preferential treatment given to Cuvu Village's interests. Like Rukurukulevu, the people of Yadua are the traditional

landowners in the Tikina, so feel even more slighted if their position is not fully recognized.

Thus, resource management leaders from Cuvu Village may have a difficult time getting other villages to agree on conservation activities and plans if those villages feel that Cuvu is only acting in their own economic self-interest. Both chairmen of the Environmental Committee have also come from Cuvu Village. There was probably little PCDF could do about this, since Cuvu is the chiefly village of the district. Nonetheless, any further resources provided to or authority given to Cuvu Village from outside sources exacerbated the problem of inter-village divisions.

Intra-village conflict (micro-micro). Internal divisions within villages, and between individuals, are also not unusual, and can easily damage the progress of projects. Although examples were not frequently mentioned in the interviews, observation and informal discussion suggests that not all community members supported their respective committee members. Younger representatives were discouraged by their inability to do environmental projects because of the seeming capriciousness of elders' decision-making in their respective villages. While they, along with the youth of the villages, wanted to work on projects, they did not receive assistance or encouragement from village leaders so could not proceed. Also, there did not seem to be a working relationship between the Kalevu and one of the key contacts in Cuvu Village for PCDF; these two rarely spoke to each other so PCDF's messages were either not relayed or were not given serious consideration by the Kalevu. Finally, some committee members voiced their disappointment about the attitude of their fellow villagers concerning the environment. Even though awareness had increased concerning the problems with issues like rubbish

disposal, they felt that some people did not care enough to change their behavior. So, it seems, frustration flowed both ways within villages. Indeed, other village activities outside of the context of CBNRM projects were often hampered by disagreements and lack of participation by various groups. It is a daunting challenge for an outside agency to try to work around these divisions as they are not easily seen, but are often spoken about informally in villages and thus reinforced.

Village-external organization distrust (micro-macro). Two examples of micro-macro conflict emerged during PCDF's project because of distrust: villagers distrustful of NGO motives and activities, and village distrust of the Fijian Resort. Respondents from three villages questioned the motivation behind PCDF's work, feeling they were in it mostly for themselves. Two leaders from Rukurukulevu who were also members of the Fijian Parliament questioned PCDF's credentials for managing the project, voicing their concern over the legitimacy of the *tabu* area established around the Fijian Resort. It is clear that this distrust was felt by Rukurukulevu Village in general based on their behavior during and after the project. A man from a different village also commented that "[PCDF] did not train them nicely; because otherwise the committee would know [that PCDF was doing the work for their own financial benefit]" (Yadua Villager, pers. comm.).

While skepticism over the Fijian Resort's commitment to the Coral Gardens project was only mentioned during three interviews, I often heard villagers talk about the lack of concern that the Resort shows for the villages in general. One participant felt that hotel managers were the actual leaders and funders of the project, and that once the wetland was built there (for the Wai Bulabula project), they lost interest in project

activities. The other two were concerned that the relationship between the two stakeholders had lapsed and needed to be restarted with the new management. Unmet expectations also created distrust between the village, hotel and PCDF. The most visible activity discussed and written into the Environmental Management Plan was the construction of a new causeway for the Fijian Resort. The current causeway blocks over half of the flow in Yanuca Channel, which has made the channel shallower due to siltation and poses a greater danger of flooding in the adjacent villages. When they saw no work being done on a new causeway, villagers felt that both PCDF and the resort were reneging on their obligations in the project. Currently, the lead project scientist is again working with management at the Fijian Resort to improve flow in the channel.

Conflict between external organizations (macro-macro). In general, NGOs and other organizations tried to collaborate with each other on projects in Cuvu Tikina and elsewhere. Sometimes, however, these collaborative efforts led to disagreements between organizations. In the final donor report, PCDF mentioned that there were difficulties working with the FLMMA network, and that PCDF decided to sever this relationship during their work in Cuvu. This tension arose due to the perception that FLMMA was not willing to listen to other viewpoints and that participants had to conform to one certain methodology. Another glaring conflict occurred that hindered the Coral Gardens Initiative from being funded by the Fijian Resort. Based on interviews with PCDF staff, it seems that a senior staff member at the Institute of Applied Science at USP, who was also on the PCDF Board of Directors, discouraged the hotel from providing the additional funding for the project through personal contacts he had there. It is possible that he disagreed with the methods that PCDF used, or that the disagreement

stemmed from other problems that PCDF had with collaborative efforts with Coral Cay Conservation (in the Mamanuca island group) and FLMMA. Whatever the reason, the Fijian Resort did not provide further funds after 2003 although they had initially committed money for another two years.

Ineffective communication links

Pretty and Ward's (2001) discussion of the importance of connectedness shows just how important communication channels are in developing lasting networks. If stakeholders do not feel like they are being informed, they will not likely support the project. The most important link for PCDF's information flow was the Environment Committee, whose members were supposed to inform both the Kalevu and their respective villages about current activities, and to return to meetings with ideas generated at village meetings. Many interview respondents, however, including Committee members, stated that other stakeholders were not well-informed of the outputs from committee meetings. Villagers not on the Committee only knew about activities, such as workshops or marine restoration work, as they happened. PCDF staff also recognized that they were not able to engage the villages as a whole. Most of the members of the Committee were leaders in their villages, whether a *turaga ni vanua* or *turaga ni koro*, and thus spoke on other issues at district and village council meetings, but project activities were not regularly discussed. Also, the link between PCDF staff, the committee and senior management at the Fijian Resort degraded when two top managers who were very supportive of the project left for other assignments in late 2003. Relations with the new management were never developed until recent attempts by the lead project scientist to restart the hydrologic restoration project. Finally, poor communication

between the Kalevu and the Committee and PCDF meant that the most important authority was not an active player in the project and thus gave little support.

The following two-way communication links were critical for the self-sufficiency of the Coral Gardens Initiative based on the structure used from 2000-2003: PCDF – Kalevu; PCDF – Environment Committee; PCDF – villages; Environmental Committee – Kalevu; Environmental Committee – villages; PCDF/committee - old and new hotel management; and old hotel management - new hotel management. Of these links, only the PCDF - Committee and the PCDF - old hotel management links were solid. The internal links did not fully develop before the project ended in 2003. Thus, critical communication links that were intended to build networks between villages and with external organizations failed to function after PCDF's involvement ceased.

Lack of participation from the Kalevu

As discussed in chapters two and three, traditional titular chiefs still have significant influence in the local decision-making process. This is especially true as one gets closer to the traditional flagpole; while in other parts of Nadroga/Navosa the Kalevu is not necessarily active in local decision-making, he has immense power within his own *yavusa* (Louvatu) as well as Cuvu Tikina. It is not always easy to contact the Kalevu to discuss projects, however, because of his other private and public obligations. Nonetheless, without building a relationship with the Kalevu, any sustained effort, particularly in the realm of governance, is unlikely to survive. A project participant explained that, “everything should be briefed to [Kalevu] before anything happens...there's a different atmosphere in his heart when they bring things to him. He

feels good about it” (Cuvu Villager, pers. comm.). Thus, if the Kalevu is informed and involved, he is much more likely to support the project.

Both PCDF staff and committee members point out that the Kalevu had not been fully informed about or supportive of the project, two factors that are likely correlated. Although he approved the Environment Management Plan in 2001, the Kalevu had not been well-informed of project activities, a duty assigned to the Committee. Villagers also often went directly to him to ask to fish in the *tabu* area rather than informing the Committee or fish wardens. Thus, villages were given mixed messages concerning the *tabu* area; they were told that no fishing was allowed and then they saw people fishing there. Committee members and fish wardens were frustrated by their inability to enforce the fishing restrictions, because the high chief has the final say in resource management decisions.

Difficulty of selecting leaders

To set up a committee at the district level, the standard forum to choose members is the quarterly *bose ni tikina*. PCDF established the Environmental Committee through the Cuvu *Bose ni Tikina* in 2000. The committee consisted mostly of *turaga ni vanua* and *turaga ni koro* from each village, as well as fish wardens once they were chosen by their villages in 2002. PCDF staff noted that women and youth were not well represented on the Committee, though this is true of the village and district councils in general. Except for the critical participation of the Kalevu in Committee meetings, PCDF seemed to follow the right process and had the right people on a committee to make decisions regarding natural resource management. Furthermore, Committee members generally responded positively about the project activities and PCDF. Most were conversant on the

main topics presented during the project including rubbish management, the benefits of *tabu* areas, and the ecological importance of mangroves and coral reefs to name a few, and were eager to restart these projects if PCDF returned.

Nonetheless, the Committee proved ineffective in sustaining itself or any of the Coral Gardens activities following PCDF's exit in 2003. One problem has been mortality; since the end of the project, chiefs from three of the villages have died. The chiefs who replaced them may not have been on the Committee and had not participated in previous meetings, so were not well-informed about the activities and their benefits. A particularly strong advocate for conservation work from Naevuevu Village passed away, leaving a vacuum of leadership there. Second, many respondents commented that Committee members should be able to 'walk the walk' along with talking the talk, suggesting that younger individuals should be chosen as they would be able to lead the way in implementing activities. The problem here, however, is that traditional leadership is generally passed on to the senior individuals from each family line. A *turaga ni koro* may be younger, and often is, but his authority to initiate projects rests on the approval of the village elders (see Nayacakalou 2001). Thus, the impetus to work on a project must come from the chiefs and elders, and these were the people on the Committee. They could easily assign work to the youth of the village, but it is very difficult for youth to independently bring up ideas for village activities.

The hesitancy of youth or other non-traditional leaders to assume leadership positions in a village setting is a product of the Fijian culture. If an individual behaves in a manner not in accordance with his or her proper role, he or she will be filled with a sense of embarrassment or shame, known in Fijian as '*madua*.' This applies both to not

fulfilling obligations as well as overstepping one's proper bounds. Williksen-Bakker (2004, 210), in describing how the sense of *madua* affects Fijian business ventures, explains the potency of this feeling on the Fijian mind:

Madua is a crucial part of a discourse about Fijian relationships and it is encoded in social space, limited by walls or conventions. One cannot be 'madua' without doing 'madua'....[it] cannot be separated from the obligations inherent in particular relationships. Although a business person, or any educated person, may wish to distance himself from 'madua' inherent in obligations to kin, he does not consider it wise to do so.

It is even possible for *madua* to manifest itself as sickness. One man in Cuvu Village who was active in environmental projects but had no official relationship with the Kalevu or position in the *Bose ni Tikina*, got up and followed the Kalevu out of the *Bose ni Tikina* to speak with him about issues in a *tabu* area. The next day a large boil began forming on his upper back. He left the village until the boil began to heal. When discussing the man's sickness, people from several of the villages stated that the boil was the '*mata ni vanua*', or 'eye of the land.' It served as punishment for overstepping his proper role, as this man had no official responsibility as an advisor to the Kalevu. The notion of *madua* complicated PCDF's intentions for selecting and developing leaders. They wanted to include several youth and women in decision-making forums, but these groups usually do not speak up in meetings unless it is their role to do so. So PCDF had to rely on traditional leaders who commonly make decisions to also drive the project forward. As these leaders chose not to take ownership of the project after PCDF left, there was little other junior committee members, fish wardens, or women and youth representatives could do to sustain it.

Problems with project funding

Funding is a double-edged sword for CBMRM projects. On one hand, a project cannot begin or proceed without some amount of financial backing. NGOs must cover

logistical costs including salaries and travel cost for staff, per diem and travel costs for government officials and other outside expertise, equipment for presentations and activities, and food and protocol matters in the villages where activities occur. An average one-day workshop costs around F\$500 (PCDF staff, pers. comm.), and can be more expensive based on number of participants, technical needs, and reimbursement for food and lodging in the village. In short, NGOs cannot do projects if they do not have funding.

On the other hand, when an NGO begins work in a village, it creates a spike in the amount of resources available for resource management and planning. The villages usually do not pay any money for workshops or any other activities. Rather, they need only provide the time and effort to implement activities. The problem here is that villages easily become dependent on the NGO to continue providing funds, and will subsequently only follow the NGO's agenda while money is available. Their expectations also tend to increase during projects, particularly for tangible items such as boats or farming tools, because of the availability of resources. Once the funding stops and the NGO's presence weakens or disappears, then so does the project, at least in the minds of villagers. They typically do not have the resources to continue a project or activities that were sustained earlier by ample money and external motivation. Finally, from my observation, many Fijians tend to distrust each other when it comes to money management, usually for good reason. I repeatedly heard stories about funds unaccountably disappearing from the school and village coffers, particularly discretionary funds. So an influx of money may also lead to an increase in distrust and corruption.

PCDF intended for the Coral Gardens Initiative to have at least a five-year lifecycle, funded jointly by PCDF and the Fijian Resort for the first three years then by the Resort for the final two years. The Coral Gardens Initiative came to an abrupt end in 2003 after their project funding expired. As mentioned earlier, the Fijian Resort committed to funding the project for two more years, but backed out due to the interference of one of PCDF's board members. Villages assumed that PCDF just forgot about the project, not understanding that funding for other projects could not be redirected to continue at the Cuvu site. During the participatory learning and action (PLA) workshops, villages identified a number of activities and resources they considered essential to implement the five-year management plan. With the resources provided, however, few of these activities were fully implemented. Fish wardens also expected to be compensated for their efforts with funds coming from the environmental trust fund held at the hotel. When the project ended, villagers, and especially fish wardens, were upset that these resources never materialized. Three of the four fish wardens, and eight Committee members mentioned that the lack of funding for the fish wardens' resources made their job impossible. Thus, PCDF could not fully implement their governance development initiatives because they relied on continued funding from the Resort and establishment of the environmental trust fund, both of which did not happen. Instead of having five years to work with the Committee and fish wardens, they only had three.

Local mismanagement of funds

For governance development to succeed, authority over the management of money is necessary or else the people responsible for resource management decisions

will not have the capacity to implement activities. PCDF remained in charge of the money during the project while only consulting the Environment Committee on which activities should be implemented. There was no indication that PCDF gave the committee authority to actually spend money as they deemed appropriate. While this lack of delegation severely hampered governance development goals of the project, it is understandable because in the single case where funds were directly handled by villagers, mismanagement occurred. The dive shop at the Fijian Resort, a separate business from the resort, agreed to pay 50 cents per diver to the committee for use of their dive sites within the *iqoliqoli*. This money would then be used to fund marine resource management activities decided upon by the Committee. Instead, one individual on the Committee received the money and never accounted for these funds. In 2005 a new chairman took over the defunct Committee and became responsible for the revenues. Needless to say, this money was not used to fund environmental projects, as there was no environment committee or environmental fund, and both the old and new recipients distrusted each other's money management.

In fact, Fijians themselves question the efficacy of integrating traditional politics with financial decisions (Nayacakalou 2001, Williksen-Bakker 2004). For example, decisions concerning the lease money from the Fijian Hotel are made by a board of trustees and not the members of the *itokatoka* that are the actual land owners. This decision was made after perceived mismanagement of large sums occurred in the 1970s and 1980s. Another example is the ecotourism project in Tore Village. At first, efforts were made to separate the business from village politics. In 2006, however, traditional leaders took control of the project. Since 2005, no further work has been done on the

ecotourism site. Both traditional leaders and the people previously in charge blame each other for stagnancy of the development. These examples are used here to show that in controlling the money, PCDF did not really deviate from villagers' own behavior or opinions on the subject of financial control.

Cash economy expectations

The people of Cuvu Tikina are generally more integrated into the cash economy than are more remote villages thanks to the presence of resorts and businesses in the area. This puts more pressure on families to provide some sort of cash income to cover both family and community expenses compared to less developed areas of the country. Thus, most fish wardens focused their efforts on income-generating jobs rather than volunteer duty. Many interviewees felt that the wardens should be paid for their efforts rather than working solely on a volunteer basis. Many of the participants in the fish warden workshop ended up getting other full-time work so stopped performing volunteer warden duties altogether.

Two members of the Committee also felt that the *itovo Vakaviti*, or Fijian way of life, was being eroded as a result of focusing on earning money. Because the village gives few resources directly to resource conservation and management, leaders must rely on villagers volunteering their time. Because so many villagers work at full-time jobs, there are usually fewer hands available for village work. One project participant noted that if he had a lot of money to spend on conservation activities, then the work would quickly be accomplished because many villagers would be willing to work for pay. Without money, however, it would not get done. PCDF recognized this issue and attempted to generate money through the environmental trust fund at the hotel to pay fish

wardens and other villager who did conservation work, but the fund never materialized. Thus, it is likely that as villages become more integrated into the cash economy, volunteer efforts will decrease and more resources will be necessary to sustain participation, both while the NGO is present but especially once they are gone.

The complexities of protocol

Protocol is a tricky and complex issue when working with Fijian villages, thanks in part to the dual governance structure in Fiji. Typically, an outside agency must inform the provincial office that they plan to do work in a village. An assistant *roko tui* then informs the village through the *turaga ni koro*, who should bring up the issue in the *bose vakoro* and ensure that the *turaga ni vanua* is fully aware of the request. Ideally, the village then reports back to the outside agency and begins preparing for the meeting or activity as necessary. On the day of the proposed meeting, a *sevusevu*, or ceremonial offering, usually un-pounded *yaqona* or in more formal events may include a whale's tooth, must be performed with the chief or his representative to formally receive permission to initiate work in the village. Although when a chief accepts a *sevusevu* it is supposed to mean that one is symbolically part of the village and can move about freely, this process is usually followed each time an outsider visits a village. Even with perfect communication channels, following protocol can be a difficult task. The fact that many houses do not have phones and that villagers only sporadically check their mailboxes, compounded by the likelihood that the message is not passed quickly from the provincial office to the village, means that all aspects of protocol will not likely be respected every time an NGO (or Peace Corps volunteer) wants to do something in a village.

Three interviewees commented that PCDF did not follow traditional protocol well when working with villages. Instead, these villagers argued, PCDF just arrived and took Committee members to meetings at the Fijian Resort and then brought them back, failing to inform the other village leadership (the *turaga ni koro* and *turaga ni vanua* not on the committee). Community members with this opinion became distrustful of PCDF and may have informally spread their discontent throughout their respective villages. In such a situation, local project leaders' motivation could get overwhelmed by negative or indifferent attitudes. The community would still support the project while PCDF provided funding, leadership and motivation, but not afterwards. Also, a Committee member mentioned that it is difficult for one PCDF staff member to integrate because he is allergic to *yaqona*, a critical element in Fijian social and ceremonial occasions.

From my experience, it is not easy to recognize when protocol has not been properly followed. If one directly asks if he or she has behaved properly, a Fijian will usually respond that the behavior was perfectly fine just to avoid offending the other party. Similarly, Fijians will not directly state when a transgression has been made, even if they see the action as offensive. Two observers, separated by nearly a century and a half, came to similar conclusions concerning this facet of Fijian culture. Williams (1985, 122) wrote that "Few things go more against a native's nature than to be betrayed into a manifestation of anger. On the restraint and concealment of passion he greatly prides himself, and forms his judgment of strangers by their self-control in this particular." Ravuvu (1983, 109) made a similar statement discussing the Fijian personality and value system:

People know that anger or hatred is ruinous to the individual and subversive to group living and solidarity...aggressiveness is discouraged. It requires harassing and mocking before one gets angry and thinks of revenging. Though people are occasionally ill-treated

and deceived, they usually subdue their anger or the need to retaliate. (Ravuvu, 1983, 109)

This is not to say, however, that insults are quickly forgotten. Instead, a Fijian remains friendly towards the offender, but may speak disparagingly of him or her to others in the village. Williams (1985, 108) provides a fitting description of this characteristic, noting “I have often witnessed such outward calmness and apparent indifference, when within – ‘Slumber’d a whirlwind of the heart’s emotions.’” So while PCDF can be blamed for not following protocol, it is likely that no one informed them that people in the villages were concerned over perceived slights. Furthermore, it is hard to say where the proper information channel broke down. It is possible that the Provincial Office or *turaga ni koro* received the request but did not pass on the message in a proper forum.

Legal and cultural limitations to enforcement

To sustain a CBNRM project, enforcement of rules and guidelines is necessary. The fish wardens were supposed to fill this role for the *tabu* areas. The Coral Gardens Initiative site, however, presented significant challenges for the volunteer fish warden system. First, there is a relatively large population along the coast, including eight villages, one small town, the Fijian Resort, and Indo-Fijian settlements, so even subsistence and legal commercial fishing put significant stress on the fishing grounds. The large population also means that there are likely more illegal fishermen as well, a problem that all fish wardens mentioned in interviews. Second, the fish wardens complained that it was impossible to stop most illegal fishing because those fishermen had technology to assist them such as SCUBA equipment and boats, while the fish wardens did not.

I also believe, based on observation, that a fish warden may find it difficult to arrest or even condemn illegal fishing activities done by fellow villagers. There is a strong prohibition against direct confrontation in a Fijian village, especially between close relatives. If forced to choose between protecting a *tabu* area and not insulting a fellow villager or relative, most Fijians would choose the latter. There are less direct methods of pointing out misconduct in a village setting, but these do not always affect behavioral change. Furthermore, every registered member of the *itokatoka* listed on the customary fishing rights document is allowed to fish in the *iqoliqoli*. Unless *tabu* areas are officially written into by-laws by a *bose ni yasana*, they are not afforded the same legal recognition as customary fishing rights. Thus, it is a social rather than a legal sanction that limits fishing in the protected areas. Due to the tension between and among villages in Cuvu Tikina, it is not a surprise that these informal restrictions were not uniformly recognized. Generally, in the more cohesive villages where traditional leaders believed in the value of the *tabu* areas, they were respected. In other villages, they were not.

Overall, the fish warden system has not been successful in Cuvu Tikina, so active enforcement of the *tabu* areas was weak. Several interviewees stated that most fish wardens have not done any work since the project stopped, and that some were not actively protecting their fishing grounds even during the project. Even worse, an interviewee noted that one fish warden was sabotaging the work being done at the Fijian Resort. Another fish warden lost his license after punching an Indo-Fijian man who was illegally fishing in the *tabu* area. I also witnessed another fish warden directing the use of fish poison (*Derris trifoliata*), which is banned in the Fisheries regulations.

The villages also did not seem to have strict criteria when selecting their fish wardens, resulting in the several problems above. Also, only one interviewee mentioned that a fish warden routinely talks about the *iqoliqoli* status at village meetings and other venues. The role of educator and advisor is a critical one for the fish warden system to work, because this would make them the village leaders of the fishing grounds and ensure everyone knows the rules. The fish wardens chosen during the project did not fulfill this duty. Furthermore, it is not clear who was responsible for supervision of the fish wardens. If they were to receive a salary and access to resources, to who are they accountable? This is not to say that a fish warden system will inevitably fail, but these are all very tangible challenges that must be dealt with when developing a fish warden system at a site.

Project and planning process was controlled by PCDF

For governance development to be successful, a village's planning and decision-making procedures must be strengthened as well. PCDF's focus on long-term planning and use of the PLA approach contrasted with standard village planning procedures, and may have created more of a sense of dependency than empowerment. Also, the fact that the Coral Gardens Initiative was not demand-based also prevented local ownership from forming.

Although the majority of external facilitators use the participatory learning approach (PLA) in their planning workshops to flesh out community ideas for management, such a planning method is still not used internally by villages. In PLA forums, participants usually gather in groups and brainstorm to come up with problems or solutions concerning a given topic. The groups then present their findings and all of the

ideas are consolidated, usually by a facilitator. The benefit of this method, it is argued, is that more voices will be heard, leading to better, or at least better-informed, decisions. District and village council meetings, however, follow a more standard meeting structure. The *turaga ni koro* or *mata ni tikina* usually facilitates the meeting based on a pre-arranged agenda including a catch-all section that allots time for different subjects. Except for the members of the council, villagers rarely speak up about issues included or not included on the agenda. The PLA format is an excellent way to engage the larger community, but it likely puts participants in an uncomfortable position of being out of their traditional roles. Thus, while communities offered input during planning, the project methodology was pre-established and directed by PCDF and conformed more to CBNRM methodology than standard village procedures. Though they attempted to put community members in charge of the planning process, PCDF still controlled the method of discourse and planning.

Second, based on observation, villages rarely make detailed, long-range plans internally. In terms of long-range planning, villages must create five-year development plans in conjunction with provincial office representatives. These plans usually outline the priorities for projects that will need external assistance from the government. Common projects include the construction of community halls, sidewalks, and sea walls. For financial planning at the village and district level, councils usually look out one year. These plans usually cover village obligations for the district school, funding for the provincial office and church, and money for development projects.

The majority of village activities, however, are planned as the need arises and are based on well-understood traditional practices. Occasions such as births, weddings, and

funerals occur frequently and take up a significant amount of human and financial resources, but cannot be predicted or arranged in a long-term fashion. The Environmental Management Plan was supposed to guide a select number of activities over five years, the durational limit of village planning. And while developmental planning has a fairly long history at the local level, environmental planning is quite new. Thus, the management plan was both more long-term and more formal than standard village planning and also regarded a new subject. Not surprisingly, villages continued to rely on guidance and expertise from PCDF to approach new subjects in new ways.

The process of identifying problems for project activities to address also led to dependency and increased expectations. During the PLA workshops, villages identified environmental problems that the project should focus on solving. While this is a good way to ensure that project activities will focus on the needs or desires of the village, the process usually identifies problems that the village feels are beyond its ability to solve. Focusing on these problems gives the impression, then, that the village is somewhat helpless and needs external support. Furthermore, most of the ideas for solutions were generated by the lead project scientist and PCDF staff.

Thus, PCDF remained the leader of these projects in the minds of the villagers, who may still feel that they need experts to create solutions for resource management problems. Many interview participants stated that their village could not or would not deal with environmental problems on its own. They explain that villages need to be taught about these issues and that the message needs to be continuously reinforced by external experts with funds. In short, interviewees describe a teacher-student relationship. Villages seem to be more comfortable with this arrangement when dealing

with non-traditional subjects such as ecosystem restoration and management. In my experience, villagers tend to be excited about a new idea or project if one is offered, but their enthusiasm is difficult to maintain, especially at the expense of their own resources and time. The teacher-student construct, while effective for building awareness, is extremely detrimental to the development of new governance structures.

Finally, other examples from CBNRM literature suggest that demand-based projects tend to produce more sustainable results. If a community has independently identified a problem and taken the initiative to seek assistance, then they are also more likely to support the activities. It is important to note that the villages in Cuvu Tikina did not actively seek out assistance for environmental problems. Instead, PCDF chose the site because the Fijian Resort offered matching funds, and as a continuation of the Wai Bulabula project. When given an opportunity to receive assistance, villages predictably jump at the opportunity. But this enthusiasm does not necessarily represent pre-existing motivation, nor does it mean that a village will work independently to meet project goals.

Discussion: The role of social capital in governance development

Summary of findings

As we can see from the findings above, PCDF's goal of building stronger local natural resource governance in Cuvu Tikina faced a myriad of challenges that in the end were too powerful to overcome. In some cases, the root of the problem can be attributed directly to PCDF's actions. By selecting the site based on funding availability rather than any demand from leaders in the villages, PCDF could not be assured of the local motivation level. Also, methods that led to identifying problems that village leaders felt they could not solve alone ensured that some external assistance would continue to be

needed, especially when the funding was not controlled by the Environment Committee. NGO staff also failed to fully engage the Kalevu despite some effort to do so, which meant that local leaders in the Coral Gardens Initiative did not receive much support from the highest traditional authority in the area. Finally, it seems that PCDF was not fully aware of the tensions that were already at play in Cuvu Tikina between individuals, kinship groups, and villages. Some aspects of the project exacerbated these tensions and divisions, leading to outright opposition of the project in the case of Rukurukulevu Village. If they were to do more work in Cuvu Tikina, PCDF could take active measures to ensure that these same mistakes were not made.

The story of why governance development was so difficult, however, is much more complex. Clearly, it wasn't just PCDF's actions that caused problems. In fact, in many cases PCDF seemed to be pursuing the right course of action to achieve their ends. For instance, the Environment Committee was chosen through the *Bose ni Tikina* and both the Committee and the Environmental Management Plan were endorsed by the Kalevu. This shows that the Kalevu knew about the project, but he still did not get involved. Could PCDF do anything about this? It is hard to say, even in hindsight. The members of the Environment Committee also seemed like the right people for the job, but these representatives failed to do their job in the context of the project. Also, although PCDF may have helped increase tensions between different villages and social groups, the problems and divisions were already in place.

There are also site-specific and cultural challenges that probably could have been foreseen, but not changed. These include the influence of wage earning jobs in reducing the volunteer spirit and population pressures that impaired the fish warden system. Also,

Fijian cultural norms restricted the number of people who could or would be willing to be leaders in the activities and reduced the effectiveness of fish wardens. This is a good example of how adherence to social and cultural norms can inhibit a project's progress. Protocol measures associated with the culture also make working in villages difficult; they are often difficult to follow but easy to use against outsiders if someone wishes to do so. Lastly, the Fijian Resort was an important stakeholder in the project. They were supposed to provide an additional two years of funding, establish the environmental trust fund, and continue to collaborate with villages on environmental projects. When the resort staff departed from the project, they left an unexpected void that no other group could fill in the given project plan. In summary, there were many factors that degraded the governance mechanisms put in place by PCDF and no single actor in the project can take all the blame. In my opinion, even if PCDF had not made the mistakes mentioned above, the governance development mechanisms would still not likely have been sustainable.

Social capital in Cuvu Tikina

As mentioned earlier, social capital is an essential component in any CBNRM project, and is especially critical in creating successful governance mechanisms to oversee management activities. Like other forms of capital, pre-existing social capital must be available in order to build more capital. By utilizing strong, connected networks between all stakeholders based on the notions of trust, reciprocity, and shared norms and expectations, facilitators could then slowly reduce their role in the project while leaving networks intact. From the findings above, we can conclude that PCDF did not successfully facilitate the development of strong networks and trust during the Coral

Gardens Initiative. Communication links that failed to solidify during the project were essential and without them, the governance system could not function. This meant that the Kalevu and the villages were not linked to the Environment Committee. It meant that fish wardens did not feel empowered or motivated to do their job. It meant that when PCDF departed, the network that the Coral Gardens Initiative relied upon fell apart. Although PCDF attempted to build a natural resource network, and even had all the mechanisms in place to do so, they could not make the new structure last.

Results from the project also suggest that there were already problems within the social networks in Cuvu Tikina in the first place. Indeed, many people of all ages, genders, and levels of authority are concerned that their community is not functioning like it should. Money, to many of them, is proving to be the root of evil. When villagers are working at the Fijian Resort six days a week, they are absent from the social gatherings where bonds are strengthened and mutual trust is created, including ceremonies and village work. It is likely that the issue of ownership of the reefs and *iqoliqoli* around the Fijian Resort only became an issue once they gained monetary significance. Children are also torn between two different models: individual success in schools and work versus honoring the cultural norms and obligations in the village setting. This is the case everywhere in Fiji, but is especially strong in more urban and commercialized areas such as Cuvu Tikina where both options are clearly available.

There was also a great deal of controversy surrounding the selection of the present Kalevu in the late 1990s. In fact, problems began with the previous installment. A compromise was made to avoid the problems that vacant chiefly titles create, but it did not settle the situation once and for all. When the last Kalevu died, there were competing

claims as to who should rightfully replace her based on different blood ties. Eventually, the current Kalevu was chosen through the appropriate traditional channels.

Disagreements continued, however, to the point that some kinship groups did not attend the installment ceremony (Cuvu Villager, pers. comm.). While everyone recognizes the current Kalevu, animosity likely continues to fester. To my knowledge, there have not been major disputes over other chiefly positions that have recently been filled.

Each village also has its own internal tensions. In Cuvu Village, for example, there are problems between different *itokatoka* that have led to some frustration concerning reciprocal duties and obligations. The village is split by the old highway, physically separating the chiefly family from the rest of the village. Whereas the layout of traditional villages physically manifested the links between kinship groups and the roles that each group was supposed to play, in Cuvu this is no longer the case (A. Bogiva, pers. comm.). Consequently, there are occasionally rumblings that either the chiefly *itokatoka* is not participating or vice versa, depending on whom in the village is asked. This has reduced the feelings of trust and reciprocity essential to a strong Fijian social structure. Although villagers in Cuvu Village continue to work together for the benefit of the village, there are concerns that group cohesion is not as strong as it could be. Thus, PCDF entered into a social structure where a number of forces were challenging traditional norms, making it difficult to generate wider networks based on that structure. PCDF did not meet their governance development goals in part because they did not successfully help to build stronger networks and trust between stakeholders, but this was due in part to problems with the social dynamics of those involved.

This is not to say that Cuvu Tikina has no social capital. In fact, the combination of chiefly authority, access to resources, and a number of professionally-trained individuals gives it great potential. For example, the *vakataraisulu*, or lifting of the mourning clothes, for Adi Lala Mara, the wife of former Prime Minister and President Ratu Sir Kamisese Mara, was held at the provincial high school grounds in October 2005. Around 1000 visitors from all over the country and Tonga attended the day-long ceremony. Estimates of the cost of hosting the function were around F\$100,000 (Cuvu Villager, pers. comm.). Although the ceremony could have been held in many different places, Cuvu was chosen because of its resources. Although Cuvu Village took overall leadership in planning and preparation, all villages in the district and province contributed time and resources to make the event a success. When the people of Cuvu Tikina work together to accomplish a task, they have shown that they can perform impressive tasks.

An example of traditional resource governance in Cuvu Tikina

To finish this discussion of social capital and natural resource governance, it is useful to see how a resource conflict in Cuvu Tikina arose and was resolved without the involvement of any outside organization. It is also interesting to see how possible effects of PCDF's work are still being played out amongst the different social groups. This story concerns the *tabu* areas in the *iqoliqoli*.

In late February 2007, a man in Cuvu Village, T., who is active in environmental projects, received a call from the Fijian Resort. Managers at the resort were concerned about a group of men and women fishing near the Resort's recreational area where families were swimming and snorkeling, and out on the reef flats in front of the hotel.

The area had been declared a *tabu* area during the Coral Gardens Initiative. T. went to the hotel and informed the fishermen and women that they were not supposed to be fishing there. A couple of days later, about a dozen men and women were once again fishing in the area. Once again, T. rode out on a boat with hotel staff and me to ‘chase them away.’ He did not recognize any of the Fijians, suggesting that the fishermen were not from Cuvu Tikina. He asked them who authorized them to fish in this part of the *iqoliqoli* and one man mumbled that one of the village leaders from Rukurukulevu told them that it was fine to fish there. The men and women grudgingly retired from fishing and we returned to shore.

Less than a week later, the same thing happened. This time, the Kalevu went out with T. to tell the people not to fish in the *tabu* area. This clearly had a more powerful effect on the fishermen and women, as they did not return again to the *tabu* area. The Kalevu, angry at this challenge to his authority over the *iqoliqoli*, declared the entire area of the *iqoliqoli* adjacent to Cuvu Tikina a *tabu* area except for the waters adjacent to Yadua Village, deferring to the traditional landowners. At the Cuvu *Bose ni Tikina* meeting in March, the Kalevu stated that the *iqoliqoli* would remain off-limits to fishing for one month. A group of men set up *hara*, traditional symbols of *tabu* areas made up of bamboo rods with a section of coconut leaf attached at the top, across the *iqoliqoli*.

Between March and June, there was much discussion regarding this decision and opinions differed widely. Some hailed this measure as an important step in restoring fish stocks in the *iqoliqoli* while others complained that it put undue pressure on families that relied on fish for subsistence, especially during an economic slowdown brought on by the coup in December 2006. One villager was concerned that children in Sila were not



Figure 6.2. A 'hara' in the iqoliqoli near Cuvu Village. Hara are traditional indicators of *tabu* areas.

learning how to fish because of the long-standing *tabu* area there (site of the Seacology project) and that this tradition would be lost. The Kalevu stated that people could come to him for money if they wanted to eat fish, but of course no one approached him for a handout.

At the same time, many stories about the *iqoliqoli* began to circulate. In one story, a large grouper was caught by an outgoing tide on a shallow mud flat, where a man came upon it. Ready to spear the tasty fish, he then looked up and saw the *hara* flapping in the wind. Cursing all the while, the man picked up the fish and put it in deeper water so it could swim away. Others mentioned that fish behavior had changed; the juvenile fish showed no fear when they saw people. Many workers at the Fijian Resort spoke with amazement about a large octopus that they sighted under the hotel's causeway, a rarity in that location. Whether positive or negative, the *iqoliqoli* became a hot topic following the Kalevu's decision, and not surprisingly the issue came up at the next *Bose ni Tikina* meeting. Although he mentioned that the *tabu* was only for one month, it was still in place three months later.

Gathered in the *Were Levu*, the chiefly *bure* where the Kalevu's traditional business takes place, the *Bose ni Tikina* gathered for their second meeting of the year. After discussion a number of financial and school-related issues, a representative from Rukurukulevu brought up the *tabu* area, requesting that the fishing grounds be re-opened. He stated that his village was suffering because they could not fish for subsistence purposes and could not afford to buy fish at the market. Furthermore, he mentioned that many people did not understand the purpose of the *tabu* area or why it had been imposed on the entire *iqoliqoli*. The Kalevu turned down this request, arguing that the effects to the *iqoliqoli* were already visible, and that waiting even longer would yield greater benefits. He spoke about a woman, one of the people fishing in the *tabu* area in February, who came to him with an *isoro* to beg his forgiveness. Relating this story brought the Kalevu to the verge of tears, showing his concern about the difference in levels of respect between this woman and others who still did not listen to him. When the Rukurukulevu man mentioned again that people were struggling to make ends meet, the Kalevu angrily told him that they could do what they wanted, but that members of his own *yavusa* (Louvatu) should at least respect the *tabu*.

Seeing the paramount chief so upset, the man, though not from the same *yavusa*, said that they would respect the *tabu* area and that he now understood why it was in place. At this point, a representative from Yadua Village stated that his village would declare their part of the *iqoliqoli* off limits as well. This seemed to further placate the representatives from Rukurukulevu, as the two villages are from the same *yavusa* (Yavuasuna). A high chief from that village then spoke for the first time. He also stated that his village would respect the *tabu* area until the Kalevu chose to lift the restriction.

A civil servant from the Ministry of Environment who is from Cuvu Tikina then explained in detail about the idea of marine protected areas and their ecological benefits. The members of the *Bose ni Tikina* gave out a hearty “*vinaka*”, or thanks, at the conclusion of this speech, and then called for another round of kava. This marked the end of the discussion about the *tabu* area during the meeting, but the controversy was not over. As of August 2007 when I left Cuvu Village, the *iqoliqoli* was still off limits to fishing, and has been opened recently for a couple of days to gather fish for an annual fundraising event (Peace Corps Volunteer, Cuvu Village, pers. comm.).

This story provides one example of how Fijians in Cuvu Tikina deal with natural resource conflicts on their own. It is significant for a number of reasons, particularly in showing how some of the challenges that PCDF faced were not present in this example. First, the Kalevu was obviously fully involved in the decision-making; he declared the *tabu* in March. Second, the conflict between Cuvu and Rukurukulevu was at least brought out into the open, and to some extent may have resolved some of the tensions between these two villages and *yavusa*. Third, the appropriate forum for discussion was used to debate the topic and included the key people from the concerned villages, so issues of protocol and procedure were not problematic. Following the *Bose ni Tikina* in June, I did not hear about further violations of the *tabu*, although some fishing may have continued unnoticed. Nonetheless, with the declaration coming from the Kalevu and understood by members of the council, the cost of enforcement was significantly reduced. Traditional procedures circumvented many of the challenges presented in this paper.

This is not to say that this method is the best way to make resource use decisions, or that the Kalevu’s decisions were necessarily right. In fact, we can see from this

example how the power of social and cultural norms can significantly restrict individual behavior and local decision-making. It also shows how influential the chiefly system is and the influence of networks in a rural or semi-rural Fijian context in general. Such a system can make change very difficult unless the paramount chief makes the decision. Conversely, it is just as difficult to try to oppose any decision that is made at that level. This example thus shows some of the potential benefits and challenges of utilizing traditional governance structures when implementing a CBNRM project.

Another interesting point to consider is the influence of all the NGO projects that had occurred in Cuvu over the past several years. Since PCDF's project ended, both PCDF and ICM staff met with the Kalevu, making him more informed about their work. He also had to approve the contract between Seacology and Sila Village. So the idea of *tabu* areas, and natural resource management in general, were likely more fresh in the Kalevu's mind than while the Coral Gardens Initiative was taking place three years earlier. Thus, it is likely that the efforts of PCDF and other organizations had a delayed impact on the area, though other forces were certainly involved in this specific case.

CHAPTER 7: CONCLUSION AND RECOMMENDATIONS

Summary of the Coral Gardens Initiative and challenges to CBNRM work

In this study I have described and explained ten major challenges to making governance development efforts in the Coral Gardens Initiative sustainable. Four out of PCDF's five governance measures, which included the creation of a district environment committee, fish wardens, a five-year management plan, an environmental trust fund, and *tabu* areas within the *iqoliqoli*, did not function after 2003. Only the *tabu* areas have remained in place, but they have often been opened to provide fish for traditional ceremonies. I described ten challenges that led to this result, and show that PCDF, the Fijian Resort, and village leadership all made decisions that led to the emergence of these challenges and reduced the effectiveness of the introduced governance measures. The Fijian culture and site specific characteristics also played an important role in determining the effectiveness of these efforts by shaping the context in which the Coral Gardens Initiative took place.

None of these challenges are completely unique to this case, as shown by other projects discussed in the literature review. Two of the most common problems with CBNRM projects cited in the literature – failure to empower local communities and the lack of understanding of local social and power dynamics – impacted the Coral Gardens Initiative. In Fiji and many other South Pacific island nations, legally-defined customary tenure of resources provides a critical foundation for community-based resource management. Thus, projects need not worry as much about empowering villages through decentralization of management. Rather, empowerment here is achieved by improving local management through learning about options and available resources. Concerning the second problem, a good place to begin learning about a community is to see what can

be understood at a macro level. In this case, if we understand some of the complexities of Fijian history and culture, then we will have a basic understanding of any specific location in Fiji. In chapter two of this paper, I outlined the evolution of resource management and local governance in Fiji, focusing on how decisions made by the colonial administration and Fijian chiefs codified the co-management structure and institutionalized parts of traditional Fijian culture. Any CBNRM project in Fiji will be based on these aspects of contemporary Fijian society.

Importance of social capital

I also showed the importance of social capital in the success of community-based projects, and the influence of the Fijian culture in determining how social capital is generated and utilized. In communities where individuals and kinship groups have formed cohesive networks based on trust, reciprocity, and shared norms that are continuously renewed through engagements, there is an increased likelihood that further group-oriented initiatives will succeed. Where provincial councils and provincial offices actively support and participate in projects, as is the cases in Kadavu and Cakaudrove, they can be powerful links in resource management networks. On the other hand, as shown in the ICM case, when the Nadroga/Navosa Provincial Office did not take ownership of the project it greatly reduced the project's effectiveness. Similarly, when the government merely provides financial capital for a project and little else, projects like Tore's ecotourism venture will not reach maturation.

Networks at the village and district level, however, are very difficult to build from the outside. Furthermore, most efforts will be faced with the paradox of building upon traditions and trying to create change at the same time. There is also an inherent tension

between promoting the development of individuals within the project and developing community cohesion at the same time, at least in the Fijian context. PCDF attempted to build upon the social networks that were in place and extend the network to include the Fijian Resort, government offices, and the NGO itself. But because of pre-existing tensions, these efforts were not very successful. Where PCDF did not use the existing structures or did not anticipate the dynamics between groups, project activities tended to exacerbate rather than alleviate tensions. Without chiefly leadership, other leaders were not empowered and did not take much interest in independently continuing the project, showing that cultural norms can easily hamper project activities. When the Kalevu took charge of natural resource governance, as he did in March 2007, the rest of the district was obligated to follow.

It is also notable that PCDF initiated contact with leaders in the district rather than vice versa. The Coral Gardens Initiative always belonged to PCDF in the minds of the people of Cuvu Tikina, so they never took ownership of the project. Therefore, it is not surprising that the governance measures put in place did not last beyond contact with PCDF. Participants in the project learned a great deal about natural resource management and the people of Cuvu Tikina have shown that they are fully capable of planning and implementing complex projects, but these two qualities were never combined during the project.

Other projects in Cuvu Tikina did not try to directly work on governance matters at the village and district level, instead focusing on tangible projects. Seacology is relying completely on the current governance structure to respect the promise to maintain the *tabu* area for ten years; there are no external accountability measures in place. But in

Seacology's case, both groups have likely already considered the project a success. The village has a community hall and Seacology and their donors can claim that almost 25,000 acres of the lagoon have been conserved. Though one may question the conservation value of such a method, it does leave authority at the local level. For their work in Cuvu Tikina, OISCA simply provided the raw materials and hands-on training for their conservation efforts. Although OISCA staff members do consult with local leaders, they do not try to influence decision-making processes directly. Rather, tangible evidence of conservation activities such as coral restoration and reduced erosion around newly-planted mangroves provides an incentive to villages to continue working on these efforts. ICM, like OISCA, also worked on a demand basis. If village or district authorities decided that they needed support on resource management activities, ICM staff could come in and help. Thus, all of these projects sought to provide tools to the local governance structure to help strengthen village-based resource management, rather than attempting to deal with the much more challenging endeavor of creating new governance structures.

Overall, due to previous efforts in the district and the fact that it is a chiefly area, if PCDF or another organization returns to this area to continue work on governance and management of natural resources, a strong foundation is already in place. The key to any future work rests in establishing strong and active leadership and building a network that includes all stakeholders. In fact, as long as local governance structures are functional, this holds true for work in any area in Fiji. The following recommendations are important for all stakeholders to consider, including local leaders and project participants.

Recommendations for future work and research

Recommendations for future CBNRM work

Projects should be demand-based. The most successful projects in Fiji have been initiated by the villages rather than any external organization. If NGOs simply provide villages with an opportunity to gain resources by being involved in a project, most villages will be eager to participate. In many of these cases, however, enthusiasm only lasts as long as the NGO is there to provide leadership and resources. This is particularly true concerning governance development. On the other hand, if traditional leaders approach NGOs or government offices for assistance in natural resource management, it suggests (though it does not guarantee) that the issue has already been discussed at the village or district level. CBNRM projects that can build upon existing work will also be better understood by participants and will not have to worry as much about selling their ideas.

Knowledge of local dynamics and social capital is critical prior to initiating a CBNRM project. CBNRM literature clearly states that understanding of the local communities and institutions is essential. Once a village or district states that they want to participate in a project, the facilitating organization should take the time to thoroughly assess how well local governance structures and networks are functioning before any work actually begins. They should also try to identify potential sources of conflict and if social networks are strong enough to be built upon. It is important to identify any conflicts around chiefly positions, or if any titular positions are currently vacant. Also, facilitators should understand the status of current natural resource governance mechanisms.

Information could first be gained by talking with chiefs and other local leaders. People from the village who live elsewhere, other organizations that have worked in the area, and local businesses may also be approached to gain an external perspective. Once initial contacts are made, attending provincial, district or village council meetings can help to identify the communities' priorities and concerns, and show who the visual and vocal leaders are. If an external organization's project ideas do not meet the needs discussed at council meetings, it may not be a good location to start a project. If a site is deemed ripe for a CBNRM project, facilitators should then ensure that villages and leaders understand the goals of any project, the costs and benefits for both the organization and village, and the role that each group will play. Transparency concerning these matters is essential to build trusting relationships. Sufficient time must be given to this process, perhaps six months to a year.

Building strong networks is essential and all stakeholders should be involved in activities. One of the most important tasks in governance development projects is to establish networks that enhance the quality of natural resource governance. Villages, settlements, the government, and local businesses often have a shared interest in how resources are managed; strong CBNRM projects develop integrated networks that account for all of these stakeholders.

In areas where there is significant commercial activity, especially the tourism industry, businesses have a keen interest in good environmental management. Thus, they can be useful partners in CBNRM initiatives and may act as long-term donors if they find it is in their best interest to be involved. Indeed, businesses like the Fijian Resort have shown a willingness to provide assistance with environmental work in the past and may

do so again in the future, especially as they also stand to gain from more environmentally-sound practices in surrounding villages. Similar to work in the villages, hotel activities must have both the approval of senior managers as well as staff members willing to devote their effort and resources towards long-term sustainability of project goals.

Including representatives from settlements and the Indo-Fijian population will provide for a more holistic perspective concerning resource use and management. Settlements in general and Indo-Fijians specifically are often neglected in CBNRM projects. These groups are likely not included because they are typically not resource owners in the district and there is rarely a clear governance structure in settlements, making it difficult to know who to approach concerning resource management. These residents, however, are resource users and of course impact the environment. It is therefore critical to engage the community and ensure that they are aware of resource decisions made by the *bose ni tikina* or *bose ni qoliqoli*. In the case of Cuvu, Naidovi settlement could even send representatives to council meetings to better integrate the community with the rest of Cuvu Tikina. Also, at least one fish warden should be selected from Naidovi, preferably an Indo-Fijian, to ensure *tabu* areas are respected and other regulations are followed.

Government agencies are also stakeholders. Involving the government offices responsible for natural resource management is an important way to ensure continued technical and motivational support is sustained after an NGO ceases to actively participate in a project. From my experience, forestry and fisheries field officers are often eager to provide villages with technical advice and assist in implementing projects.

Other offices with resource management related duties like the Rural Local Authority, provincial offices, and the Department of Environment are also critical in making the co-management structure more effective. If good relations can be built between these offices and local leaders, then both groups can accomplish their assigned duties more efficiently.

Finally, other NGOs can be valuable partners in CBNRM projects, as different organizations tend to have expertise in different activities. Coordination does often occur between NGOs in Fiji, and this practice should be continued. Conflicts, however, can and do occur between NGOs that can actually damage projects, as seen in the Coral Gardens Initiative. It is important that all staff members of NGOs understand that they share common goals and that different methods may be used to achieve those goals. By combining strengths rather than arguing over methodology, NGOs can enhance each other's projects.

Engage chiefs early and often. The higher the chiefly position in the area, the more important it is for the chief to actively support and participate in a project. The first step in developing strong leadership is to get the paramount chief actively involved in the project. Chiefly approval to initiate work is essential, and any guidance he or she offers on possible activities would be an excellent place to begin. If they thoroughly understand the benefits, chiefs will be able to provide important support for the other traditional leaders in the area. For example, if the Kalevu does not become a supporter of a project in Cuvu District, it is unlikely any community-based activities will succeed because no one else will feel empowered to advocate for the project. Chiefs should also be encouraged to develop a forum for conflict resolution, which would allow people from

the district to voice their concerns outside of official council meetings. Since he or she is the final decision-maker, it is also essential that chiefs understand all aspects of a given natural resource issue. External organizations can help by being available to provide technical information and options upon request.

Use traditional Fijian councils as planning and decision-making bodies. Rather than forming a distinct environmental committee, effort should be given towards empowering the existing governance structures to make informed natural resource decisions. Utilizing these structures would reduce the cost, effort, and potential confusion that come with building new structures. Because of the powers vested in provincial councils, any project should begin with approval from them. As shown in the literature review, provincial councils are an important source of support both for provincial offices and lower councils. These bodies already have legal authority and, in the case of *bose ni tikina* and *bose vakoro*, are already forums for decision-making at their respective level. These council meetings are also the traditional way to formally pass information, so including environmental issues at meetings will give legitimacy to the message as well. In this way, resource and environmental matters will become mainstream issues, an important step towards sustainability.

Because *iqoliqoli* do not necessarily parallel land borders, usually falling somewhere between district and provincial levels, they need their own decision-making bodies. The high chiefs of an area, the owners of *iqoliqoli*, should be encouraged to get their *iqoliqoli* committee (*bose ni qoliqoli*) registered and use this group to consult about local fisheries matters. Once established, a workshop could be held to train these individuals on marine resource management and current laws. *Bose ni qoliqoli* could also

act as mediators for conflicts surrounding *iqoliqoli* matters. As traditional leaders on these councils become more familiar with environmental principles, it is hoped they will be more willing to educate (in workshops and informally) the rest of the village. If leaders are pushing for environmental initiatives, they are much more likely to happen. Information must also reach a wider audience to see major attitude changes village-wide.

Empower the traditional governance bodies with knowledge. The traditional decision-making bodies must be trained on resource management principles and options. Once awareness is strengthened, they should develop a strategy for goals and future work independent of external facilitators, who could become technical advisors for future activities as needed. Emphasis should be placed on the committee finding its own resources to avoid overdependence on external facilitators or donors. They must also be responsible for deciding how to allot funds and other resources. Finally, village or district representatives can initiate contact with other outside agencies such as the University of the South Pacific or government field offices to seek guidance or resource assistance.

Identify community assets rather than focusing on problems. When villages identify a host of problems during PLA workshops, they usually feel that they cannot implement solutions without external support. This idea runs counter to the idea of empowering local people. While acknowledging the problems that villages face is important, it is more essential that they understand their assets and how they may be utilized in a given context. Once they identify the local resources they have at their disposal, solutions can then be selected that may be implemented largely with local resources rather than relying on other expensive options. This approach is now well-

developed, particularly by the Asset-Based Community Development (ABCD) Institute at Northwestern University (www.sesp.northwestern.edu/abcd) and the Mountain Institute (www.mountain.org/tmi/appa.cfm), which uses a process called Appreciative Participatory Planning and Action (APPA). This approach is also at the foundation of the U.S. Peace Corps approach to development (Peace Corps 2007).

Governance development project lifecycles should be five to ten years. Because of the challenges inherent in building and sustaining good governance practices, the standard funding cycle for NGO-led projects is insufficient. As we saw with PCDF's work, two to three years is not enough time to introduce new practices and train leaders on resource management approaches to the point where they are comfortable enough to take ownership of the project. Currently, organizations must report to donors frequently and thus need to utilize the allotted funding in a timely fashion. This timeline drives the process rather than allowing results from the project to inform future decisions. NGOs spend significant resources on a project in a short amount of time to create results that may be reported to donors. Likewise, villages suddenly have an increased focus on environmental or resource issues that were previously given little attention. The amount of effort provided by thousands of donor dollars cannot be sustained beyond the project.

I suggest extending the timeline of governance development projects and reducing the intensity of activities in these projects. The same amount of money that is currently spent in three years could instead be spread out across five or more years. A longer timeline could reduce the impact of the facilitator's role and the boost in resources given to natural resource management would be more gradual. This means that NGOs would probably have to conduct several projects at once in order to fund their staff and logistical

needs, but their workload in any single project at any given time would decrease. Donors would have to give NGOs more time to produce results and be willing to fund the assessment period where an NGO may decide not to conduct a project at that site.

Suggestions for continuing research

Findings in this paper generally agree with conclusions already made in the CPR and CBNRM literature. Results show that social capital is an important characteristic in the management and governance of communally-owned natural resources, as well as the importance of strong local institutions. Furthermore, challenges discussed in CBNRM literature were also problematic for PCDF's work. For the most part, then, this research helps confirm conclusions made in other studies.

One addition to the social capital literature is the suggestion of explicitly examining the impact that a given culture plays in determining how social capital is both created and used, and how it can both positively and negatively affect project success. An understanding of cultural norms can provide a foundation for a more specific, place-based assessment that facilitators should make before entering a project site. Although we cannot make universal generalizations about the impact of culture, I believe that where cultures share many common features (such as in Pacific Island countries), a good understanding of these features can also inform practical decisions on how to examine the activities and motivations of local communities in different locations. Second, the ethnographic approach provides a useful method for thoroughly examining the dynamics of both the external organizations as well as the local communities. By studying both of these groups, a richer depiction of the complexities of CBNRM projects can be created.

The following are three other possibilities for further study that may help inform future project stakeholders.

Examine if there are correlations between social capital and other forms of capital in Fijian villages regarding natural resource governance and management.

While this study assesses the importance of social capital to the success of governance development activities in CBNRM projects, I do not explicitly examine how it interacts with other forms of capital or the impact that other forms of capital have on CBNRM projects. For instance, is there any correlation between levels of financial capital and social capital in Fijian villages? The fact that many Fijians are concerned that money is eroding the Fijian culture suggest that this relationship might be inverse. To my knowledge, however, this has not been examined in the context of natural resource management. What is the impact of human capital on social capital in villages and districts? Is there a relationship between natural capital and strong management? Results from these studies may help to inform facilitators on where efforts should be focused based on the assets of a given community.

Assess the impact of project timelines on governance development results. A study that looks at the sustainability of governance mechanisms based on how long external organizations were active in an area could help determine an optimum average project length. Are there any trends suggesting that longer-term projects are indeed more successful in meeting these goals? If so, facilitating organizations and donors could determine different timelines based on the desired outcomes.

Assess the impact that the PLA approach has on its subjects in Fijian villages.

The participatory learning and action approach seems to be solidly entrenched in CBNRM methodology. This is also the case in Fiji. There are certainly many reasons why the PLA approach is so popular, and previous studies discuss its strengths. But PLA can also create problems as shown in this paper. Do local leaders make better decisions based on information gained in PLA workshops? Are seemingly marginalized groups in Fiji, like women and youth, empowered through this process? It would be helpful to understand if there are characteristics of Fijian villages that make PLA more useful than in others, or if there are cases where it should not be used.

Conclusion

Although many of the findings in this paper suggest that CBNRM projects have not substantially improved local management and governance of resources, this is not to say that the endeavor should be discontinued. Despite the challenges, efforts to improve management at the village and district level is still probably the best way to promote the conservation of Fiji's abundant natural resources. In Fiji, the co-management of natural resources relies heavily on decisions made by resource owners themselves. For government agencies to work effectively, and for the nation to fulfill its duties as signatories to international environmental treaties, local leaders must acknowledge their responsibility in this effort. To the extent that external organizations can assist in meeting this goal, their presence will continue to be important.

Ecosystems must be considered holistically; social, cultural, and ecological considerations must be taken into account when developing resource governance mechanisms. Sound resource management is particularly important in rural and semi-rural Fiji, where livelihoods and traditions are intimately tied to the health of their

ecosystems. Fijians cherish their farming and fishing heritage and it seems that many villagers are happiest when participating in these activities. In both urban and rural areas, there is concern that traditional values, and the environment, are being eroded by western influences and money. Where Fijians cannot pursue these traditional activities, the likelihood of further cultural loss is very possible as many villagers would have to turn to wage earning jobs to survive. It is also important to remember that most rural Indo-Fijians are intimately tied to the land as well. Their heritage is at stake when there is poor land and resource management, or where land tenure is insecure because of effects of political propaganda. CBNRM facilitators and local leaders should always strive to comprehend the implications that natural resource decisions have on the entire ecosystem.

External organizations such as NGOs, the government, businesses, and volunteer groups have all played a role in trying to improve natural resource governance and management in Fiji. The sheer number of projects that have been or are being conducted can attest to this fact. These people are usually very eager to assist in a variety of ways and the work that they are doing is very important. Ultimately, however, local leaders and Fijian villagers, the resource owners in Fiji, are responsible for their own fate. It seems that a good framework is in place for resource owners to build networks, including the communal nature of resource tenure and the interrelatedness of social groups. They must be utilized and reinforced by the groups themselves, who must also be willing to sacrifice a little today to achieve benefits for tomorrow. Natural resource and environmental stewardship also requires a strong commitment from local leaders who are both willing and able to accept this daunting responsibility. The current generation has

two responsibilities in terms of natural resource management in Cuvu District and elsewhere. First, they must pass on an ecosystem that continues to offer the same benefits as it does today. Second, they must also pass on the knowledge of how to properly manage these resources in the face of increasing market pressures and cash demands. If current leaders are successful in accomplishes these two duties, we may well continue to see village feasts with piles of fish and crops ready to be eaten.

REFERENCES

- Agrawal, Arun. 2001. Common property institutions and sustainable governance of resources. *World Development* 29(10): 1649-1672.
- Agrawal, Arun and Charles C. Gibson. 1999. Enchantment and disenchantment: the role of community in natural resource conservation. *World Development* 27(4): 629-649.
- Agrawala, S., O. Tomoko, J. Risbey et al. 2003. *Development and Climate Change in Fiji: Focus on Coastal Mangroves*. Paris: OECD.
- Arnstein, Sherry R. 1969. A ladder of citizen participation. *Journal of the American Planning Association* 35(4): 216-224.
- Berg, Bruce L. 2004. *Qualitative Research Methods*, 5th ed. Boston, MA: Pearson Education, Inc.
- Berkes, Fikret. 2003. Alternatives to conventional management: lessons from small-scale fisheries. *Environments* 31(1): 5-19.
- Berkes, Fikret. 2004. Rethinking community-based conservation. *Conservation Biology* 18(3): 621-630.
- Berkes, Fikret and Carl Folke. 1992. A systems perspective on the interrelations between natural, human-made and cultural capital. *Ecological Economics* 5: 1-8.
- Burawoy, Michael. 1998. The extended case method. *Sociological Theory* 16(1): 4-33.
- Caillaud, Anne.; Sarimin Boengkih; Elizabeth Evans-Illidge; John Genolagani; Paul Havemann; Douveri Henao; Eric Kwa; Donna Llewellyn; Alma Ridep-Morris; Justin Rose; Russell Nari; Posa Skelton; Robin South; Reuben Sulu; Alifereti Tawake; Brendan Tobin; Silika Tuivanuvou; Clive Wilkinson. 2004. Tabus or not taboos?: how to use traditional environmental knowledge to support sustainable development of marine resources in Melanesia. *SPC Traditional Marine Resource Management and Knowledge Information Bulletin* 17: 14-35.
- Capell, A. 1991. *The Fijian Dictionary*. Suva, Fiji: Government Printer. Original edition, 1941.
- Central Intelligence Agency (CIA). 2005. Fiji. From *The World Factbook*. Available online at <http://www.cia.gov/cia/publications/factbook/geos/fj.html>. Retrieved 27 April 2005.
- Coleman, James. 1988. Social capital and the creation of human capital. *American Journal of Sociology* 94: S95-S120 (Supplement).

- Cooke, Andrew J.; Nicholas V.C. Polunin; and Kolinio Moce. 2000. Comparative assessment of stakeholder management in traditional Fijian fishing-grounds. *Environmental Conservation* 27(3): 291-299.
- Coombes, Brad. 2007. Defending community?: indigeneity, self-determination and institutional ambivalence in the restoration of Lake Whakaki. *Geoforum* 38: 60-72.
- Davies, Anna R. 2002. Power, politics and networks: shaping partnerships for sustainable communities. *Area* 34(2): 190-203.
- Deane, William. 1921. *Fijian Society*. London: MacMillan and Co., pp. 98-115, 166-180.
- Derrick, R.A. 2001. *A History of Fiji*. Suva, Fiji: Government Press. Original edition, Suva: Government Press, 1946.
- Diamond, Jared. 1998. *Guns, Germs, and Steel*. New York: W.W. Norton.
- Dolsak, Nives and Elinor Ostrom. 2003. The challenges of the commons. In *The Commons in the New Millenium: Challenges and Adaptations*, ed. Nives Dolsak and Elinor Ostrom, 3-34. Cambridge, MA: MIT Press.
- Drew, J.A. 2005. Use of traditional ecological knowledge in marine conservation. *Conservation Biology* 19(4): 1286-1293.
- Elmqvist, Thomas. 2000. Indigenous Institutions, resilience and failure of co-management of rain forest preserves in Samoa. Presented at the Eighth Conference of the International Association for the Study of Common Property, Bloomington, IN, May 31-June 4.
- Evans, Nicholas. 2006. Natural resources and the environment in Fiji – A review of existing and proposed legislation. IWP-Pacific Technical Report No. 21. Apia, Samoa: Secretariat of the Pacific Regional Environment Programme.
- Feeny, D.; Fikret Berkes; B.J. McCay; J.A. Acheson. 1998. The tragedy of the commons: twenty-two years later. In *Managing the Commons*, ed. John A. Baden and Douglas.S. Noonan, 76-94. Bloomington, IN: Indiana U. Press.
- Fernando, Jude. 2003. NGOs and production of indigenous knowledge under the condition of postmodernity. *Annals of the AAPSS* 590 (November): 54-72.
- Fiji Ministry of the Environment. 2007. Fiji national liquid waste management strategy and action plan. International Waters Project Technical Report no. 48. Apia, Samoa: Secretariat for the Pacific Region Environmental Program (SPREP).

- Fiji Ministry of Fijian Affairs. 2005. Vakatabui ni qoliqoli cokovata e Macuata. *Na Mata* (November): 10-12.
- Fiji Ministry of Information, Communications and Media Relations. 2004. *Fiji Today* 2004/2005. Available online at http://www.fiji.gov.fj/publish/cat_about_fiji.shtml. Retrieved 5 April 2005.
- Fiji Ministry of Information, Communications and Media Relations. 2005. *Fiji Today* 2005/2006. Available online at <http://www.fiji.gov.fj/uploads/FijiToday2005-06.pdf>. Retrieved 20 March 2008.
- Fisk, E.K. 1970. *The Political Economy of Independent Fiji*. Canberra: Australian National U. Press.
- Fong, Patrick S. 2006. Community-based coastal resources management in Fiji Islands: case study of Korolevu-I-Wai District, Nadroga. Master's thesis, U. of the South Pacific, Suva, Fiji.
- Ghosh, D. 2004. Re-crossing a different water: colonialism and Third Worldism in Fiji. *Third World Quarterly* 25(1): 111-130.
- Goffman, Erving. 1989. On fieldwork. Trans. and ed. Lyn H. Lofland. *Journal of Contemporary Ethnography* 18:123-132. Quoted in Lofland, J. 1995.
- Gombos, Meghan. 2007. Workshop updates – locally managed marine areas [Fiji]. Available online at http://sprep.org/publication/Digest_archive.asp.
- Hay, J.E.; A.G. Suarez; P.P. Wong; L. Briguglio; S. Ragoonaden. 2001. Small Island States. In McCarthy, J.J.; O.F. Canziani.; N.A. Leary (eds.). *Climate Change 2001: Impacts, Adaptation and Vulnerability. Contribution of Working Group II to the Third Assessment Report of the IPCC*. Cambridge: Cambridge U. Press, 849-862.
- Hickey, Francis R. and Robert E. Johannes. 2002. Recent evolution of village-based marine resource management in Vanuatu. *SPC Traditional Marine Resource Management and Knowledge Bulletin* 14: 8-21.
- Integrated Coastal Management Project (ICM). 2006. ICM Coral Coast Newsletter, vol. 2. Institute of Applied Science, U. of the South Pacific, Suva, Fiji.
- Johannes R.E. 1978. Traditional marine conservation methods in Oceania and their demise. *Annual Review of Ecological Systems* 9: 349– 64.
- Johannes, R.E. 2002. The renaissance of community-based marine resource management in Oceania. *Annual Review of Ecological Systematics* 33: 317-340.

- Katz, Elizabeth G. 2000. Social capital and natural capital: a comparative analysis of land tenure and natural resource management in Guatemala. *Land Economics* 76(1): 114-132.
- Kearney, John; Fikret Berkes; Anthony Charles; Evelyn Pinkerton; and Melanie Wiber. 2007. The role of participatory governance and community-based management in integrated coastal and ocean management in Canada. *Coastal Management* 35(1): 79 – 104.
- Keen, Meg and Sango Mahanty. 2006. Learning in sustainable natural resource management: challenges and opportunities in the Pacific. *Society and Natural Resources* 19: 497-513.
- Kellert, Stephen R.; Jai N. Mehta; Syma A. Ebbin; and Laly L. Lichtenfeld. 2000. Community natural resource management: promise, rhetoric, and reality. *Society and Natural Resources* 13: 705-715.
- King, M. and U. Faasili (1999) Community-based management of subsistence fisheries in Samoa. *Fisheries Management and Ecology* 6: 133-144.
- Kumar, C. 2005. Revisiting ‘community’ in community-based natural resource management. *Community Development Journal* 40(3): 275-285.
- Kwiatowski, Lynn. 2005. NGOs, power, and contradiction in Ifugao, The Phillipines. *Urban Anthropology* 34(4): 385-436.
- Lane, Marcus B. 2006. The governance of coastal resources in Fiji – an analysis of the strategic issues. IWP-Pacific Technical Report no. 20. Apia, Samoa: SPREP.
- Lane, Marcus B. and G. McDonald. 2005. Community-based environmental planning: operational dilemmas, planning principles and possible remedies. *Journal of Environmental Planning and Management* 48(5): 709-731.
- Lal, Brij V. 1992. *Broken Waves: A History of the Fiji Islands in the Twentieth Century*. Honolulu: U. of Hawaii Press.
- Lal, Brij V. 2003. Heartbreak islands: reflections on Fiji in transition. *Asia Pacific Viewpoint* 44(3): 335-350.
- Leach, Melissa; Robin Mearns; and Ian Scoones. 1999. Environmental entitlements: dynamics and institutions in community-based natural resource management. *World Development* 27(2): 225-247.
- Legge, J.D. 1958. *Britain in Fiji: 1858-1880*. London: MacMillan and Co., pp. 170-205.
- Li, Tania M. 2002. Engaging simplifications: community-based resource management,

- market processes and state agendas in upland Southeast Asia. *World Development* 30(2): 114-132.
- Lockerby, William. 1925. *The Journal of William Lockerby, Sandlewood Trader in the Fijian Islands During the Years 1808-1809*. Sir Everard im Thurn and Leonard Wharton, eds. Cambridge, UK: Hakluyt Society.
- Lofland, John. 1995. Analytic ethnography: features, failures, and futures. *Journal of Contemporary Ethnography* 24: 30-67.
- Lucas, Verona; Setefano Nauqe; and Sachin Chandra. 2003. Assessing community perspectives on governance in Fiji. Suva, Fiji: Partners in Community Development Fiji.
- Mason, Jennifer. 2002. Observing and participating. In *Qualitative Research*, 2nd ed. Thousand Oaks, CA: Sage Publications. pp. 84-102.
- Matthews, Elizabeth; Joeli Veitayaki and Vina Ram Bidesi. 1998. Fijian villagers adapt to changes in local fisheries. *Ocean and Coastal Management* 38: 207-224.
- Muehlig-Hofmann, Annette. 2007. Traditional authority and community leadership: key factors in community-based marine resource management and conservation. *SPC Traditional Marine Resource Management and Knowledge Information Bulletin* 21 (October): 31-44.
- Middlebrook, R. and J.E. Williamson. 2006. Social attitudes towards marine resource management in two Fijian villages. *Ecological Management and Restoration* 7(2): 144-147.
- Mosley, L.M. and W.G.L. Aalbersberg. 2003. Nutrient levels in sea and river water along the 'Coral Coast' of Viti Levu, Fiji. *South Pacific Journal of Natural Science* 21: 35-40.
- Morrow, Christopher E. and Rebecca Watts Hull. 1996. Donor-initiated common pool resource institutions: the case of the Yanesha Forestry Cooperative. *World Development* 24(10): 1641-1657.
- Narayan, P.K and B.C. Prasad. 2003. Fiji's sugar, tourism and garment industries: a survey of performance, problems and potentials. *Fijian Studies* 1(1): 3-27.
- Nayacakalou, R.R. 2001. *Leadership in Fiji*. Suva, Fiji and Melbourne: U. of South Pacific and Oxford U. Press, Melbourne. Original edition, Melbourne: Oxford U. Press, 1975.
- Onyx, Jenny and Paul Bullen. 2000. Measuring social capital in five communities. *Journal of Applied Behavioral Science* 36(1): 23-42.

- Ostrom, Elinor. 1998. Social capital: a fad of fundamental concept? Bloomington: Center for the Study of Institutions, Population and Environmental Change, Indiana U.
- Overton, John. 1999. Vakavanua, vakamatanitu: discourses of development in Fiji. *Asia Pacific Viewpoint* 40(2): 173-186.
- Peace Corps. 2007. *Participatory Analysis for Community Action (PACA) Training Manual*. Information Collection and Exchange no. M0053. Available online at <http://www.peacecorps.gov/multimedia/pdf/library/PACA-2007.pdf>. Retrieved 12 May 2008.
- Portes, Alejandro and Patricia Landolt. 1996. The downside of social capital. *The American Prospect* 26: 18-21,94.
- Portes, Alejandro and Patricia Landolt. 2000. Social capital: promise and pitfalls of its role in development. *Journal of Latin American Studies* 32: 529-547.
- Prasad, Biman C. 2003. Institutional economics and economic development: the theory of property rights, economic development, good governance and the environment. *International Journal of Social Economics* 30(6): 741-762.
- Pretty, Jules and Hugh Ward. 2001. Social capital and the environment. *World Development* 29(2): 209-227.
- Putnam, Robert. 1993. The prosperous community: social capital and public life. *The American Prospect* 13: 35-42.
- Putnam, Robert. 2000. *Bowling Alone*. New York: Simon and Schuster.
- Raiwalui, Anare K. 1992. *Na I Vosavosa Vakaviti E So: A Collection of Fijian Idioms*. Suva, Fiji: Nation Print, Ltd.
- Ratuva, Steven. 2007. The pre-election 'cold war': the role of the Fiji military during the 2006 election. In *From Election to Coup: The 2006 Campaign and its Aftermath*, ed. Jon Fraenkel. and Stewart Firth, 26-45. Suva, Fiji: IPS Publications, University of the South Pacific.
- Ravuvu, Asesela. 1983. *Vaka I Taukei: The Fijian Way of Life*. Suva, Fiji: University of the South Pacific.
- Ravuvu, Asesela. 1987. *The Fijian Ethos*. Suva, Fiji: U. of South Pacific.
- Roue, Marie. 2003. NGOs, indigenous peoples and local knowledge: issues of power in the arena of biodiversity. *International Social Science Journal* 178: 533-537.

- Rowlands, G; J. Comley and P. Raines. 2005. Fisheries resource assessment report: the i qoliqoli Vanua ko Yavuasuna and Voua. Unpublished report compiled by Coral Cay Conservation, Ltd. Retrieved in electronic from the Institute of Applied Science, U. of South Pacific.
- Schmink, Marianne. 1999. Conceptual framework for gender and community-based conservation. Case Study No. 1, MERGE series on Gender, Community Participation and Natural Resource Management. Gainesville, FL: U. of Florida/PESCARE.
- Srebrnik, H. 2002. Ethnicity, religion and the issue of aboriginality in a small island state: why does Fiji flounder? *The Round Table* 91(364): 187-210.
- Sriskandarajah, D. 2003. Inequality and conflict in Fiji: from purgatory to hell? *Asia Pacific Viewpoint* 44(3): 305-324.
- Tawake, Alifereti and William Aalbersberg. 2002. Community-based refugia management in Fiji. In: *IAS Technical Report No. 2002/08*. Institute of Applied Science, University of the South Pacific, Suva. Washington, D.C.: The World Resource Institute.
- Thaman, Batiri and Bill Aalbersberg (2004) Initiating integrated coastal management (ICM) in the Fiji Islands. Presented at the Coastal Zone Asia-Pacific (CZAP) Symposium. Brisbane, Australia.
- Throsby, David. 1999. Cultural capital. *Journal of Cultural Economics* 23: 3-12.
- Tomlinson, Matthew. 2006. Reflexivity, tradition and power: the work of R.R. Nayacakalou. *Ethnos* 71(4): 489-506.
- Tuimaleali'ifano, Morgan. 2007. Indigenous title disputes: what they meant for the 2006 election. In *From Election to Coup: The 2006 Campaign and its Aftermath*, ed. Jon Fraenkel. and Stewart Firth, 261-271. Suva, Fiji: IPS Publications, University of the South Pacific.
- Turnbull, Jane. 2003. South Pacific agendas in the quest to protect natural areas. *Development and Change* 34(1): 1-24.
- Turnbull, Jane. 2004. Explaining complexities of environmental management in developing countries: lessons from the Fiji Islands. *The Geographical Journal* 170(1): 64-77.
- Veitayaki, Joeli. 1998. Traditional and community-based marine resource management system in Fiji: an evolving integrated process. *Coastal Management* 26: 47-60.
- Veitayaki, Joeli. 2002. Taking advantage of indigenous knowledge: the Fiji case.

International Social Science Journal 54(173): 395-402.

Virdin, John W. 2000. An institutional model for co-management of coastal resources in Fiji. *Coastal Management* 28: 325-335.

Volavola, Ratu Timoci N. 2005. A history of Cuvu Village. Unpublished document. Printed September 2005.

Vuki, Veikila; Milika Naqasima and Ron Vave. 2000. Status of Fiji's coral reefs. Coral Reef Monitoring Network, International Ocean Institute Operational Center of the Pacific Islands Node. Unpublished report from the Marine Studies Programme, U. of the South Pacific, Suva. Available online at www.reefbase.org.

Warner, Michael. 2000. Conflict management in community-based natural resource projects: experiences from Fiji and Papua New Guinea. Working Paper 135, Overseas Development Institute: London.

Warner, Mildred. 2001. Building social capital: the role of local government. *Journal of Socio-Economics* 30: 187-192.

Williams, Thomas. 1985. *Fiji and the Fijians, vol. 1: The Islands and Their Inhabitants*. Suva: Oceania Printers, Ltd. Original edition, London: William Nichols, 1858.

Williksen-Bakker, Solrun. 2004. Can a 'silent' person be a 'business' person?: the concept *madua* in Fijian culture. *The Australian Journal of Anthropology* 15(2): 198-212.

World Bank. 2000. *Voices from the Village: A Comparative Study of Coastal Resource Management in the Pacific Islands*. Final Report. Pacific Islands Discussion Paper Series No. 9. East Asia and Pacific Region, Papua New Guinea and Pacific Islands Country Management Unit. Washington, D.C.: The World Bank.

Websites referenced

Asset-based Community Development Institute (ABCD) at Northwestern University
<http://www.sesp.northwestern.edu/abcd>

Fiji Parliament
<http://www.parliament.gov.fj/main/index.aspx>

Fiji Government
<http://www.fiji.gov.fj>

Fiji Bureau of Statistics
<http://www.statsfiji.gov.fj>

The ICM project of the Institute of Applied Science, University of the South Pacific
<http://www.usp.ac.fj/index.php?id=4330>

Mountain Institute (Appreciative Participatory Planning and Action (APPA)
<http://www.mountain.org/tmi/appa.cfm>

Partners in Community Development-Fiji (PCDF) Coral Garden Initiative in Cuvu District
<http://www.fspi.org.fj/affiliates/fiji/coral.htm>

OISCA's work in Fiji
<http://www.oisca.org/e/project/fiji/index.ht>

Seacology – Project in Sila Village, Cuvu District
http://www.seacology.org/projects/individualprojects/FIJL_Sila2006.htm

APPENDICES

Appendix A: List of Fijian terms (definitions are based on those found in Ravuvu (1983) and Capell (1991).

A note on Fijian pronunciation: vowel sounds are similar to those in Spanish and are consistent. All of the consonant sounds are similar to English pronunciation with the exception of the following: **b** sound like **mb** in number; **c** sounds like **th** in this; **d** sounds like **nd** in thunder; **g** sounds like **ng** in singer; and **q** sounds like **ng** in finger.

bati – warrior, traditional warrior clan
bose ni qoliqoli – native fishing grounds committee, committee meeting
bose ni tikina – district council, district council meeting
bose ni yasana – provincial council, provincial council meeting
bose vakoro – village council, village council meeting
buli – native officer in charge of a district during the colonial era
galala – free, exempt from tax or other restrictions
gonedau – traditional fisherman clan
ikanakana – section of a traditional fishing ground used by a village for subsistence
iqoliqoli – customary fishing ground
itokatoka – sub-clan; the smallest kinship grouping in traditional Fijian society, a group descended from brothers
itovo – method, way of doing something; ex. *itovo Vakaviti* – done in a Fijian way
kalou vu – traditional origin gods
koro – Fijian village
lala (stress on both vowels) – the order of a chief requiring work to be done
lawa lailai – by-laws that can be passed by provincial councils
lewe ni vanua – the common people in a village
mataqali – clan; the primary local division of Fijian society and basic landowning unit
roko tui – native officer in charge of a province, based on a titular position on Bau Island
solesolevaki – volunteer work for the good of the community rather than self
soqosoqo vakamarama – women’s group
tabu – sacred, prohibited, restricted, forbidden both in religious and legal terms
talai rawarawa – obedient
taukei ni qele – traditional land owners
Tui – paramount chief of an area; ex. *Tui Nadroga* – paramount chief of Nadroga/Navosa province
turaga – chief, man
turaga ni koro – native officer in charge of village activities, village mayor or headman
turaga ni vanua – traditional chief
vakataraisulu – a ceremony marking the completion of mourning, usually after 100 following a death
vakaturaga – belonging to a chief, in a chiefly manner
vakavanua – in a traditional Fijian manner
vanua – land, place; a group of yavusa consolidated under a powerful chief; can also be used to represent the cultural traditions of the Fijian people
veidokai – respect
veilomani – consideration, caring
veinani – consideration
viavialevu – arrogant
yalo malua – humble
yaqona – kava (*Piper methysticum*); an important ceremonial drink in Fiji and the Pacific Islands
yavusa – tribe; the largest kinship and social division of Fijian society based on origin gods

Appendix B: Interview Guides

Interview Guide 1: used during initial assessment (June-July 2006) of the Coral Gardens Initiative and provided by PCDF staff.

Objective of the Assessment: To determine the longer-term positive impacts and changes brought about by the previous PCDF program, to include:

1. Community aspects and determining any permanent changes, based on the opinions of community members of the PCDF project
 - a. awareness levels (before and after)
 - b. major achievements and good points of the project
 - c. major disappointments, things that didn't happen
 - d. any new community initiatives towards sustainability
 - e. hopes and plans for the future
 - f. what more outside assistance or facilitation is needed?
2. Resort impacts and determining any permanent changes (interviews with long-term engineering and water sports activity staff, etc.)
 - a. guest information, fish house program
 - b. bridge replacement progress
 - c. living waters waste treatment system is it functioning and well understood by the resort management and engineers?
 - d. were other environmental recommendations followed?
 - e. environment trust fund, is it operational?
3. Environmental impacts of the work and permanent changes
 - a. management plans and Tabu areas, are they operational
 - b. rubbish disposal (past and present)
 - c. other changes that have happened
4. Governance structures in the process of environmental management and sustainability versus dependence
 - a. Fish warden system, is it working (interviews)
 - b. Cuvu-Tuva Environment Komiti (interviews)
 - c. Chiefly system and support (interviews)
 - d. Tikina Council and Provincial office support
 - e. Recommendations for a more workable system
5. Why did PCDF pull out so suddenly in August 2003
6. What lessons overall can be learned by PCDF in our new USAID sites?

For discussion and conclusions: Record those aspects of the project that have been continued and those that have been discontinued, discuss obstacles to project self-sufficiency and continuance at the local level, and recommend whether further work by PCDF or other agencies is advisable at this time.

Interview Guide 2: used during interviews in July-August 2007.

(Before the project)

- a. How can an NGO help villages manage their resources? (What does the village need help with?)
- b. How did you hope the project would benefit the villages? How much impact can an NGO have?
- c. How can sustainability best be achieved in CBC projects?
- d. How did you (NGOs) choose your project site?
- e. How are village participants chosen?
- f. (NGOs) How have you developed your project methodology? How well do village reps understand these methods?
- g. What did you know about the village/NGO previous to the collaboration?
- h. What are the priorities in your village? What are priorities in the NGO?
- i. What was the plan to develop leadership at the village level? Has it been successful?

(During the project)

- j. How did the NGO involve the community during the project (leaders, participants, students)?
- k. Who were the leaders during the project? (who controlled the money, the timeline, and the activities)
- l. Where did the ideas for specific activities come from?
- m. How can an NGO include villages most effectively?
- n. What are some factors that can slow progress in a project?
- o. How long should an NGO actively work in a resource management project?
- p. What are examples of successful NGO activities/projects?
- q. How much have the NGOs' activities affected your village? Give examples.
- r. What advantages and challenges do NGOs face working with a village? Village with NGOs? (What makes sustainability possible? What makes it hard?)

Background of participant

Age?

What was your role in the project?

How long have you worked on environmental projects?

Have you worked with other NGOs/villages as well? Have your experiences been similar/different? What are the similarities?