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INTRODUCTION

This study was part of an iterative process to determine the influence of cultural roles in the effectiveness of Marine Managed Areas (MMA). Cultural roles included people's culture and traditional practices associated with marine resource use; cultural organization, structure and features of the community resource use activities and regulations; community marine resource management initiatives and changes associated with the establishment of MMAs. Special features of the study covered gender roles and distribution of responsibilities, the challenges to be addressed; the achievements by communities undertaking marine resource management, the potentials to be used and suggestions on how cultural roles can improve marine resource management.

The aim of the study was to gather relevant information on specific cultural issues that enhanced coastal resource management programmes. The initiative was valuable because even though customary practices were the basis of the community-based marine resource management activities spreading in Fiji and other parts of Oceania over the last decade, little research had been undertaken on the influence of the cultural roles. Moreover, the challenges that were facing community-based marine resources management today (e.g. poaching) made it critical that the influence of cultural roles be better understood and addressed. For this reason, cultural roles had joined the ecologic, economic, social and economic factors as important parameters that needed to be better understood for the effective management of the marine resources at the community level.

In Fiji, a dual system of coastal resource management existed; where an informal management system, devised and implemented by a community of resource users, coexisted with a formal government management system. This customary system was based on traditional practices that were handed down through generations as the cornerstone of the community-based resource management undertaken across the Pacific Islands. Contemporary experiences in Fiji showed the usefulness of some traditional practices despite the fact that the traditional system of resource use was formulated for a time long gone. (Veitayaki 2000:125). Although the customary system reflected the ethnic, clan, kin, class and gender situations and responsibilities, there was little consideration of the influence of cultural factors such as community leadership and governance. In other words, the assumptions were that the cultural system worked and that all the community members adhered to the decisions made by the groups and their leaders.

A review of the published reports from some of the community groups in Fiji undertaking conservation showed how little the people involved in community-based resource management reflected on the imposition of customary resource management arrangements. Lingering questions on people's perceptions and whether they were happy with their management plans remained with those who

wanted to see if the effectiveness of MMAs could be improved. There were unanswered questions: what was the effect of the resource management activity on the people involved? Were the views of people solicited before the resource management decisions were made? How was the decision made in the first place? Was the customary system functioning in the present time? Why was poaching the biggest threat to community-based resource management? Could there be a better arrangement to deliver on the objective of resource management? These questions would be examined in this study.

The importance of cultural roles studies in an archipelagic state such as Fiji was evident. The existence of customary marine tenure and rules that included the unwritten, informal (customary and traditional) practices through which people gained use rights and defined specifically which acts were required, permitted and forbidden by resource users with respect to their coastal activities, made this study important and timely. A good understanding of Fijian principles could enhance appreciation of why the coastal communities did what they did (Ravuvu 2005).

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BACKGROUND OF THE STUDY

2.1 Objectives

The objectives of this study were covered under the following categories:

(a) *Research:*

- Determine the human cultures, cultural contexts, cultural values and cultural roles in communities involved in marine resource management;
- Determine the extent to which marine resource management delivered the range of social and cultural benefits required to sustain community support; and
- Assess the cultural influences, relations, practices and values that affected the people's resource management activities.

(b) *Capacity Building:*

- Provide training workshops in the study sites to promote study;
- Produce trained research assistants from partner organizations, the University and local communities; and
- Secure postgraduate scholarships for studies in this area.

(c) *Outreach:*

- Develop an outreach programme to publicize the objectives and the results of the study
- Publicize the study through publications, reports, and public lectures

MMA's were spreading quickly in Fiji as local communities were lobbied to protect their fisheries resources, which they realised, were in danger of depletion and overexploitation. The commitment in these local communities was demonstrated by the fact that even though the Fiji Government had proposed to have 30 per cent of all its waters managed by 2020, all of the 200 or so community-based resource management actions taken up to now had been by local communities using their customary rights. In all of these communities, the people had made the hard decision to protect and restrict the use of their marine resources. The challenge was to make these initiatives efficient in conserving the resources and in providing benefits to the resource owners and users.

The relationship between people and their land and sea defined the duty of care that people had to each other, the future generations as well as the environment (Govan 2009:22). Community-based resource management in Fiji and the Pacific Islands was a dynamic system of social interventions, shaped by local experience and influenced by external forces. Through time people learned that their resources recovered quickly if the use level was reduced and devised practices and enforcements to restrict their effort whenever justified. Attempts to strengthen contemporary community-based marine resources management should therefore be based upon an assessment of the motives, ethics, interests, and cultural conceptions of the people involved. In such situations, the knowledge level, education, religion, community dynamics and perceptions all played a vital role.

In Fiji, and many other countries in the Pacific Islands region, a customary marine tenure system built on local autonomy and self-reliance, controlled the use of local marine space and resources. There were 410 registered customary fishing rights areas (*i-qoliqoli*) in Fiji, which supported subsistence fishers as well as some commercial interests. In the heavily exploited *qoliqoli*, resource management was important as pressure through local users increased and was no longer sustainable (Muehlig-Hofmann 2008).

In many traditional villages, the respect paid to the chief, which depended on factors such as strength of character, knowledge and authority (Vunisea 2002), was increasingly questioned. This was important because the declaration of MMAs was influenced by the social structures, situation and the circumstances in the communities involved. Consequently, strong, wise and respected community leadership was necessary for the sustainable management of natural resources in the villages (Muehlig-Hofmann 2008). The customary system offered an alternative to resource management in countries such as Fiji where the people could take action instead of waiting for government directive, guidance and leadership. The challenge was to understand the conditions under which management worked best.

2.2 Conservation Implications

This study examined how cultural roles affected MMAs and the factors that needed to be taken into consideration in communities undertaking resource management. The experience of the Fiji Locally Managed Marine Areas (FLMMA) network demonstrated the attractions and effectiveness of community-based resource management practices initiated by the communities and non-government organizations, and supported by the government. However, FLMMA worked to increase the effectiveness of conservation and to make the involvement of the people in the management of their marine resources satisfying and meaningful. LMMA implementation in Fiji led to increased resources and a corresponding reduction in poverty in rural communities that depended on marine resources (Aalbersberg, Tawake & Parras 2005:151). Although most conservation literature was focused on the bio-physical and economic features of MMAs, cultural roles were critical because of their influence on the resource management decisions made and the actions taken. After all, resource management was about managing people and not the resources. No individual could declare resource management or conservation in any part of Fiji unless he or she had rights, which were recognised by their group.

Management decisions needed to be enforced and this requirement was provided for within the customary system. However, while the customary system was still largely observed, some of its features and context had changed drastically due to the modernisation of coastal communities. This study provided the basic cultural science data into the MMA research and helped construct the framework for on-going cultural data collection that was required for the assessment of the outcomes of the MMAs. The lessons learned would be shared widely with people to enhance the community effort and maximize the benefit to the people involved in resource management.

2.3 Existing Science Efforts

Numerous studies had been undertaken on Fijian culture by scholars such as Belshaw (1964), Watters (1969), Brookfield *et al.* (1978; 1979), Nayacakalou (1975; 1978) and Ravuvu (1983; 1988a; 1988b). Studies were also undertaken by Lal and Slatter (1983); Carleton (1983); and Veitayaki (1995) on fishing in coastal communities. Following the proliferation of MMAs in recent years, the effectiveness of community resource management activities also had become the subject of interesting studies (Johanessen 2004; Muehlig-Hofmann *et al.* 2005; Muehlig-Hofmann 2008; Sano unpublished). Some of these studies would be reviewed to determine the human cultures, contexts, values and roles that influence the activities in communities involved in resource management.

Indigenous Fijians had exclusive customary fishing rights in the *qoliqoli* extending out to the barrier reefs and some offshore reefs. However, the sea and sea floor belonged to the state, and the indigenous people had no rights over it (South and Veitayaki 1998). This mixed arrangement was a source of confusion for over 130 years (Cooke and Moce 1995; Ruddle 1994).

Since independence in 1970, attempts were made to return full ownership of the *qoliqoli* areas to the indigenous owners. In August 2006, in an attempt to resolve the situation, a Qoliqoli Bill was put before the Fiji Parliament, to return all proprietary rights to *qoliqoli* areas to the identified traditional *qoliqoli* owners. A notable feature of this proposed change in legislation was the establishment of a Qoliqoli Commission to administer and manage fisheries operations within *qoliqoli* areas. The Bill caused controversy amongst the diverse stakeholders some of whom harbored the assumption that the Bill privileged only the indigenous Fijian population. In a society that was becoming more individualised, where ownership rights was in the hands of a few land-owning groups (*mataqali*), the Bill was argued to undermine responsible community-based resource management and equal benefits for the entire community (Muehlig-Hofmann 2008).

Although the Bill had been under discussion for more than ten years, it was cancelled by interim Prime Minister Bainimarama during the December 2006 coup. It was obvious that other more pressing issues in Fiji had to be addressed first for the better use of *qoliqoli* and coastal marine resource conservation (Muehlig-Hofmann 2008). Two such issues that had often not been dealt with were community leadership and responsibility over community resource management efforts.

Cooke and Moce (1995), Muehlig-Hofmann (2008) and Sano (unpublished) showed that management strategies and the level of government involvement varied greatly across Fiji and depended on the individual fisheries officers, chiefs and communities involved. In some places, people changed their minds when their conditions changed. Problems and conflicts arose when people felt they were treated unequally or with disrespect. The Government relied on the local governance and self-regulation skills of the coastal fishing communities because of lack of funds and personal capacity. However, the communities alone could not with their present structure, skills and resources, establish and carry out the management arrangements needed to mitigate the increasing pressure on their resources. The effective management of marine resources by community groups needed good government support.

Some Fijian communities had worked with local non-governmental organisations (NGOs) and institutions (Veitayaki *et al.* 2005; Veitayaki 2005; 2006; Muehlig-Hofmann 2008; Sano unpublished) through the involvement of officials and academics, follow-up of NGO workshops, or hearsay from other communities and relatives. In these cases, resource management activities were dependent on the ambitions of the communities and individuals involved (Muehlig-Hofmann 2008).

2.4 Contribution to MMA Science

The idea that sustaining healthy living standards and income could only be achieved with properly managed marine environment and fisheries resources had been driving the MMAs in Fiji. Although a more sustainable approach to exploitation was pursued over the last decade, the varying degrees of success in Fiji were a reminder of people's inability to get organised (Zann and Vuki 1998; Veitayaki 1998). In many areas, some of the people were still trying to modernise their fishing methods, which were contradictory to the aims of MMAs.

Given the current harvesting capacity, a resource could easily be exploited beyond sustainable levels, which was why the precautionary approach to fisheries should be implemented at village level. According to Muehlig-Hofmann (2008), the main challenges of communities like the one she worked with on Gau Island, could only be met by a strong bond between communities and official agents, based on continuity, community consensus and trust. This could be achieved if every community had an experienced fisheries manager working with them to formulate conservation measures, surveillance and compliance, communication, networking, data collection and analysis.

The results of this study would contribute to three levels of MMA science. At the local level, this study would bring the 'social-cultural reality' of MMA processes in the context of the specific locations in Fiji. At the regional level, this study provided human ecological connections amongst various locations and resources in the Pacific. At the international level, this study set for the inclusion of cultural factors into MMA design and implementation.

Some of the relevant issues that would be considered for this study include: types of cultural systems in communities governing MMAs, such as marine tenure systems; cultural importance of fishery to the livelihoods of fishing communities; cultural perceptions of community's marine resources and traditional resource management activities practiced in communities.

Cultural roles could be both good and bad for resource conservation so it must be dealt with smartly. Generally, in the Pacific Islands and in Fiji, culture needed to assimilate contemporary challenges. Issues that needed to be addressed included trade and the commercialisation of resources including food sources, erosion of traditional authority, burgeoning population in urban centres, proliferation of non biodegradable, hazardous and toxic waste, representing the ever-changing conditions where culture operated today. The study of cultural roles would highlight the issues that needed to be kept in mind if we were to have effective MMAs.

3

ANTICIPATED DIRECT OUTCOMES

3.1 In Country Capacity Building

The study was a national capacity building and awareness raising exercise. Capacity building and awareness on the subject of effective resource management at community level and the role of culture was important given the challenges associated with the sustainability of the MMAs.

Local academics and researchers trained, worked and supervised stakeholders and students in rural communities and at the University of the South Pacific. Partners from Government and civil society were involved whenever possible to introduce them to all these activities. Attempts were made to entice formal post graduate studies in this area. The study team included research students from abroad who studied aspects of this topic.

A series of resource management workshops in the chosen study sites highlighted the need for effective resource management in rural communities and was used to share the results of the study.

3.2 Deliverables for the Conservation Community

The challenge was to have more successful and meaningful MMAs developed that will improve the conditions of life in coastal communities, as well as ensure the effective use of natural resources. In Fiji, key areas of focus in the Strategic Development Plan (SDP) 2003 - 2005 included the need for proper environmental management and sustainable development, recognition of the rich and fragile natural resources and the serious environmental problems that awaited and threatened us (Fiji Government 2002; Kaly *et al.* 2002, ADB 2005). A number of innovative initiatives had been tried to bring together biodiversity conservation, livelihood and economic needs as well as social and cultural issues such as organisation and leadership. The study produced documentation of the cultural roles in these MMAs.

The outcome of the study was intended for MMA managers, the church, provincial administrators, government, future outside researchers and the public. The results would be:

- Published as technical and non-technical reports targeted both for scientists and non-scientists, policy makers and the public, demonstrating the importance of cultural roles in MMAs designs;
- Presented to local government and other interested stakeholders in forums or public lectures;

- Promoted in a publication at USP, which would be translated into the Indigenous Fijian language, thus helping to share the results with the local communities.

3.3 Peer Reviewed Publication

The study and a number of its outcomes would be published in a number of journals such as the *Ocean Yearbook*, *Marine Policy*, *Natural Resource Forum* and *Ocean and Coastal Management*. It was also intended that some of the results of the study would be published in local journals.

4

RESEARCH METHODOLOGY

4.1 Background

At the World Summit on Sustainable Development in 2002, it was widely accepted that poverty, unsustainable development and environmental degradation were prevalent in coastal communities, particularly those in rural areas. As people in these communities got involved in development and the formal 'western' economy, their independence and resilience were lost and replaced by their reliance and dependence on the globalised economic system in which they were always at a disadvantage. Poverty and environmental degradation therefore became features of life in rural areas as people utilized their food resources to earn income. Governments, development agencies and NGOs formulated policies, strategies and development projects to meet people's basic needs, to allow them to manage their environment resources and formulate sustainable development activities.

In Fiji, the 2002/2003 household income and expenditure survey placed the national poverty level at 29 per cent of the population, an increase from the 25 per cent previously used (Baleinakorodawa *et al.* 2006:1). In this category, the lowest income earners were in rural Fiji where poverty was increasing amongst people who do not have a steady source of income and yet were required to pay the most for the goods and services they need.

4.2 Methods

The influence of cultural roles in the MMAs was investigated and analysed to see if they could be used to make MMAs more effective. To gather this kind of information, the study initially focused on the literature, particularly the studies that were conducted on Fijian culture and its changing context. Reports on existing MMAs activities were examined to show how the cultural roles had been handled in these different cases. In addition, interviews, focus group meetings and participant and non-participant observations were conducted in as many parts of the country as possible over a period of 12 months.

Knowledgeable women and men in the villages in each of the sites visited (see below) were involved in the study. These selected people were asked for their opinion on how they saw the changes taking place in their villages, the people, their culture, their resource use practices, their concerns, hopes and perspectives for the future.

Information derived from the focus group meetings and the literature was cross checked against the information gained through the interviews and observations.

Keeping the study sites consistent for the cultural, economic and social studies were meant to enhance the comparability of the topics studied. However, it was also a hindrance as some of the communities chosen were not able to separate the issues along the lines that was pre-determined by the researchers. In the end, there were issues of repetition and feelings of ‘research overload’ in some of these communities. This study focussed on individual villages and tried to reach as many people in these communities as possible. Consequently, the researchers went with the local partners to a number of the sites such as Verata, Cuvu and Waiqanake and proceeded by themselves to others such as Kubulau and Gau.

Some of the cultural roles variables that were studied included:

1. Culture and traditional practices associated with marine resource use
2. Organization, structure and features of the community
3. Resource use activities and regulations practiced in the community
4. Knowledge of marine resource management initiatives
5. Changes accompanying the establishment of MMAs
6. Gender roles and distribution of responsibilities
7. Challenges to be addressed
8. Achievements since communities ventured into marine resource management
9. Potentials to take advantage of cultural roles
10. Suggestions for how cultural roles could improve marine resource management

4.3 Study Sites

The study was conducted in FLMMA sites. The number of the sites covered depended on the budgetary constraints and the alternative arrangements that were possible. Site selection was based on the project requirements, accessibility, uniqueness and the length of time involved. Most of the sites that had existing biological, social and economic data were visited.

The sites that were visited included:

Site	Partner Org.	Management regime	Year of Estab.	Available Data
Priority Sites				
<i>Navatu, Kubulau, Bua</i>	WCS	Seascape and community-based	2004	<ul style="list-style-type: none"> • WCS Biological and social and economic monitoring reports
<i>Gau</i>	IOI-PI, IAS, WWF	Integrated Coastal Management	2002	<ul style="list-style-type: none"> • Muehlig-Hofmann, A. papers and PhD thesis • Veitayaki, J. et al. papers
<i>Waiqanake, Navakavu,</i>	IAS	Full LMMA and community based.	2002	<ul style="list-style-type: none"> • LMMA Biological and Socioeconomic • SPC PROCFISH Biological and Socioeconomic • TNC MPA and Poverty Reduction Socioeconomic • Cakacaka, A. thesis (biological) • Economic Valuation (SE)
<i>Verata</i>	IAS	Full LMMA	1990	<ul style="list-style-type: none"> • Tawake, A. MSc thesis • Vunisea, A. MA thesis and papers • Tawake, A. et al. papers • Aalbersberg, W. et al papers

<i>Waitabu, Taveuni</i>	Resort Support	Community and co-management	1998	<ul style="list-style-type: none"> • Resort Support Biological and Socioeconomic monitoring reports
Additional sites based on funding				
<i>Nacula Gunu</i>	PCDF	Community-based	2006	<ul style="list-style-type: none"> • Nacula District Marine Awareness, Participatory Learning and Action Workshops
<i>Kadavu</i>	IAS WWF	Full FLMMMA and co-management	2004	<ul style="list-style-type: none"> • Reports from Tawake • Johanessen paper • Calamia, M. PhD thesis
<i>Tikina Wai and Tikina Cuvu</i>	WWF	Community-based	2004	<ul style="list-style-type: none"> ▪ Sano, Y. PhD thesis
<i>Solevu, Malolo Island</i>	MES/ PCDF	Community-based	2004	<ul style="list-style-type: none"> • PCDF Biological Report on the Malolo Marine Management Plan Workshop • Baseline Monitoring Report • Fish Catch Survey
<i>Nabubu, Namuka</i>	Macuata Provincial Office/ IAS	Full LMMA and co-management	2004	<ul style="list-style-type: none"> • LMMA Biological and Socioeconomic • SPC PROCFISH Biological and Socioeconomic
<i>Nakawaga, Mali Island</i>	WWF- Fiji Program	Ecosystem based and community-based	2004	<ul style="list-style-type: none"> • WWF/WCS Biological • WWF Social and Economic Monitoring reports

5

THE INFLUENCES OF CULTURE ROLES

5.1 Culture and Traditional Practices Associated with Marine Resource Use

5.1.1 Culture

Fijians lived in villages, which were the basis of Fijian organisation. Originally small, the main size regulators were the minimum viable defense force or the maximum number that the food supplies would provide for (Frazer 1973:78–9). The village size increased over the years, however, the composition remained the same with each village consisting of one or more closely related clans. The clans were made up of *mataqali*, which were commonly the land owning units that included a number of extended families or *tokatoka*, which in turn were made up of individual households.

The village operated because the different groups consisting of *mataqali* or *tokatoka* within it had responsibilities they performed (Seruvakula 2000:21-29). From the different *mataqali* or *tokatoka* came the chiefs, heralds (*mata ni vanua*), warriors and planters (*bati*), fishers (*gonedau*), priests (*bete*) and carpenters (*mataisau*). People knew who they were and what their roles were. This was why only the people who did not know themselves did not attend to their roles. The *saturaga* were responsible for installing the chief and for maintaining the respect and order for the chief and the village. They ensured that all the responsibilities were carried out and that order was respected. They therefore could confront anyone that was not doing as expected.

The chiefs and their clansmen were the traditional owners and guardian of the land, waters, resources and the people. Fijians did not previously attribute a monetary value to land nor had any idea that land could be bought and sold for personal gain (Farrell 1972:38). In some communities, the close ties with the land and sea was demonstrated in the customary practices. The umbilical cords for girls were taken to the reefs and those of boys were planted with trees on land to keep the ties with the sea and the land and the traditional roles associated with these (Ms Alisi Daurewa, 2008 Personal communication).

Customary marine tenure (CMT) referred to the formal or informal ownership of sea space by a group of individuals (Calamia 2003). Customary fishing areas were owned by Fijian groups. The use of customary fishing grounds by outsiders was permitted, provided access conditions were met. Some people believed that the system hindered economic progress, as the indigenous owners of the resources were not fully aware of the merits of proposed development projects in their areas and consequently opposed them.

The location and size of the tenured fishing grounds was another problem. The delimitation of these areas (between 1890s and 1996) was not based on biologically optimal management units but on historical developments and societal, traditional

and geographic features. Thus, the sizes of fishing grounds and the quantities of resources contained therein were only weakly related to the sizes of the populations that depended on them (Muehlig-Hofmann *et al.* 2005).

Village life evolved from the time of European contact to this day. In 1864, the first Melanesian labourers were shipped to Fiji to work on the farms as local people, from a European perspective could not work well because of their custom and kin ties and had to be taken elsewhere to be productive. In subsequent years, some 20,000, Ni Vanuatus, I Kiribati, Tuvaluans, Tokelauans and Solomon Islanders were brought to Fiji (Narayan 1984:23). This labour trade was a dreadful way of treating people who had never worked under these 'western' conditions before.

Shifting cultivation, which provided the people with food for consumption and social obligations, was replaced by permanent farming practices that marked the beginning of the modernisation that continued today. Communication, health services, education and European goods featured in the villages only in the 1960s (Frazer 1973:78–9) but continued to change village life to mirror other modernising societies. Cash crops, wages and commercial activities were established in villages throughout Fiji.

Decision-making was transferred from the hereditary chiefs and community councils, to the government officials and magistrates. The role of hereditary chiefs declined while individuals and groups took on more independent roles. Fijian villages became unlimited in size and were influenced by their proximity to urban areas. Furthermore, villagers were attracted to urban life, opportunities for higher income and a desire for higher status.

The Fijian chiefs ceded Fiji to Britain and became subjects of Queen Victoria in 1874. In 1970, with independence, the political leaders confirmed Fiji's dependence on the United Nations, the International Monetary Fund, the Pacific Forum, and other treaties that hung Fijians by the noose. For instance, after four coups in 20 years, the people were struggling with the National Charter for Building a Better Fiji (Daurewa 2008) to map their development path into the future.



overfishing during spawning aggregations

The traditional marine resource management system was promoted to meet existing conditions where the people were mere spectators and the state was responsible for all the resource management activities. Heavy fishing of the reefs caused extensive damage because of the destructive fishing methods used. The increases in population were a cause of the threats to coastal fishing areas.

Moreover, overfishing due to commercial and subsistence fishing was driving people further into deep and distant areas increasing their costs and threatening their sources of livelihood.



commercial operations
are threatening
livelihoods

Poaching was common even in MMAs, while destructive fish drives were still conducted in villages such as Uruone in Vanua Balavu, Vanuaso, Nacavanadi, Malawai and Lamiti villages on Gau.

These destructive fishing methods were blamed for the extensively damaged reefs and the dominant algae and seaweed cover along the coast. Other major threats to customary fishing grounds included pollution and sedimentation associated with poor farming practices (Veitayaki 2006). Throughout the country, the increasing use of pesticides was affecting the marine environment. In Mualevu Tikina in Vanua Balavu, the villagers were asking why the destructive chemicals were being introduced when they were so damaging to the environment. In Tuvuca, fruit trees were forbidden to be grown near the village, while cassava was allowed but was poisonous. The burning of hillsides was a common problem across Fiji.



polluted coastlines

Customary roles and duties used to be much clearer in the past but were blurry today. The traditional tenure system and resource management strategies that had been prevailing throughout the region experienced gradual erosion with the increased impact of colonization in the 20th Century (Govan 2009:25). While traditional roles and resource use systems within the communities were still more or less well defined, leadership structures, protocol, respect and beliefs were undergoing changes and their usefulness and relevance were questioned by an increasing number of people (Vunisea 2002).

In addition, Muehlig-Hofmann (2008) supported the notion that *qoliqoli* and other traditional systems were unable to cope with the rapid exogenous change independently and hence failed to meet the role in fisheries management, which many believed they were capable of fulfilling (Anderson and Mees 1999). Whilst

there was strong support for the MMA, there were people who believed that the length of the closure was too long and that the area should be periodically opened (van Beukering *et al.* 2007). In the Qoliqoli Cokovata communities in Macuata, the high number of primary and secondary school drop outs, who already had limited livelihood options, added more pressure to the already diminishing marine and terrestrial resources of the area (WWF 2006).

5.1.2 Food Sources

Food was symbolic to Fijians and was central to their traditional social and economic activities (Ravuvu 2005:41). Traditional food sources in Fiji were found exclusively within the surrounding environment. There were no external food sources except when food was exchanged in the customary manner. During such exchange or barter, coastal dwellers would take fish and other marine commodities to the inland communities who reciprocated with gifts of food and items available on their land.

Food sources included those that were farmed and those in the wild. The two sources complemented each other to offer continued supply. People periodically consumed wild food sources to save up on their crops. In addition, there were tree crops like breadfruits, which periodically became the staple when they matured.



Wild food sources were a bulwark against starvation in times of disaster and famine but the utilization of these resources required skills and knowledge. People needed to know how to prepare and consume normally poisonous giant taro (*Alocasia indica*) species and when and how to look for wild yams (Thaman and Clarke 1987).

During droughts, people drank off vines (*Eutada phaseoloides, walai*) and coconut (*Cocos nucifera*). In some cases, areas of secondary growth were burnt to locate the wild yams (*Dioscorea nummularia*). In the past, resource custodians had customary practices that assured the building and strengthening of relationships for food security and preservation. Some of these practices remained today (Daurewa, 2007) but were being eroded due to the modernization of village life.

In those days, people were wary of the periods of food shortages and practiced different ways of conserving food. Fijians were intricately related to each other through their social networks that enabled them to freely borrow and share surplus supply, which was reciprocated in due course. Surplus breadfruit and cassava were buried in specially prepared holes to ensure that some were saved for the off season when the surplus could become handy (Aalbersberg 1988). The yams were harvested and stored in specially built houses while fish and other protein were smoked to allow longer storage and preservation.

The wide range of fishing and hunting techniques people possessed illustrated their understanding of their food sources (Veitayaki 1995). Empirical Fijian knowledge was exemplified by the traditional calendar, which was based on what sources of food were available at different times; indicating the people's close relation with their surrounding environment.

TRADITIONAL CALENDER

JANUARY was associated with the abundance of spinefoot and rabbit fish (*Siganus vermiculatus*, *nuqa*), shellfish and bivalves (*kaikoso*) and trochus (*vivili*). This month was also when land crabs (*lairo*) (*Cardisoma carnifex*) spawned in the sea and breadfruit (*Artocarpus altilis*) trees bore fruit.

FEBRUARY was when the yam gardens matured and the offering of first produce (*sevu*) were made to the chiefs, landowners and the church.

In **MARCH**, crabs (*qari*) (*Scylla paramamosain*) matured and had eggs. In the gardens, the harvesting of yam started.

APRIL was when reeds (*gasau*) (*Miscanthus floridulus*) thrived and flowered. This was when breadfruits ripened and the bigeye scad (*Selar crumenophthalmus*, *tugadra*) plentiful.

In **MAY**, yams matured and were harvested while at sea there were a lot of chub mackerel (*Rastrelliger brachysoma*, *salala*).

In **JUNE**, the clearing of the new yam gardens began. This was when the silver biddy (*Gerres* sp., *matu*) and goldspot herring (*Herklotsichthys quadrimaculatus*, *daniva*) were plentiful.

JULY was noted for the abundance of octopus (*kuita*) (*Octopus* sp) and rock cod (*kerakera*, *kawakawa*) (*Epinephelus cholestigma*) and the continuation of work on the yam garden.

The same conditions extended into **AUGUST**, which was also noted for the abundance of little priest (*Thrissina baelama*, *vaya*).

In **SEPTEMBER**, yams sprouted and sticks were put in place to support the plant. This was when rock cod spawned and mango (*Magnifera indica*) trees flowered.

In **OCTOBER**, breadfruit matured and sea-worm (*Eunice viridis*) (*balolo*) surfaced to be collected.

NOVEMBER was noted for the continued collection of *balolo*, the maturing of crabs and the abundance of spanish mackerel (*Scomberomorus* sp., *walu*). On land, a lot of local fruits such as mangoes, Tahitian chestnut (*Inocarpus fagiferus*) and *dawa* (*Pometia pinnata*) matured.

In **DECEMBER**, the cycle rounded off with the spawning of spinefoot, rabbit fish (*Siganus vermiculatus*) (*nuqa*) and trevally (*Caranx ignobilis*, *saqa*).

5.1.3 Farming Systems

Indigenous agricultural systems of slash and burn, shifting cultivation and multi-cropping were well developed in many rural areas. With the crude tools that people used, the clearings were restricted. The undergrowth was slashed and allowed to dry in the sun. The burning that followed was important for clearing and as a control for weeds in the garden area. The burning also added ash, which was a source of minerals in the newly cleared areas. The small size of the gardens and the use of the digging sticks minimized the damage to the environment. The practice of shifting cultivation ensured that people moved to new sites when productivity from the land reduced, weeds grew faster and increased in numbers. Cultivation on a piece of bush land was for about three years before a new garden was cleared. Shifting

cultivation therefore allowed the land time to replenish; a practice that rendered unnecessary the use of fertilizers which was an integral part of contemporary farming and a threat to the marine environment..The fallow periods allowed for regeneration through succession.

Multi-cropping ensured that a wider variety of crops was simultaneously grown at any one time to allow continuous food availability. Even after a garden was abandoned and the farmer had moved to a new site, there would be coconut, plantain, banana, breadfruit or mango trees that the farmer could still harvest from the old garden site. Furthermore, fire, hurricane, flooding and drought would be less destructive to crops like yams (*Dioscorea alata*) and sweet potatoes (*kumala*) (*Ipomoea batatas*). Multi-cropping was an adaptive measure that allowed people to have a variety of sources of food available at all times. The wild sources were used to spare the garden produce and provide relief when drastic conditions prevail.



There were also some intensive and semi permanent systems of cultivating irrigated taro (*Colocasia esculenta*) and giant taro (*Cyrtosperma chamissonis*). These farming systems were still used today. Irrigation, terraces and swamp draining systems were less affected by drought and were easier to keep free of weeds, which made this permanent farming system attractive to people.

Taro plantations
on Gau

5.1.4 Medicine

Medicinal plants were freely available in the surrounding areas. The roots, barks, leaves and shoots of plants were used to cure all types of ailments. Knowledge of some of the medicinal plants was passed down family lines and was not publicly known while others were more common. Examples of some of the well known medicinal plants used for common cold included *Terminalia catappa* (*tavola*), *Rhizophora* sp. (*titi*), *Physalia angulata* (*cevucevu*), *Bidens pilosa* (*batimadramadra*) and *Zingiber zerumbet* (*cago*) (Parham 1972). Cuts and sores were treated with *Mikania micrantha* (*wa bosucu*), *Cantella asiatica* (*totodro*), and coconut (*Cocos nucifera*) (Wainimate 1997, Weiner undated). Healing power was possessed by specially blessed individuals, as their gifts were associated with magical powers related to the gods and ancestral spirits. The medicine men and women were revered within their communities and were widely known.

The ability to prepare medicine was considered a special gift amongst Fijians. Some of the medicines were collections of plants. Medicine could be consumed directly or specially boiled in solution, which was then consumed. Some of the medicine was offered under specific conditions. Indigenous healing and medicine was cheap, easily available and should be used by people until they could get to a medical center. In some instances, indigenous healers had cured people who could not be treated in hospitals.

5.1.5 Social Relations

Traditional Fijian culture was founded on mutual respect, care for one another and people listening to each other. Likewise, conflict resolution was based on humility, wisdom, consultation, forgiveness and love (Nauqe 2008). Fijians lived in well defined social units that were the basis of their social groupings and activities. 'It was our custom to be protective of our own people. Because we were all related, we needed to strengthen our ties with our people. We could not do that well if we did not know our own relations and ties. This needed to start from our chiefs' (Sefa Nawadra, Personal communication, Verata, 2008). A fascinating feature of the Fijian social system was the fact that people were closely related. In many cases, people were related to one another because of where they were from and not because they knew each other.

Social relations of *mataqali* (a respectful relation between people from the Kubuna Confederacy), *tovata* (a respectful relation between people from the Tovata Confederacy), *tauvu* (jovial and joking but close relation between people who were closely related because of their traditional gods), *naita* (jovial and joking but close relation between people), *takolavo* (relation between two districts within Viti Levu where the people have special ties) and *dreu* (jovial and joking but close relation between people from Tovata Confederacy and those from some parts of Viti Levu), were some examples of social networks that guaranteed that people assisted each other because they were related.

Burenitu people were *tauvu* to the people of Vunaniu in Serua. The same was the case for people from Vanua Levu and Lomaiviti, and between those from Kadavu and Nadroga and Ba. At the local village level, this relation was observed by people from Burebasaga and Narocivo in Rewa and between villagers from Lamiti on Gau, and those from Natogadravu in Tailevu or people from Namacu on Koro and Malawai on Gau. This relation was also observed between the villagers of Vutuna on Nairai and members of *mataqali* Nabuni in Malawai.

Education and training about the extended family and its relations was undertaken in the social units within the village. Grandparents and elders related stories about the group, their role and relations. In addition, grandparents enticed younger members of their families to accompany them to their gardens or to the sea on fishing practices. They also planted a tree for the children or bring cooked yams or fruits to establish the relations with land and sea. The elders would lead by example to pass on the tradition to their children through practical lessons (Daurewa 2008).



The village economy was characterized by 'subsistence affluence' rather than the abject poverty that was prevalent in many other developing countries (Fisk 1970:1; Knapman 1987:1). People were self-sufficient and practiced intricate exchange arrangements.

Fishing for
subsistent purposes

Sharing with relatives ensured that the resources were efficiently used and that people looked after each other in times of need. Hoarding was neither practical nor necessary because people's basic requirements were supplied through their kin-based networks (Narayan 1984:13). Economic specialization and the production of durable goods were restricted because of self-sufficiency and simple technology in these societies.

Some common social practices that were observed by Fijians were very interesting and influenced their resource use methods. *Sevusevu* was part of an introductory protocol where the visitors made a presentation of *yaqona* (kava) on their arrival to those they were visiting. The presentation would be received and reciprocated by the villagers who were informed of their purpose and welcomed them.

Sevu, on the other hand, was another presentation. This was the offering of the first yam crop to the chiefs, the landowners and to the church as a token of appreciation for the land and the crop. Nowadays, the offer of money was also practiced by people in paid employment. In Vanua Balavu, the *sevu* was now offered during the Men's Circuit church service around February when the first crop was offered.

Qusi ni buno (wiping of sweat) was a feast provided by a person or group to thank those who contributed to a collective effort that had been asked for by the hosts. *Qusi ni loaloa* (wiping of blackness) was a similar gesture but on a much bigger level. This was a ceremonial presentation and feast hosted by the village, the district or the province for those it had sought assistance from in their times of difficulty and need.

People did not say the truth and expressed themselves in figurative terms for fear of being judged arrogant, boastful and self centered. They hid the truth if it was considered good for the group not to tell this. Humility was considered a virtue amongst Fijians, who did not highly regard ambition and drive.

Matanigasau and *bulubulu* (atonement) was the presentation of *yaqona* or *tabua* (whales teeth) to seek atonement for any serious breach of protocol, norms and custom. A person caught illegally fishing in the MMA, for example, would seek forgiveness and pardon from the village or district chief. In other instances, people who felt that their misfortune and mishaps were associated with a wrong they had committed would make the same presentation to appease the spirits that they believed were punishing them.

Kana veicurumaki (sharing subsistence resources with people from other groups) was a common practice between groups that shared common borders. Verata people and those from Kubuna observed this tradition which was practised only for sustenance and not for sale. The practice allowed an extension to the *qoliqoli* available to people but the groups needed to consult and work with their neighbours. In Verata, the feeling was that they should continue to share their *qoliqoli* with those that sought to use it.

Kerekere, 'a system of gaining things by begging for them from a member of one's own group' (Capell 1991:95), ensured that surpluses were shared by people, thus preventing the accumulation of wealth (Nayacakalou 1978:40). Although no money was used and communal ownership of property was observed, people used goods such as *tabua*, mats, other artifacts and food to obtain and return favours

(Nayacakalou 1978:102). This social kinship system was the safety net that enabled people to meet their needs.

The incentive to work in an indigenous Fijian community was different because the principle of reciprocity rather than the monetary reward was a strong determinant in whether one was involved in work or not. The financial rewards that accrued became a secondary consideration in a system where one 'has obligations to one's own group; and one is involved in the obligations of one's group to other groups' (Nayacakalou 1978:119). In such situations, the compulsion to work was related to the knowledge that one day one would require the assistance of others.

Qalo (1997: 38; 134) referred to the local people's 'subsistence economy mindset' and how their conspicuous consumption affected their commercial activities. A person therefore would take time off work or spend a great deal of money in a ceremony because that was the expected thing to do according to custom even though this was economically irrational (Watters 1969:198; Ravuvu 1988a:188; 1988b:73).

Public opinion was a powerful sanction for culturally acceptable practices. There was keen competition between groups that used the exchange system and reciprocity to show one's social standing. The system gave indigenous Fijian society its structural strength. People in Fijian villages put in unlimited hours when a situation demanded it. At such times, there was no time clocking and the reward was not gauged by the length of time put in by the individuals, but rather by the effort made to complete the tasks.

'The major sanctions which will urge men to keep at work are the considerations of one's reputation as a hard worker, the force of public opinion and a sense of obligation to the other members of the group who are carrying on the work' (Nayacakalou 1978:108). People holding authority were respected and obeyed because they had greater knowledge and experience of the local context (Nayacakalou 1978:15). Thus, the use of factors of production in Fijian villages was fundamentally an act of social service, not an economic one in exchange for one's labour, land or equipment. Today, many questions were being asked about leadership at community level making the President, Ratu Josefa Iloilo warned that indigenous Fijians were facing a leadership crisis (Nawaikama, 2008). Fijians needed to better understand the modern system they were in and must appropriately look after their communities.

5.2 Organization, Structure and Features of the Communities

The *vanua* was the largest grouping of 'kinsmen who are structured in a number of social units, the living or human manifestation of the physical environment, which the members have since claimed to belong to and to which they also belong' (Ravuvu 1983). The *vanua* comprised the *yavusa*, which was made up of people in the village and consisted of a number of *mataqali* and *tokatoka* (see 5.1.1 above). The *mataqali* was often the landowning unit while the *tokatoka* was the primary social divisions that sprung from the subdivision of naturally increasing families.

The *vanua* in Fijian referred to the social and cultural aspects of the physical environment identified with a social group (Ravuvu 2005:76). On the social side, it connoted the people and how they were socially structured and related to one

another, while on the cultural side, it embodied the values, beliefs and tradition. The people were the social identities of the land and the means by which the land resources were used and protected for the sake of the *vanua*, people and their customs (Ravuvu 2005:76). Land was an extension of the self the way the self was part of and an extension of the land.

Fijians regarded *lotu* (“worship,” “Christianity”), *vanua* (“land and people” in a particular territory under a chief) and *matanitu* (“bureaucratic government”) as the tripartite basis of Fijian culture and society (Tomlinson 2002). They were the three ‘pillars’ of Fijian life. The term *vanua* referred not only to the common people, but also to the common people’s representatives - the chiefs - and what they stood for, while *matanitu* designated the “bureaucratic national government”. Institutionally, *lotu* and *vanua* led relatively separate existences, but their actors interacted with great frequency (Tomlinson 2002).

Lotu and *vanua* were cultural entities, bearing the most authority of any Fijian social institution, and whose friction was culturally productive. *Lotu* and *vanua* involved different actors and discourse; they also carved out spheres of practical authority. While a church service was an affair of the *lotu*, conducted by preachers, pastors, catechists, and ministers, a kava drinking session was an affair of the *vanua*, with the explicitly hierarchical order of seating and service reflecting chiefly paramountcy in society.

Vanua, *matanitu* and *lotu* had their own arrangements, which took up a lot of time and placed a lot of demand on the people. The *vanua* and *lotu* were closely linked and the question as to which came first was not clear. A frequently asked question was whether the church was for the *vanua* or for God? *Lotu* meant “worship”; *vanua* meant both “place” and “land” in several senses (from microscopic to macroscopic levels), and also “people”, specifically a group of people united under a chief. In the word “*lotu*”, there was the conjunction of religious action and its institutionalisation; in the word “*vanua*” there was conjunction of geographic and social locations (Tomlinson 2002:1). The *vanua* was God’s gift to people in an area.

Kaci ni vanua was associated with the wishes and desire of the *vanua*. This concept was important because the declarations of MMA were taken under this arrangement. In such a case, the chiefs and people made their decisions and these were expected to be adhered to by everyone in the community. People who disobeyed the decision of the *vanua* were ridiculed and were expected to seek redress by performing the *matanigasau* or *bulubulu*.

Fijians used a number of concepts to describe desired personality. *Vakaturaga* for instance, denoted that one’s action and character befitted the presence of a chief who was expected to show and command respect (*veidokai*), deference (*vakarokoroko*), attention and compliance, love and kindness (*loloma*), and humility (*yalo malua*) (Ravuvu 2005:103). A person displaying these qualities was highly regarded while someone who lacked these qualities would be ridiculed and criticised.

There was also the notion that tomorrow would take care of itself, meaning that life was to be lived and enjoyed now and that the immediate needs were the ones to address first and that other things would be resolved as they occur (Ravuvu 2005:106). This type of principle discouraged planning, drive and ambition.

The village was the basis of indigenous Fijian social and economic organisation (Overton 1993:99). Everything from the resources to the social and economic activities was controlled by the village, which was headed by the chief, his or her headman and the head of the church. Together, these leaders collaborated to ensure the well-being of all the villagers, each having an important function.

Village labour included the entire village population of working age and was determined by the people's physical ability to work. Labour was generalised and flexible, with a high degree of mobility between occupations and between households, between household use and communal use, and between sexes and age groups (Nayacakalou 1978:107).

Village labour could be mobilised on a series of principles, including the authority of the senior members of the household, or those of the local kin-group who were senior by virtue of age or sex, or people holding special positions within such groups. 'The bases of authority have efficiency within definite limits; each can be evaluated relative to the others according to seniority and other social considerations and according to the immediate needs of the situation, so that there is some scope of individual choice and decision as to the allocation of labour resources so as to achieve maximum work in all directions' (Nayacakalou 1978:108).

Continuous westernization had resulted in the transformation of village life (Bedford 1988). Subsistence and self-sufficiency had been replaced by semi-commercial activities, while communal labour and ownership had been replaced by paid labour and individually-owned ventures (Ward 1995:222-5). Chiefs were not all respected, as the less deserving ones - depending on how well off and successful they were - were ignored and abandoned by their people. Turtle meat dishes were now taken to the chiefs, which meant that turtles were being shared with the chiefs instead of it being only for the chiefs.

Traditional goods now had monetary value, while the need for money in villages had heightened due to the needs for school fees, church and government levies, as well as the purchase of household goods such as building materials, sugar, clothes and cigarettes. Consequently, most indigenous villages had a dual economy with an intricate mixture of traditional reciprocity and contemporary money-based system.

Government attempts to involve Fijians in commercial activities in their villages were exemplified by the Auxiliary Unit and the Blueprint. The Army's Auxiliary Unit was to stimulate commercial activities in the villages after the coups in 1987. The unit operated at a loss but appeased the villagers who benefited by meeting their needs at a point in time. Its failure was attributed to both the villagers and the project officials.

The villagers lost interest after a while and returned to their own schedules. Furthermore, there were restrictions on what the villagers produced and sold. On the other hand, the project officials, who were mostly army personnel, lacked the skills to operate the venture. As a result, goods were unsold or unaccounted for. There were also cases where the produce was sold below the purchasing prices due to the deteriorating quality of the product. There were a lot of empty trips to rural areas

because the local people who were not ready for the visits were not able to provide enough produce.

Likewise, the caretaker government under Laisenia Qarase introduced the Blueprint for the Protection of Fijians and Rotumans Rights and Interests and the Advancement of their Development, by which Fijians and Rotumans were given support in the form of legislative action and policy direction. The legislative action included a new constitution, land classes and ownership, leases, ownership of customary fishing areas (*qoliqoli*), the Great Council of Chiefs, a development trust fund, royalty and tax exemptions.

These attempts to protect Fijians' interests and to involve them in commercial activities were laced with good intentions but did not improve living conditions in rural areas, where in some cases they actually caused problems such as overfishing. Strategies were still focused on development rather than conservation and thus resulted in the over-exploitation of resources (Veitayaki 2000).

5.2.1 Organization

An understanding of the major social principles of Fijian society was important as they provided a framework within which the people could be engaged with their beliefs, values, rituals and practices (Ravuvu 2005:v). A good knowledge of when and how the principles of the importance of males, chiefs, extensive kinship ties, age and seniority, industry, loyalty, humility, perseverance, division of labour and reciprocity applied, allowed a meaningful appreciation of why Fijians behaved as they did (Ravuvu 2005; Kikau 1981).

At the time of European contact, Fijian communities were reliant on locally varied subsistence systems in which the bulk of the vegetable foods were cultivated or foraged from the surrounding forests (Golson 1972:17). Fishing for reef and inshore species using traps, nets, spears and poison was widely practiced (Veitayaki 1990:50–5). Introduced domestic animals such as pigs, chicken, dogs, and wild terrestrial vertebrates such as lizards, rats and snakes were also sources of animal protein.

The arrival of the explorers, missionaries, whalers and traders contributed to contemporary Fiji (Brookfield *et al.* 1978:1, 7; Narayan 1984:15). The introduction of metal tools and seeds of various types of introduced plantation crops such as sugar cane (*Saccharum officinarum*), coconuts, cotton (*Gossypium barbadense*) and tobacco (*Nicotiana tabacum*) affected Fijian villages, which were now limitless in size and were influenced by how close they were to urban areas, as compared to the periods when the main size regulators were the minimum viable defense force or the maximum number that the natural food supply would provide for.

The 14 Fijian provinces constituted the three confederacies of Kubuna, Burebasaga and Tovata. There was a system of representation in all of these units but understanding of this system was eroding and was not working well. Sharing of information from representatives was also non-functional so that people often did not know what was going on as the communication channel was not well established.

Leadership roles were important because upon these hinged the community's desire to work cooperatively with one another for their development. Chiefs were to be

trusted and not questioned openly; protocols were to be closely adhered to; group interests were to prevail over individual interests; 'others' were to be careful of the 'real' members; disputes were to be resolved internally even if the wait is endless, remorseful and pitiful (Appana 2008). Leaders would be successful if they cared for the community members, listened to them and invited them to be part of the decision-making, especially when it concerned them. Building and strengthening this relationship and adopting a more participatory style of leadership were challenging responsibilities (Nauqe 2008).

There were chiefs at all levels and a well established system of communication that allowed the confederacies to organize activities involving all the provinces, the *tikina* and the villages. The government representative in each village was the headman (*turaga ni koro*) who was responsible for all of the operation of the village. The headmen attended the *tikina* as well as the provincial meetings where they represented their villages on the development issues that were discussed. The provinces were administered through the provincial councils headed by a *Roko* (Provincial Administrator), who worked with his assistants within the province.

After the 1960s, Fijians could choose where and how they lived, how they allocated their time and the material possessions they owned. If they wanted to, Fijians could pursue their goals outside their villages under the system of *galala* or independent farmers in an alternative to the village system (Watters 1969:192; Scarr 1980:43). In their own villages, Fijians lived outside the commercial and formal sectors and were involved only haphazardly in the formal economic activities (Spate 1959:9). Nevertheless, Fijians were influenced and affected by external economic pressures and aspired to have a Western European lifestyle.

By the late 1970s, the traditional system in Fiji had been replaced by a nationwide trading system where all the connections were with Suva (Brookfield *et al.* 1977, 1978, 1979). Although the island communities produced much of their own food, they were also trading centers that depended on trade for some of their food, clothing, furniture, building materials, fuel and Western luxuries such as cigarettes. Migration of indigenous Fijian families to the main islands on a permanent basis is also a notable feature, which caused an overall decline in population in outer islands.

Fijians who opted to leave their villages for the independent farms believed that their communal tasks left them no time to undertake the commercial activities (Watters 1969:192–203). These independent *galala* farmers had more business acumen, energy, and strength of character than their kin in the villages (Frazer 1973:89) and were the first Fijians to understand the conflict between traditional village life and economic activity. Some people observed that there was too much *galala* or freedom to choose and that it threatened the fabric of community living; some people were not doing their community chores as if it was a matter of personal choice.

This social development raised questions about the relevance of the social administrative arrangements, such as the decision to keep Fijians in the villages that was introduced by the colonial government to protect the indigenous people and safeguard their culture (Chandra and Gunasekera undated:43; Scarr 1980:11). The villagers had become more independent and were no longer strictly adhering to the traditions and practices. People settled outside the villages while the state assumed

the roles of resource owner and regulator. Under the Fisheries Act, the traditional resource owners became mere spectators to the decision making process relating to resource use and management while the state led the management effort. This situation represented the breakdown of the traditional system and the transition to the contemporary methods.

A community development expert once shared how her grandparent who had emigrated from his village to live in Suva was happy to see his children getting established in the new way. The man, who once said there was no poor Fijian, only a lazy one, left Natumua with his young family in the 1930s for medical treatment in Suva (Daurewa 2008). The man and his family remained in Suva when he saw what education in an urban school did to his children. His daughter later topped the country in the first qualifying examination for nurses and was the recipient of the Florence Nightingale Plaque awarded to the best all around nurse of the year in the early 1950s. The man's other children did equally well. His only son made it to Medical School but was forced to join the Civil Service out of necessity to help feed the family, which by then included many relatives (Daurewa 2008). At home, the granddad insisted that the family conversed in their dialect and shared with the grand children a lot of his values and traditions.

Fiji was now divided into those living within subsistence and informal economy, and those that were part of the modern cash and urban-based system. The subsistence and informal economy was based in indigenous Fijian villages where community decision-making, resource allocation and management were founded on subsistence, with limited technology and a high degree of local environmental knowledge (Hunnam et al. 1996:49). The modern economy, on the other hand, was based on economic activities that were part of the formal sector, largely based in towns and on the main islands.

The Rural Development Administrative Structure (Figure 5.2.1.) showed how the development work in Fiji was coordinated between urban and rural areas and amongst different racial groupings in different areas. Fijians in villages submitted their development proposals to their respective *Bose Vanua* or *Bose ni Tikina* (District meeting), which prioritized them and then forwarded its recommendations to the Provincial Council. The Council discussed and ranked these proposals for the District Development Committee, which in turn passed the ranked proposals to the Divisional Development Committee (Lasaqa 1984:146).

The Structure allowed for coordination and prioritization of the development proposals, but approval and implementation was time-consuming and cumbersome and did not augur well for communities seeking rapid attention to their needs. The process demanded long-term planning of three to five years, which was often not possible at the community level, where needs were immediate (Nayacakalou 1978:15).

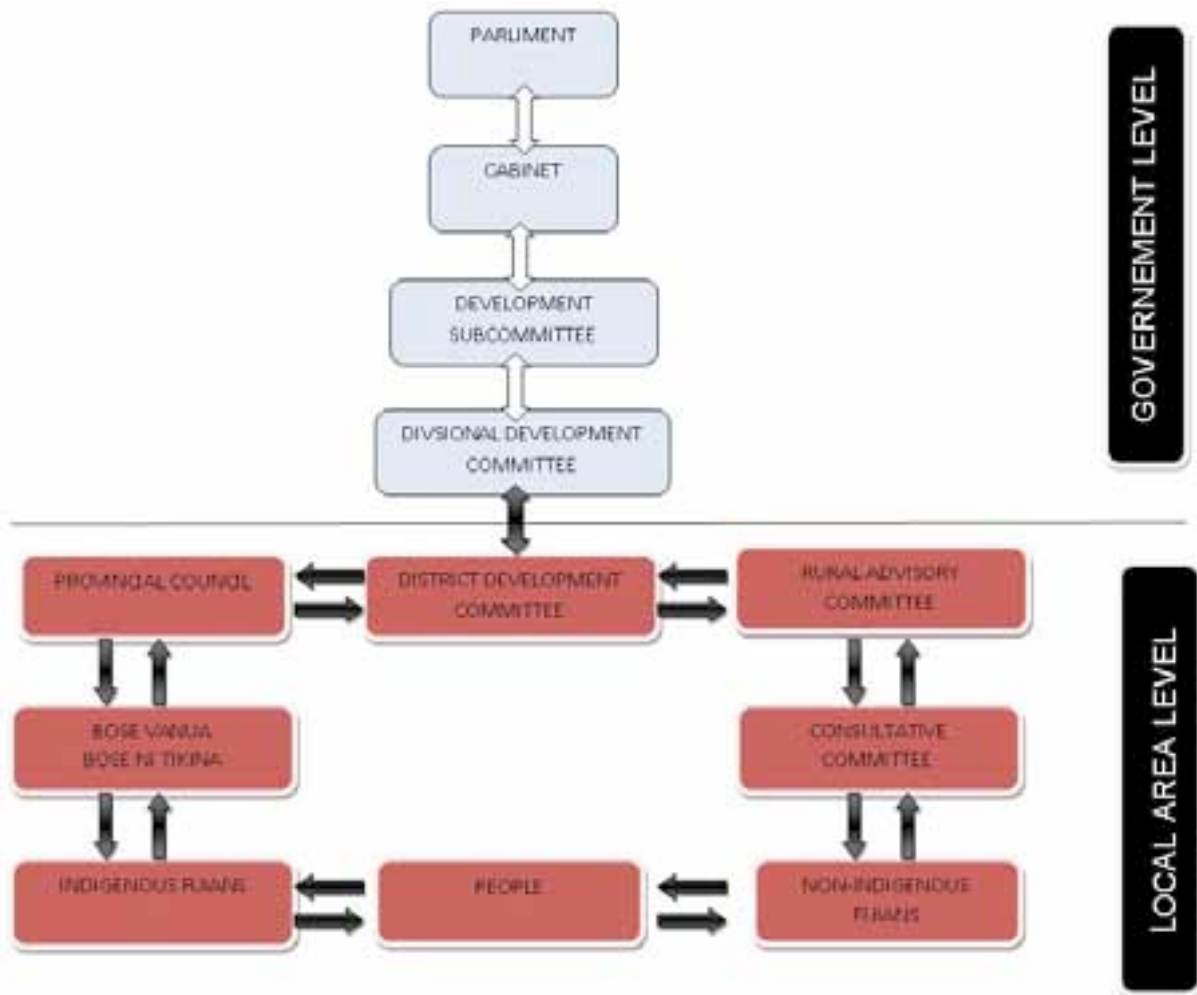


Figure 5.2.1. The Rural Development Administrative Structure (Lasaqa 1984: 146–8).

A typical case involving the improvement of rural conditions in Fiji was the Community Development in Moturiki (Hayden 1954:9). The project was undertaken in the early 1950s to stimulate community development amongst villagers who were willing to be part of the development. However, instead of identifying only those who were willing, the project involved all the villagers in Moturiki who had different needs.

The project activities included the rebuilding of houses, improvement of latrines and water supply, copra and pineapple production, formation of cooperatives for farming and marketing, introduction of small livestock, health education and nutrition, development of local craft, a literacy campaign and the construction of a jetty (Hayden 1954:12). The project even promoted the reorganisation of settlements to address various problems of land, water and education (Hayden 1954:43). Through this development project, life in Moturiki, which was originally pleasant and leisurely with no food problems, was transformed to one that demanded steady work and organisation (Hayden 1954:6). The developers were uncertain about the capacity of the people to meet the demands of a regularised lifestyle and were convinced that incentives would solve the problem.

The project failed for a number of reasons that were relevant today. First, the people in their enthusiasm agreed to contribute 50 per cent of their copra sales income to a development fund (Hayden 1954:43, 51). This contribution was agreed to before the project started, but was later found to be burdensome. Second, the capable and inspired leadership that was critical for community development was lacking, with one of the scheme chairmen accused of misappropriating project funds, a common problem with community development. Third, people were not familiar with how committees operated. Other problems included a lack of cooperation when things were not done as the people wanted; jealousy, particularly amongst the women; people only turned up to work when publicity was likely; and the influence of private affairs on official work (Hayden 1954:131). These problems were still evident to varying extent in the MMAs in Fiji.

Other scholars were sympathetic to Fijians and blamed the failure on the externally formulated top-down manner in which it was designed and imposed on the people. It benefited the promoters rather than the people (Watters 1969:247). There was no trained local leader and the project did not provide any tangible benefits at an early stage (Spate 1959:79). The high input from outsiders hindered the involvement of local people, who were soon disillusioned and desperate (Crocombe 1976:12). It was tragic that, after awakening fresh hope and instilling new needs in the local community, the project team withdrew without ensuring adequate follow-up activities to enable the people to achieve their hopes and satisfy their needs (Spate 1959:79).

Modernisation was promoted in Fiji around independence in 1970 because of the belief that indigenous Fijians' tradition, culture and socio-cultural systems were backward and thwarted Fiji's economic progress (Spate 1959:1; Burns 1963; Belshaw 1964:282; Watters 1969:12; Fisk 1970:3). Consequently, there was a concerted effort to transform traditional indigenous Fijian society into a modern society tailored on the European system. In many cases however, the initial enthusiasm in development activities in time 'slowly regresses to a slightly modified version of the old life' (Chung 1988:99).

Like in the case of the *galala* farmers, there are successful rural development cases that illustrated the appropriate revision of village organisation. The case of the Lutu Cooperative in Wainimala was exemplary of a village based enterprise that had operated for over 40 years and succeeded in the demanding local dairy farming and taro (*dalo*) export to New Zealand. The success of this initiative was attributed to its motto to place people above profit. The philosophy depicted the spirit of sharing and caring that demanded that the people give cheerfully their time, knowledge and experience to the cooperative activities.

The principles of the cooperative emphasised the Christian values of love and care for people, quality in products, timely delivery and cost-effective operations. The villagers were trained and advised on the requirements of the initiative. The people agreed to observe community rules on the use of time, which meant that they spent all the week days in their gardens. As a result, all activities of the church, community and the government took place only on Friday or Saturday. There was no kava drinking until Thursday so that people could begin their day at 5am and spend about 7 hours on their farms, while only working during the part of the day when the sun was not hot. The Cooperative had bought freehold village land, trucks and farming machinery. It supplied 24 tonnes (2 containers) of *dalo* per month, which was

purchased from the farms, and operated a dairy farm. It also provided footpaths, electricity and scholarships to improve the lives of the community members.

The Cooperative designated the 10th of October as Lutu Day to explain the state of the project to the people of Lutu. It was now emphasised that the men took their responsibilities to look after their families and provide for their women. The Village Committee worked closely with church and chiefs while the people worked to have equal share for all. This initiative demonstrated the effects of good planning and decision making.

What was most needed in Fiji today was good leadership at the community levels. For example, lease money should be distributed the way it was envisaged; that the chiefs would share with his or her people. This was the reason why the chiefs got 25 per cent of lease money. Chiefs that wanted to be popular to their people needed to share their wealth with them as a chief was expected to provide goods and wealth for their people. Otherwise, one would see the wealthy and poor within the same village.

The villagers of Lutu realised that humans were the biggest resource for the improvement of their lives and conditions. They demonstrated that the best way to proceed with their community activities was to look after each other. This brought into focus the role of local elites. Fijians were a powerful force but needed good leadership. The President, Ratu Josefa Iloilo compared the Fijian leadership crisis to broken oar in a storm and equated chiefs at the Bose ni Turaga as the oar to steer the boat through stormy water (Nawaikama 2008). The Fijian leaders were accused of sleeping on the job because they did not look after their people's interest. Poor leadership and its problems played a pivotal role in hindering Fijian development. It was now time for Fijian Chiefs and community (including church) leaders to take in hand this situation and embark upon it with the seriousness it deserved (Daurewa 2008).

5.3 Resource Use Activities and Regulations Practiced in the Community

Fijian societies had close relations with their environment and some have relations that defy logic. When the navy boat on which the former President and Tui Cakau was caught in a freak storm on Conway Reef, a shark that was longer than the boat popped the listing vessel until the storm passed (Fiji Times 1985). People in Cakaudrove where the Tui Cakau was the overload did not eat their shark totems. Shark calling was observed in Lakeba in Fiji. Similarly, turtle calling was practiced in Nacamaki and Kadavu, while in Naigani, trevally caught in a day should all be eaten and not kept overnight. The unsevered bones were thrown into the sea in the morning and a new fish would swim away.

In many parts of Fiji, indigenous people had local birds, fish and plants as totems that depicted their close relationship with nature. The totemic beliefs contributed to conservation goals as the taboo associated with totems restricted particular clans, families, age groups or sexes from catching or eating the species concerned (Veitayaki 2000: 120) This association with nature was exemplified on Vanua Balavu where in Namalata the people had as their plant the Tahitian Chestnut or *ivi* (*Inocarpus fagiferus*) and *saqa leka* (*Caranx ignobilis*) was their fish. In Tuvuca, their plant was *damanu* (*Calophyllum vitiense*), their fish was *tabace* (*Acanthurus*

triolestegus) while the *vasua* (*Tridacna* spp.) was their offering during traditional ceremonies. Food prohibition and protocol was observed in Vanua Balavu as was the case in many Fijian communities. When *balolo* (*Eunice veridis*) was fished in Susui, it was presented to Narocivo where the people of Susui traditionally were received (*tadutadu*). Susui villagers would decide if some was to be presented to the Ravunisa in Lomaloma. *Kaikoso* (*Anadara antiquate*.) was cared for by the people of Susui to be used during traditional ceremonies. In Namalata, the villagers shared food openly with those from Narocivo and Lomaloma. The influence of tradition was also illustrated when commercial fishers offered the big *vasua* to Rasau in Lomaloma.

Similarly on Gau, it was customary during traditional feasts that the chiefly *mataqali* and villages provided the traditional food for the two warriors (*bati*) *mataqali*, which was fish from the sea. In return, the *bati* provided the pork and fresh water fish that was food for the chiefly *mataqali* and villages.

5.3.1 The situation today

The rules and practices used by the people has changed. Decisions made were generally to suit the people in the present with little or no regard for future generations. In a fishing trip along one of the two streams in Malawai, Gau, the head of the *bati* group authorized the use of fish poison. The trip was successful and people met their obligation after picking the sizable fish and discarding the rest but had caused devastation in the river system. When confronted about the implication of what the group had committed, their leader was adamant that he would rather meet his commitment to the village than to future generations. This community leader was prepared to let the future generations feed for themselves as long as he was successful in doing the same now. This was a major challenge where long term benefits of resource management were often compromised by short term economic gains and benefits.

Regulations were less adhered to and respect for authoritative figures deteriorated. In some of the villages in Vanuaso Tikina on Gau, changes in the locals' behaviour and attitude contributed to disarray and conflicts in their commune. People no longer listened to the directives of the *turaga ni koro* [village headman] or the *turaga ni vanua* [chief of the village or area] giving their opinion and going their own way without much effort to integrate these into the community.

Basic village customs were no longer followed. Money was a powerful commodity and villagers were required to meet financial expenses such as church *solu* (fees/donation), levies and education for their children without having a steady income source. The system of sharing and reciprocity (*kerekere*) in villages was fast becoming a thing of the past – as everything must be paid for today.

There were also many behavioral changes over time - '*sa sega na loloma*' [there was no love/pity/kind-heartedness], '*sa sega na vakarokoroko*' [there was no respect and politeness]. Other social problems that had been faced include ineffective community leadership (which resulted in lack of respect), lack of organization, lack of communal sense, lack of cooperation and lack of trust (Veitayaki 1999:13). Youths were heavily influenced by Western culture which clashed with the traditional people and ways of life contributing greatly to these changes (Muehlig-Hofmann 2008). The ever

increasing population and modernization placed intense pressure and reliance on the environmental resources for subsistence and commercial purposes that resulted in resource depletion.

In Qoma, a traditional fishing village, the people had changed their tune over the last twenty years. In the beginning, the people were adamant that God, who had provided for their forefathers and was then providing for them, would also provide for their children and future generations. They were now unanimous in that the fishing grounds had been affected by the years of use and that the only thing that could assist them was resource management and conservation.

There was little time for the villagers to undertake their own work as they were attending to their visitors. In many cases, the different institutions were organizing their own events that required money, which placed more pressure on the use of the resources and caused conflict as there was little coordination between the separate entities. The need for money in these communities was too much for the fisheries resources to sustain. This was a possible reason why stealing was common even among the fisheries committee members and honorary fish wardens.

There were poor connections between the communities, the meetings at district (*tikina*) and provincial levels, and those communities represented at these meetings. The community representatives did not have an effective system to relay their messages so the people were commonly misinformed. Village representatives who attended MMA workshops and training did not do the same on their return to their villages, thus their people often were unaware of what was happening.

5.3.2 Resource management

The main marine resources management practice in Fiji and most of the other Pacific Island countries was the ownership of the customary fishing areas extending to the outer reef slope, and the right to organize fishing activities within that specified area. Customary fishing areas were owned by different, but closely related, social groups (such as *yavusa* and *vanua*) that regulated their use and exploitation. Customary Marine Tenure (CMT) was a form of marine conservation that was widely used in many Pacific countries (Calamia 2003). People were expected to use their own customary fishing areas, and those seeking to use grounds belonging to others were expected to get permission from the owners. This was now not always observed resulting in uncontrolled and highly exploitative fishing.

Fishing grounds owners, from time to time, declared a portion of their fishing grounds out of bounds (*tabu*) to preserve the resources for an intended purpose such as a wedding, birth, or death-related ceremony (Ravuvu 1983). Traditional fishing rights, however, were not just a means of conserving fish stocks. They had evolved in part as means to minimize conflicts and distribute resources effectively, and were an intricate aspect of the social fabric of the cultures that possessed them (Calamia 2003).

Communities managing their local waters had established institutions to restrict gear, regulate spawning aggregation, impose minimum size limits, and establish permanent or temporal community-based marine protected areas, sanctuaries, or refugia. This form of CMT regulated marine-resource use, owing to a paucity of

biological information however, it also met the social objective of guaranteeing traditional resource use, and was closely related to indigenous sea tenure system and territorial-enclosed entitlements observed in Kadavu province (Calamia 2003).

Traditional management arrangements were enforced through traditional authority, which meant that there were protocols to be followed. Under such a system, the chief and the elders should make the decision and give the directives. Not all examples were successful. The villagers in Vunaniu started to manage their marine resources but this was no longer observed. This was also the case in Tuvuca where the MMA was declared in 2003 but relaxed in 2005.

In some of the other villages and districts such as Verata, Navukavu, Gau and the Qoliqoli Cokovata in Macuata, the social structure and close-knit units in these communities were used so that the people followed tradition and respected each other. Decisions made by these different groups were conveyed through the social channels of communication, which ensured that all those involved were made aware of the group's decisions. Consequently, the traditional system of retribution was an effective deterrent to others in the community (Siwatibau 1984).

The engagement of the *tikina* was based on the strength of the social unit and traditional practices. These close-knit social units could enhance the enforcement of resource management practices if they were convinced of the credibility of the activities to be undertaken. Resource ownership and traditional knowledge combined with a local awareness of the need for instant action were normally the starting points for these community driven idea (Govan 2009:35). This was why community-based resource management was favored—because it was relatively easy to organize and could produce quick, effective results. In Fiji and some other parts of the Pacific Islands, the involvement of local people was also significant because they owned the resources and were taking care of their own interests by agreeing to manage them. This was proof that there was more strength than weakness in a traditional governance system (Daurewa 2007). Traditional practices were easier to implement because they were known to the people, who remembered their effectiveness and were directly involved. These needed to be understood and customised to complement and enhance introduced concepts and systems for the sake of the present and future generations of the people of the Fiji Islands (Daurewa 2007).

The concept of sacred ground was also prominent in Fijian societies (Siwatibau 1984). Sacred fishing grounds were special areas where special rules were observed. At such sites, fishing was conducted only when the traditional priest (*bete*) granted permission, or when the special conditions and requirements were met. In Qoma, the people going to Cakau Davui were expected to perform the rituals of an arriving party and to fish according to the rules that were widely known in the village (Veitayaki 1990). In Kaba, the customary swimming spot for the paramount chief of Kubuna was fished only when the chief requested the fishing. Otherwise, a complete ban on all fishing was observed (Veitayaki *et al.* 1996).

The association with the supernatural ensured that the fishing grounds were respected and protected at all times – not only when enforcement officers were watching. In such cases, 'a close association was perceived between the living and the dead, whose spirits inhabited sacred areas and showed offense when customary taboos and rituals were not adhered to' (Siwatibau 1984). Among the turtle

fishermen of Qoma, the belief was that, to be successful in their fishing, the people needed to please their gods by being righteous. According to the villagers, their ancestral spirits would provide for them a catch that would meet the purpose for which the fishing was asked for and conducted. Therefore, the fishers knew that once a turtle swam through their net, their catch on that occasion was enough and they would not catch any more on that trip (Veitayaki 1990).

In Vanua Balavu, the inland lagoon at Masomo was fished by the community when the traditional priest authorized it. On such occasions, the fishers observed strict protocol and were likely to be admonished and even punished the rules were not observed. These strong beliefs made people adhere to the fishing traditions and customs, and rendered unnecessary the involvement of full-time enforcement officers

The thought of retribution by the ever-vigilant gods was a continuous reminder to the people of the need to treat their resources properly. In Natumua in Kadavu, pigs causing damage was a sign to warn people, while in Verata shark attacks were indicative of a catastrophic mistake committed to the *vanua*. This was why some people were suggesting that the church-blessed MMA must also be sanctified by a *yaqona* presentation to the *vanua* or vice versa. It was obvious that the use of either the church or the traditional system was inadequate

The land and its adjoining fishing grounds in Fiji were associated with the spirits that protected them. These spirits were ever present and judge people's performance. In such societies, the environment was not something separate, 'but an integral part of one's self, providing the physical manifestation of the vital link between the living and the dead.' (Siwatibau 1984:366). Outsiders, therefore, must observe the code of conduct in any area where they were visiting. It was expected that visitors made an offering (*sevusevu*) to publicize their arrival at a place. This practice ensured that the members of the community were aware of the presence of visitors among them, and protected the visitors from the wrath of the spirits who showed offense when customary protocol was not followed (Siwatibau,1984). The arrangement also ensured that the customary owners of fishing grounds were consulted every time outsiders wanted to fish in their area.

Fishing used to be the sole activities of the *gonedau* (fisherman). This changed as people fish for subsistence as well as for income. The Tui Macuata, a local community conservation leader, was recently charged for larceny – stealing fish when he authorized the confiscation of fish from some fishers he claimed were fishing illegally in his customary fishing rights area. According to the interim government, customary fishing rights owners had no right to charge fees other than what was stipulated by the government.

In Uruone in Vanua Balavu, it is prohibited to use gas and fish poison. The same activities are banned in Verata, but some people were alleged to be providing supplies of gas to fishers. Some years back, some commercial fishers were caught in Lau and Kadavu. On Gau, there was a ban on the use of fish poison while in Tuvuca, the villagers were pleading for the reduction in the use of pesticides.

For a good part of the country, the *qoliqoli* was impoverished because the people were no longer joined to their *vanua*. In Susui, Vanua Balavu, like in other coastal

areas of Fiji and the Pacific Islands, there was depletion of trochus (*Trochus niloticus*) and bivalves (*tofe*, *vivili*, *kaikoso*) delicacies as well as bêche de mer (*Microthele fuscogilva*; *Microthele nobillis*; *Actinopyga mauritiana*).

5.4 Knowledge of Marine Resource Management Initiatives

The declaration of MMAs in different parts of Fiji was associated with resource management workshops that were organised and offered by conservation organization and education institutions across the country. More than 200 villages spread across the 14 provinces in Fiji had established some form of community based management measures and the numbers had improved progressively every year due to the trickle down effects, which had seen skills passed from village to village and needs from interested communities improved using available support (Hogan 2009: 35). Following these workshops, which promoted the need for management, the options that were available and the actions to be observed, the traditional practice of planting a tree branch in the designated MMA was undertaken to inform people of the state of the area. This practice was used in Verata, Kubulau and many of the MMA sites. Buoys were also used initially but were being removed because these were regarded an invitation to poachers who were going around looking for MMAs to poach from.

In Verata, clam (*Anadara* sp.) harvesting was banned in Lomo, Wailevu, Daveta and Matana ko Verata. These spots were owned by different chiefly families who were periodically approached by their respective people to authorize the relaxation of the *tabu*. Most villagers knew about the MMA areas and were approaching the different chiefs to circumvent the community resource management stand. The chiefs should understand these and lessen the occasions when the prohibitions were relaxed.



The majority of the households in Waisomo Village, Ono and Fiji for that matter ranked fishing as their number one source of income to meet family obligations and household expenditure. Because of the large amounts of money now demanded in rural communities for education, church tithes and other social commitments, fishing had intensified and posed serious threats to resource sustainability.

Fishing is a vital source of income

Consequently, the declaration of MMA was infrequent and was difficult to monitor because fishing was mostly undertaken individually and marketed, which resulted in overexploitation (Tabunakawai, Wilson, Aleki no date:19, 21). In such heavily exploited *qoliqoli*, resource management was becoming increasingly important as pressure through local users increased and was no longer considered sustainable (Muehlig-Hofmann 2008).

The MMAs throughout Fiji were made by people who were aware of the choices they had and were convinced of the need to manage their environmental resources. The

intervention was timely and showed a commitment to look after the interests of future generations given the desire of the people in these communities to improve local conditions using their fisheries resources. Maintaining the MMAs was demanding as the people were asked to change their activities in order to protect the environmental resources that supported them.

The rapid disappearance of unrecorded traditional knowledge and the lack of interest of younger people in acquiring it, had serious implications on the management of marine resources (Ruddle 2008:13). The message in all of the MMA villages was that people needed to manage environmental resources better today if their future generations were to enjoy the same resources. Local action was required so that resources had a chance to recover. Regular follow-up activities were needed to introduce new ideas and techniques.



Unfortunately, community empowerment had not reached all the people in all the villages. The representatives to the meetings hardly shared the information with their people and hence remained the only ones that knew about their project and its plans. This was one reason why the people did not all know what was going on in villages and the reason why village training should be encouraged.

Community empowerment
needs to be widespread

It was unrealistic to expect the whole community group to know about the initiative unless the community workshop was conducted. Those involved in MMAs implementation needed to understand the serious pressure that the long term observation of MMA requirements entailed. For this reason, more training should be offered on the different aspects of community based resource management.

In a study based in Tikina Wai and Tikina Cuvu in Nadroga, Sano (unpublished) explored the processes through which social capital in rural communities was translated into action regarding MMAs. According to Sano,, we had to understand the perception and behaviour of individuals in a community if we were to understand why some people followed rules in MMAs and others did not. This was because these behaviours were shaped by day-to-day social networks, including many of the social customs, norms and bonds that defined them (Sano unpublished).

The Turaga ni Koro in Votua Village in Cuvu Tikina, used to ignore the MMA because he wrongly believed that the MMA was for the chiefs sole benefit. The workshop in his village clarified the issues for him and he has vowed to support the initiative and promote it to the children and youth. Previously, the man used to think that he had the right in his *kanakana* (the place to secure sustenance from), and that he could fish it whenever and however he pleased.

5.5 Changes Accompanying the Establishment of MMAs

All the people in communities involved in MMA work were unanimous that the MMAs were useful and worthwhile. Parallel MMA studies on the social and economic changes associated with community-based resource management highlighted some of the details.

Conservation measures implemented in Ono, Kadavu included: the ban on the use of traditional poisons (*duva*) in Waisomo and the neighbouring villages of Vabea and Waisomo area. There was also the ban on the burning to clear land within the boundary of Waisomo village. The Waisomo villagers also banned fishing in two lagoons on the Great Astrolabe Reef beginning in 1998. Members of the community were trained and certified as Fisheries Wardens and were responsible for enforcement of relevant components of the Fisheries legislation.

In Macuata, a village by village visit was made between September and October 2005 to inform each household of the management plan and the process of its developments as well as to get the local people's input. Moreover, in November 2005, there was a celebration of the establishment of the management of the *qoliqoli*, and of the offer by Tui Macuata of his network of MMAs in support of the Government's commitment to establish a network of MMAs extending over 30 per cent of its inshore and offshore areas (Tabunakawai 2006).

In Navakavu, there was very strong overall support and ownership for the MMA. People observed positive changes: increased abundance and size of fish and invertebrates, and less disturbance to their habitat. The villagers understood the impacts of the restoration that this MMA had on marine life (van Beukering *et al.* 2007).

The Qoliqoli Committee in Navukavu was formed after the establishment of the MMA to coordinate the MMA work at the village level and with the relevant institutions. The Committee made all decisions about the management of the MMA after consultation with the local people through the village council meetings.

The Committee consisted of a representative from the seven land-owning units in each of the four villages, community biological monitors, fish wardens (1 from each village), leader of the youth drama group and the four village headmen. There were in total 21 members of the Yavusa Navakavu Qoliqoli Committee. Committee members were either fish wardens or good liaison persons between the committee and the community. Meetings were carried out once every 2 months. At each meeting the members discussed the progress with their management action plan, provided meeting updates, reviewed their specific action plans and addressed emerging concerns about MMA implementation (van Beukering *et al.* 2007).

The Management Action Plan was drafted in 2002 after a workshop held in the village of Muaivusu to declare their MMA; this was later moved to Waiqanake. The University of the South Pacific facilitated the formulation of the management action plan. Each household in the community was well informed of the existence of such an action plan and posters stating all resource rules were distributed within the village. There were therefore established resource rules that the committee worked

from for monitoring purposes or when the need arose to change or modify certain things (van Beukering *et al.* 2007).

Decisions from the Qoliqoli Committee were taken as proposals to the *bose vanua* (traditional council meetings), which had the last say on such issues and concerns. The decisions were announced at the *bose vanua*, which comprised of representatives from the different clans in the villages, and then via the headmen to the village meetings with people attending those meetings relaying the information to each household. The Committee sought funds to undertake its work and used the MMA as the main attraction. In October 2006, the Qoliqoli Committee opened a bank account called the “Vueti Navakavu Fund” to keep all funds generated from the MMA (van Beukering *et al.* 2007).

There was closer collaboration between local communities, NGOs and government agencies. The partners complemented each other’s work, allowing for quick results. In fact, it was unlikely that any resource management action would take place without these partnerships, which were credited for first getting communities involved in the management of their activities and resources. Community members in Navukavu mentioned the number of times that MMA visitors and researchers from within Fiji and around the world had come to the villages, bringing much needed money, ideas and contacts, which helped to promote the effort of their communities. This made them proud of their initiative (van Beukering *et al.* 2007).

Lajiye Rotuma, the non-government organization spearheading community-based resource management in Rotuma, promoted the MMAs through an engaging community consultation process. This was undertaken through a campaign involving awareness, education and community initiatives such as ‘Adapt a Habitat Programme’, ‘Rotuma School Eco Camp’ and the weaving of fish traps by the elders (Alfred Ralifo, personal communication, 2008).

One must not lose sight of the international recognition and awards won by some NGO’s in Fiji for working with traditional governance systems on environment conservation and management to sustain livelihoods which is taking the world by storm to the extent that these NGOs continue to be visited by global experts in these areas to learn from the way Pacific cultures operate (Daurewa 2007).

However, the local communities’ ability to mobilise quickly, was hampered by their lack of funds to pay for the activities and information on what they could do to help shape the use of their resources in the future. For example, external funding allowed for the work in Vanuaso Tikina after the donors learned of the plight of these rural communities from their partners in government, non-government organisations, education and development institutions. These partners were united in their emphasis on local participation, successful and effective conservation and the improvement of living conditions in rural areas.

In many of the MMAs, there were now trained and licensed honorary fish wardens who were tasked to ensure compliance from all the villagers in their district. This was the case in Kadavu, Verata, Navukavu and Gau. In Kumi, Verata, and Tavua enforcement was undertaken by the people who monitored the use of their *qoliqoli*.

People's perception and position on MMAs were changing. For instance, some people said that the length of the closure of this marine area was too long, while others felt that it was best to have closed area forever particularly as the carrying capacity of the MMAs would not provide for the increasing population (van Beukering *et al.* 2007). The MMA could be a source of revenue for people. Support for MMAs and ideas about sustainable development were now shared amongst the youths to register their interest and get them involved. People were taking a stand to protect their interest and to guard their *qoliqoli*.

A major finding was the notable increase in the community's level of awareness and knowledge of environmental and development issues. All of the reports from the districts agreed that the people were benefiting from their management of environmental resources. Ucunivanua was the site of the first locally managed marine area with management beginning over eleven years ago.

Villager's income had risen significantly and the kaikoso clam was once again abundant (Aalbersberg, Tawake & Parras 2005:144). In Waitabu, Taveuni, the numbers of both fish and fish species in the MMA rose from 1996 to 2002, was constant from 2002 to 2005, and then declined slightly from 2005 to 2008. Interestingly, the drop had been in the targeted "food-fish species", especially larger Groupers and Wrasse, and not in smaller species not specifically targeted for food.

The people were now aware that a healthy environment was linked to their health and had explored the future that they faced by planning for relevant and appropriate development options.



Community training workshops were important for the MMAs because most of the people were not familiar with the ideas behind the project. Through the training workshops, capacities in the local areas were organized to enhance understanding of the issues and involvement in the initiative.

The training workshops were useful means of the empowerment process as many of the issues were new to local communities who needed to revise their knowledge and how to deal with these. People also needed to believe in those spreading the word because the message was as important as the messenger whose reputation and approach were important.

In many of the communities, some of the youths had been trained as honorary fish wardens. These villagers now led the enforcement of all the fisheries management decisions that had been made by the communities in the districts. Ironically, as the results of the fisheries recovery in the managed areas were made known, the most serious threats were coming from outside the communities.

This was a bigger challenge because it involved people who were not from the communities helping themselves to the people's MMAs. These outsiders were better equipped and had more resources, which made it more difficult to control them. Fishers from outside the villages were periodically sighted fishing on the reefs, while most of the villagers were on land, oblivious to what was happening. The honorary fish wardens had the support of the community to uphold their communities' management decisions but needed better equipment to carry out their communal responsibilities.

In some of the districts where the MMAs had been established, the people had extended their environmental management activities and were working to rehabilitate coastal habitats and secure alternative sources of income. A successful LMMA was, in effect, an alternative income source (Aalbersberg, Tawake & Parras 2005:150). This initiative complemented the MMA activities and encouraged people to adopt the broader and all-encompassing integrated resource management approach. It was agreed that the management and recovery of fishing grounds needed to be complemented by the reduction of land-based sources of pollution for a more meaningful environmental management strategy.



Some of the issues that were addressed under this initiative included the protection and rehabilitation of mangrove forests and coastal vegetation, the promotion of sustainable land use, the fight against deforestation and wild fires, the promotion of good drainage and the protection of water supply, the proper disposal of domestic waste, the treatment of waste water and the fencing of domesticated animals to allow people to cultivate nearby lowland areas.

It was critical that the principles of community-based resources management received the recognition, delineation and strengthening of traditional rights and boundaries as well as the appropriate leadership that was needed for good project vision and motivation; accountable organizational roles and responsibilities for all stakeholders; regular monitoring; community willingness, community awareness, adequate local participation; existing skills/capacity; long term vision and inclusiveness (Parks, Aalbersberg, Salafsky 1999:10-13). As Cicin-Sain (1993) advised, it was a never ending process of revision and changes.

To date, there was no law in place to support a *tabu* declared by local communities. Poachers who had been detained by the community and taken to the local police had not been appropriately dealt with. At the moment, poaching continued to be the largest problem faced by this project. Illegal fishing impacted both fish breeding populations (Grouper aggregations), and tourism perceptions (fish reacting negatively to the presence of a human swimmer), which had been built up with great effort by the community (Sykes and Reddy 2008). Poaching in Waitabu had increased in the past 2 – 3 years and there was an urgent need for the problem to be taken seriously and prosecuted by the authorities before it reached levels that

permanently impacted the breeding populations so painstakingly protected over the years by the Waitabu community.

5.6 Gender Roles and Distribution of Responsibilities



Traditional culture often did not allow women to be a part of decision-making, which was unfortunate as women were often the ones most involved in gathering inshore fisheries resources and had unique knowledge about them (Aalbersberg, Tawake & Parras 2005:150). In Fijian societies, men made the final decisions about family or clan activities. While they certainly would consult the womenfolk, as heads of the household they had the final say (Ravuvu 2005:8).

However, the emphasis accorded to males does not preclude the importance of females influencing and sustaining family and community affairs (Ravuvu 2005:2). Women remained in the background, either encouraging or discouraging the men about ideas or proposals being discussed by their men. The men were recognising the importance of involving their women as the execution of numerous household chores and other social and economic activities for the welfare of the family and the community depended to a large extent on the support and resourcefulness of the female members (Ravuvu 2005:2).

Women were recognised and admired for their contribution and commitment. They were respected for displaying their specific female qualities in accordance with accepted values and beliefs and were greatly acknowledged for performing their role appropriately within the family and community hierarchy (Ravuvu 2005:2).

The MMA had had some positive impacts in the lives of women in helping them to cooperate more and be better organized and coordinated. They also had been assisted to improve their position and work. Women now went out together to the reef to collect fish and invertebrates for visitors undertaking studies within the village and this had greatly affected their interaction in a positive way.

Women were not represented in the Navukavu Qoliqoli Committee where it would be important for them to voice their concern; they had some criticism of the way the committee was doing its job. Women groups had their own meetings, but they rarely had anything to do with the MMA. Committee members' regarded their roles in the community as 'homemakers' and not 'decision makers' (van Buekering *et al.* 2007).

In Verata, women collected and counted the *kaikoso* so that the men could make the decisions regarding the management of such the fishing activities. For the continued success and sustainability of the MMAs, this absurdity needed to be addressed

(Aalbersberg, Tawake, Parras 2005:150) and women's contribution must be recognised.

For the past three years, the women of Waitabu had been selling handicrafts and hand-woven mats and cloth to tourists visiting the Waitabu Marine Park. The greatest success came from visits by large tourist groups or cruise ship passengers, but the selling varied greatly - some women sold everything they made, while others barely sold anything at all. In 2008, Naniese Ledua from Beqa Adventure Divers conducted a short workshop to share ideas on community marketing strategies and stock control (Sykes and Reddy 2008).

To overcome such variations, women should be trained to: be self-confident and carry out basic conversation with visitors; be presentable to visitors in terms of their attire, attitude; show creativity in their products and offer a wider variety of high quality items for sale rather than having a particular product; be collaborative and help each other with the making of good quality handicrafts and souvenirs.

It was suggested that a certain day of the week/month should be allocated to learn new skills and build capacity in the community. Handicrafts should be hand-made from local products, which meant that imported materials and decorations should be avoided. Local cultural symbols should be used on mats and tapa while in-season fruits and vegetables should be included in the menu. Additional trainings such as business management and entrepreneurship skills were recommended to help boost enthusiasm and interest in the project (Sykes and Reddy 2008).

For the youth, one major activity in Navukavu was the formation of a youth environmental drama group. The University of the South Pacific facilitated the formation of this drama group, which had 25 youths (males and females) from the four larger villages. The group performed drama pieces that incorporated environmental and conservation issues. For instance, during Fiji National Environment Week in 2008, the drama group was invited by several schools (primary and secondary) to perform. They also performed during USP Open Day and in the Coral Coast – Tagaqe. They performed in workshops to develop their skills in acting and operating such a group. The Youth Drama Group had opened an account where their income was kept and expenses paid from.

Youths did not participate in decision making as it was considered disrespectful for them to speak in village meeting attended by their elders (Calamia 2003). Under the traditional societal norms, it was complicated for young people to partake in decision making, as they would not have a say in the meeting of elders (Aalbersberg, Parras & Tawake 2005:150).



Youth representatives of Navakavu at a workshop

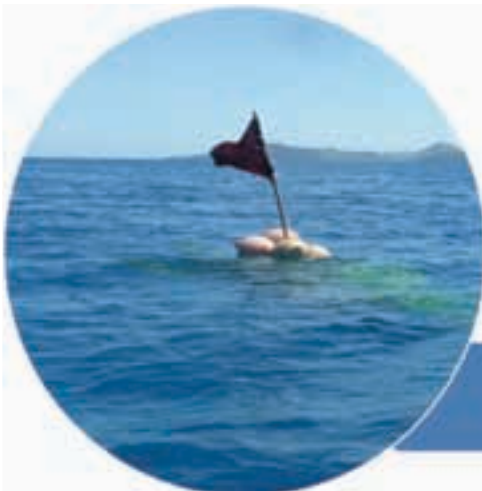
Youths did not disregard instructions or demands from their seniors nor question their authority (Ravuvu 2005:7) but were now given opportunities to organise certain activities. In Navukavu, youths were represented in MMAs through some of the fish wardens, community biological monitors and the youth drama group.

The use of Participatory, Learning and Action (PLA) approach for engaging people in MMAs, was adopted to address some of these complicated traditional issues. This approach was to allow people to reflect on what they needed to do as a group and to find out ways to do that. Women and youth were important members of their communities who needed to be more active in the organization of their fisheries and other resources because their lives depended on these activities undertaken at present.

A Community Leaders Good Governance Workshop organised by the Partners in Community Development in 2008 and opened by Fiji's former Vice President, Na Turaga na Rokotuibau, Ratu Joni Madraiwiwi stressed the importance of equal participation by allowing women and youths to be part of the decision-making processes. He explained that women and youths' active participation in decision making in community life would enhance development in the *tikina* and the village. This would entice them to come forth and be part of the village and *tikina* activities. Moreover, passive listening was slowly disappearing as education and the media had broadened people's outlook. However, as Ratu Joni emphasised, the involvement of women and youths did not overturn traditional structures rather elevated their status (Nauqe 2008).

Change was required in the manner in which the voice and participation of women and youths in decision-making was embraced in the communities. It was part of life. Some participants did express that changes had to be taken carefully and it was not something to rush and impose straight away. All workshop participants agreed on the important roles and responsibilities women played in society. It must be taken very carefully and tactfully by those in leadership positions (Nauqe 2008).

5.7 Challenges to be Addressed



Customary fishing boundaries are unclear

Challenges to community-based resource management included: the not clearly defined customary fishing area boundaries within the *tikina*, which led to conflicts with neighboring villages; reliance on the owners of traditional fishing grounds to make decisions that were consistent with sustainable practices when determining what to do with their fisheries resources; misunderstandings between the traditional owners and the state on the issuing of fishing licenses;

difficulty of ensuring that management programs were tailor-made to encompass various social and economic systems; control of illegal fishing in traditional fishing

areas and the lack of consistency and coordination between traditional practices, national legislation, policy and strategies.

Resource and CMT claims were frequently contested amongst closely related groups. The Native Land Fisheries Commission confirmed and defined the extent of fishing grounds of the *vanua* Ono, which was communally owned by the seven villages under the legal custodian of the “Tui Ono” (chief of the Ono district), currently held by the chief of Vabea village. Although the fishing grounds of Ono encircled the entire island, the specific boundaries for the fishing area for each village had not been surveyed nor registered. This caused conflict relating to the issue of usufruct and ownership rights between neighboring villages (*qoliqoli* owners) (WWF no date).

Within existing power relations, some actors’ claim to resources and territory were likely to take priority over those of others (Calamia 2003). Based on their work in Ono in Kadavu, Tabunakawai, Wilson, Aleki (no date:19, 21), observed that the relations between the *mataqali* determined the effectiveness of MMAs as dominant clans had the most say on the management of the protected areas. Moreover, social actors were not positioned to mobilise endowments such as labour or capital that were necessary to make effective use of others such as land sea estates. These customary rights were based on cultural-historical claims predating state-codified laws that protected endangered species, and therefore could be construed to legitimize poaching (Calamia 2003).

Customary practices could also hinder resource management plans because people who were related traditionally to the group observing the MMAs did not need permission to fish in the customary area. These relations could fish whenever they liked, however they liked and however much they liked. This was why MMAs should be widely publicised and promoted amongst people who had rights to the resources. The villagers needed to examine the full impacts of the decisions they made particularly when they allowed periodic and partial relaxation. For this reason, allowing a relative to fish the MMA was unjustifiable because it would weaken the support for the cause from other villagers and made it hard to have a genuine MMA. In any case, it was unfair for some members of the group to individually profit from the collective effort of the people to manage their resources.

For most households, fishing was still a very important source of income, and the households undertook more fishing activities now compared to five years ago. Income from fishing and gleaning of invertebrates helped to fulfill social and traditional obligations within the community. Poaching was still a big issue and according to some people took place every week. A Yanuca fish warden once said it was difficult to have a good catch because of depleting fish stocks caused by poaching (Kikau 2009). Three years into the closure of the fishing ground in Navukavu, some of the community members breached the set resource rules because they were tempted by the richness and the health of the marine environment, organisms and/or life to violate the agreement that once was firmly established about the MMA (van Beukering *et al.* 2007). Similar occurrences had been observed in Gau and other areas.

It was known that illegal fishers came into the MMAs at night, and there was evidence of spear fishing in the form of coral breakage, and increased wariness of

targeted species such as Grouper, Emperors and large Parrotfish. In Waitabu before 2005, several large Grouper and Humphead Wrasse were regularly seen in the MMA, and it was hoped that the area would become a ground for breeding aggregations. However, the number of these fishes dropped in 2005 and 2006, and it was presumed that they were taken by spearfishers (Sykes and Reddy 2008).

Moreover, the intricate family relationships between fish wardens and community members generated the perception that certain members of the community got away more easily with poaching, and gave the impression that the MMA now was not equitably observed. 'It's not that the fish wardens are not carrying out their assigned jobs but due to the fact these are people who are next of kin'; they prefer to let the issue pass (van Beukering *et al.* 2007).

Locals found it difficult to serve as honorary fish wardens and to exercise their police powers to enforce the law when kins were involved (Calamia 2006:43). Moreover, it was difficult for the fish wardens to effectively do their assigned job because of lack of resources. For instance, in Navukavu one boat was not enough to patrol the MMA. The patrol boat was looked after by each of the four fish warden in a 3-month rotation, and the boat was frequently used for fishing and hiring. Poaching by community members and outsiders still took place (van Buekering *et al.* 2007).

There was no doubt that the formation of the Navukavu Qoliquoli Committee improved the social setting and the relationship amongst the members of the community and brought together the people from the four primary villages involved with the MMA. The ongoing work of the Qoliquoli Committee had certainly fostered better communication amongst residents in the four villages and enhanced cooperation amongst people.

Moreover, it was recognized that the establishment of the MMA bridged the differences between the various clans within the community. There was now less conflict and more cooperation amongst members of the community when it came to the general need for the *vanua* or social obligations within the village. This was particularly important since other changes in community life, brought about by the new road, took people away from the village when they were supposed to attend to community work such as cleaning up on Mondays (van Buekering *et al.* 2007).

A strong, wise and respected community leadership was necessary for the sustainable management of natural resources in these communities (Fong 1994; WB 2000) which required special attention (Muehlig-Hofmann 2008; Veitayaki 2006). The community should take responsibility for the enforcement of their management measures and locally developed regulations and rules (Crawford *et al.* 2004); yet for this, people first had to understand, be informed and involved in developing these measures, which required good community leadership. As Ratu Joni explained, 'leadership roles call for the encouragement of views that contribute to the general well-being. Everyone needs to be alert to this as it is a common human nature to advocate one's own importance' (Nauqe 2008).

Some of the villages in Vanuaso Tikina had been without a traditionally installed leader for years, although there were members of the chiefly family living in the village. In Tomlinson's study (2004), the chiefs had not been formally installed within living memory, exacerbating the sense of lost power. Without a formal installation,

chiefs were considered ineffective (Tomlinson 2004), and in Tikina Vanuaso people actually felt during this period as if the community was without a leader altogether, supporting not only the feeling of lost power but also lost identity (Muehlig-Hofmann 2008). Tomlinson's (2004:657) observation that people and society in the past were unified, proper, and powerful while the present was fragmented, improper, and relatively powerless by contrast was corroborated by the present study. With communities being fragmented, unstable or unaware of their power, future community-based marine resource management plans would be difficult to develop and implement in a sustainable way.

The traditional respect for each *i kanakana* (place to eat from) was breaking down because people knew that the waters, according to law, belong to the government (Calamia 2003). In other cases, people played with the customary system when there was no clear decision-making body or when there was no chief installed. Moreover, some people did not follow the MMA declared by the chief and people of the area. Some people did not believe in the resource management activities while others highlighted that resource management would be more acceptable if it was legally endorsed and enforced by government. The four honorary fish warden in Navukavu could not effectively enforce the communities' resource management arrangements and worse, some honorary fish wardens had even been caught within the MMA.

Placing restriction on the number of fishing licenses offered to members of the clan was difficult in places where the Turaga ni Yavusa was the sole decision maker that gave out licenses (Thaman, Tamata 1999:12). Although issued by the Fisheries Department, the license must be agreed to by the local chief (Veitayaki, Aalsberg and Tawake 2003). The villagers were not consulted in this process and did not know the other people who were licensed to share with them their fishing grounds. Moreover, the chiefs at times ignored the villagers' point of view and the marine area management and think only of themselves (Calamia 2003). The Tui Suva and some of the past Rokobeleni were not well respected and trusted by their people who then decided to form their fisheries management committee to manage their fisheries resources. In Sawaieke and Somosomo on Gau, WWF was working only with the chief while the majority of the people knew little about their MMA initiative.

There was no fishing license given in Verata in 2008 but there were 16 in Matacaucau with whom Verata shared a common boundary. It was thus assumed that some of the fishers from Matacaucau crossed over to the Verata fishing grounds. In addition, according to the people, the Government was offering deep water licenses in parts of Verata's *qoliqoli*. To make matters worse, the *qoliqoli* area of the clan, tribe or district was not clear and sometimes caused conflict amongst villagers and between villages (Calamia 2006:44).

The social and customary obligations to the village and the church contributed greatly to the overexploitation of marine resources because of the many requirements that needed to be met by people whose sources of income were limited. The people were continuously asking their chief to allocate more areas for their subsistence. The argument was that such an allocation would reduce the violation because the people would be able to carry out their obligations. Good decisions should be made because all the financial requests made to the people equated with the resources that had to be secured from some source. Likewise, resource

management would work well if subsistence requirement was well catered for. On the other hand, a direct result of the MMAs was that outside fishers were drawn to the site to harvest. This was due to the increase in number of fishes and other desirable species that attracted them to the site (Aalbersberg, Tawake & Parras 2005:150). Interestingly poachers could not report on other poachers.

Resource management practices instigated by local governments were less efficient, and associated with: the lack of consultation of the leaders in the communities in making decisions pertaining to resource use; a lack of understanding about the method or the importance of the management strategy, and a lack of follow-up activities by organizations responsible for the management initiatives (Thaman, Tamata 1999:12).



It was likely that turtle conservation now promoted by the government was not working because chiefly support had not been sought for the protection of turtles, which was a chiefly ceremonial icon and delicacy. It was common to have disobedience amongst people who had resettled in their villages from urban areas. This was due to the social change that had made these people less committed to communal obligations.

Culturally significant turtles are ecologically threatened

In some instances, traditional systems of exchange and assistance were being used by some, particularly the people in urban areas, to deceive and exploit their relations in rural areas. Marine resource development and management schemes failed because they were designed with little understanding of the resource users, the ecological settings in which they were operating and their cultural milieu (Ruddle 2008:13). Fishing was attractive because whatever was secured was taken for instant profit - "*matua ga ni kua*" (mature today).

The search for alternative sources of income was important because of the need for income in rural areas where the people were paying higher prices for goods and services than those who had secure and regular income and lived in centers of economic activity. It was expensive to transport the marine commodity to the markets, so distant villagers must harvest twice as much as those in nearby villages to cover their costs (Tabunakawai, Wilson, Areki (no date:19, 21).

Calamia (2006:41) highlighted the lack of training, environmental awareness and marine conservation in rural areas. Although training was held through workshops such as the one on the important role sea cucumbers played in the marine environment, and the important role humans played and how they impacted the fishery in Yanuca, the effectiveness of this training in all the rural communities was difficult to gauge. In a classic case, an uncle chose to relinquish his post as Chairman of the community fishing venture because the boat captain, his nephew, was swindling the project and he could not confront him because they were not

allowed by tradition to talk to each other. Instead of relieving his nephew of his duties because of the manner in which he was abusing his position, the Chairman resigned and allowed his nephew to carry on with his illegitimate activities.

Traditional knowledge, while adequate for many purposes, was no longer applicable under increasing population pressure, new technologies or where new export markets had arisen and a cash economy developed as a result of Westernization (Ruddle 2008:13). In Vanuaso Tikina, on Gau, the Roko Tunu from Vanuaso village declared MMA over all of his fishing ground beginning from the passage in Nacavanadi, the neighbouring village. It was alleged that night divers from Nacavanadi regularly fished in his side of the passage and sold the catch to the village chief who was operating a fish marketing venture. In this case, the full benefit of MMA was not recognized as poaching was taking place.

Leadership was challenging when the customary leaders were not involved because all the lesser chiefs would be giving orders. Moreover, it was difficult for people to speak frankly if chiefs were present at meetings (Nauqe 2008). This is why the chiefs must take the lead and encourage their people to unite in their resource management effort. This was difficult for the older generation but encouraging dialogue was an important aspect of good leadership. As Ratu Joni put it 'how can people be heard if they remain silent? This was important because it was not part of Fijian culture to speak one's mind. However, it was quite clear that we needed to adapt our culture and tradition to suit where we are' (Nauqe 2008).

The fact that some communities felt increasingly powerless was likely to impact any MMA. The basis for good MMAs – consensus in issues concerning the entire community and traditional respect accorded to the chiefs – was declining everywhere in Fiji (Cooke 1994; Ruddle 1995; Tomlinson 2004; Toren 2004). Findings also showed that this lack of respect was dividing the villages, in addition to increasingly different economical status and religious beliefs among families (Tomlinson 2004). Those who coped with a 'modern' individualistic self-determined life independent of *kerekere* had tended to separate from those that still respected the traditional social structure and deemed this as a precondition for community function and leadership. The notion of having 'too many people who talk', meaning the inability to find consensus was obvious in some of the villages (Muehlig-Hofmann 2008). In Kadavu, people also lamented that "commoners who earn money think they are chiefly too, and begin to act – inappropriately – like chiefs" (Tomlinson 2004: 656).

The way things were playing out, the problems associated with modernisation moved through the country and communities faster than the rate at which solutions were proposed by those responsible for finding solutions to these problems. For example, new resource use methods were spreading out into the countryside faster than the ability of those involved in these communities to formulate resource management plans and action. The threats were recognised easily while the people were slower to organise themselves against the threats that were supported by middlemen who now funded most of the resource exploitation. On Gau, fishers in the villages were now assisted by commercial fish dealers in Viti Levu who provided the boat and engine and the finance. It was now alleged that these fishers were taking pain killers (stop ache) to allow them to reach depths they could not get to naturally.

Decentralised responsibility in Fiji should not be classified as co-management yet. Rather, it was a parallel arrangement between government and rural communities, the latter carrying the biggest responsibility for their resources. The government relied on the local governance and self-regulation skills of the coastal fishing communities because the lack of funds and personal capacity would make their problems much greater (Muehlig-Hofmann *et al.* 2005). However, the communities could not from their present structure, skills and resources establish by themselves the management arrangement needed to mitigate the increasing pressure on their resources. Knowledge of the different possibilities, practices and sustainable management regulations remained scarce, and resource owners like government officials still did not have the means to quantify the impacts and pressures on the fishery (Cooke *et al.* 2000). Hence, they required (and ask for) input from outside agencies (Muehlig-Hofmann 2008).

In Navatu, Kubulau, some of the people threatened to fish the *tabu* area if no assistance was received from their partner organisation. This should not be the attitude in local communities because the MMA belonged to the people who would be the main beneficiaries. In many of these cases, people needed to realise the hard work put in by others to assist them. The strengthening of individual rights had disrupted community order and arrangements. At times some of these elites and leaders involved communities to line their own pockets. This was why there was agreement about the need for better leadership and decision making processes in many local communities.

Furthermore, the people of Kubulau were sharing their fishing grounds with their neighbours from Wainunu and Wailevu with whom their ancestors have always shared their fishing grounds for subsistence. It was now suggested that the practice should be stopped because it was being abused by these relatives on either side of Kubulau, who were illegally fishing commercially. This was where government support was needed to ensure that commercial operators met the requirements of the trade and did not exploit local communities.

Sometimes, contradictory or differing views were disregarded in local communities. Sadly those with differing views in Fijian communities could be reprimanded or criticised. Those in leadership must bore in mind that people could not agree all the time and that leaders should encourage their people to share their views. Good ideas, which were not considered originally, sometimes arose from these differing views. It was useful to encourage frank and open discussions because the final decisions would be a lot more comprehensive (Nauqe 2008).

Due to the ongoing changes in local communities, there was a need for people to consider the new stakeholders in their management plan and to facilitate their participation in the management process. In some of the cases, non community members continued to fish in the *tabu* areas as they were either unaware of it or they did not respect it (Calamia 2003). Moreover, the issue of how many outside stakeholders may be resistant to change had to be addressed (Calamia 2006:43).

The Fisheries Department should be leading the initiative by coastal communities to sustainably utilize marine resources. It must put in place measures to enhance the effectiveness of MMA. Therefore Fisheries Division should formulate policies and plans for the setting up of MMAs, provide support to assist community-based

initiatives and monitor the implementation of these resource management plans. Moreover, the Division needs to better monitor the use of marine resources. At present, one could not help but marvel at the many activities, some of them criminal, that were taking place around the country. Unlicensed fishers supported by middlemen to poach in *qoliqoli* and MMAs, the pollution of rivers and coasts current, the removal of mangroves and the use of scuba gear by some of the fishers. These practices contradicted the existing legislation, policy and regulations.

5.8 Achievements Since Community Based Marine Resource Management

Waitabu Marine Park had been protected for over 10 years and was one of the longest standing community MMAs in Fiji. During this time the *vanua*, researchers and individuals had witnessed the recovery of this once severely degraded and overfished reef (Sykes and Reddy 2008).

Focus activities that could now be undertaken in all the MMA communities included: the formulation of management plans (operations and management activities, education and awareness), identification of income generating activities (ecotourism, levies and fees) and the organisation of biodiversity surveys (regular surveys to monitor changes, training of locals). These should now encompass training in MMA governance and sustainable living.

The focus of the community workshops was to create awareness among the participants on their roles and responsibilities to the people. Introducing selected principles of good governance and its relevance in leadership roles allowed the participants to evaluate and recheck their present practices and attitudes, and then to adapt to suit the changes in village society. It was a huge challenge, but had to be undertaken. In creating awareness and so building the leaders capacity, participants were able to define the meaning of good governance in their own language based on their understanding and perception of traditional leaderships and modern governance principles. With the empowerment of local communities to manage, good quality leadership would make the involvement of local communities pragmatic and meaningful (Veitayaki 1999:16). Most people agreed that good governance was badly needed and that this was guided by good vision and decision for the good of all (Nauqe 2008).

Leadership, be it traditional, religious or civil was the responsibility of the community members. The people would gladly shoulder their responsibilities if they trust and saw value in their leaders. If they saw that they were cared for and attention was paid to their development then they would support and strengthen their ties with the leaders. Therefore, it was important for the leaders to be close to those that they led (Nauqe 2008). Customary leaders could make declarations affecting their people only if they were respected by their people who fully understood their reasons.

The most recent *Rokobaleni*, (chief of Navukavu), was a good leader and would be remembered for his deeds in upholding his duties to his people. He served the *vanua*, church and *qoliqoli* and made his people proud with his service to others. This chief was hailed a man of the people when he died. It was important for the leaders to listen to their people and to lead from the front. According to Ratu Joni, the very issues that people were silent on were the ones that needed to be addressed

vigorously. This was only possible if the leaders were aware of what was happening around them and what the villagers or community members were interested in (Nauqe 2008).

All of the *qoliqoli* for Cuvu and Votua extending from Yanuca Island to the passage in Yadua was declared an MMA by the *Turaga na Ka Levu* because of poaching in the original MMAs. Fishing was allowed for only a little while next to the Fijian Hotel. This fishing area was extended to support the Nadroga Rugby Team. The *Turaga Ka Levu* offered to buy fish for those of his people who wanted to eat fish. In Malolo and Nacula, the whole *qoliqoli* was declared MMA by the chiefs. These were impressive commitments by the chiefs but it was not certain if they were supported by their people who were literally barred access from the fishing grounds.

According to the late Josaia Ravula, a champion community worker, he no longer talked to people about conservation but was urging them to perform their duty to their *vanua*. 'I am trying to secure things that villagers needed because it was often not considered'. This approach supported the integrated resources management arrangement that incorporated development and resource management in all of the people's activities'.

People were not well informed about sustainable development issues and needed to be better trained on all aspects of the process. This was why capacity building was crucial in all communities in Fiji. People needed to understand the close linkages with their environment. Acknowledgement of the interrelated issues of environment and development would ensure that environmental management was better perceived and supported in all coastal communities. Closer working relations with the government departments were a significant first step. These must be extended so that people were assisted with their sustainable development activities that ultimately contributed to the government's position in this area.

The main challenges in MMA sites could be addressed through strong collaboration of communities, government officials and development agents, based on continuity, community consensus and trust. Every community could have at least one experienced fisheries manager working closely together with respected community members. This would render possible acceptance of conservation measures, general compliance, communication, networking and data collection and analysis. Under a system of extension workers similar to that established for teachers and nurses, these "marine advisors" could monitor projects, make marine conservation and education matters of everyday life for the communities, and support long-term thinking (Muehlig-Hofmann 2008).

5.9. Potentials to Take Advantage of Cultural Roles

The use of cultural roles was well illustrated in the MMAs in Fiji. In Kadavu, WWF aimed to develop the capacity of local communities to design and manage integrated marine conservation initiatives that encouraged and fostered culturally appropriate conservation methods (WWF no date). Their specific objectives were to: design and facilitate the implementation of a community-based integrated marine conservation and development process and formulate a research framework that was culturally appropriate and replicable; build the capacity of resource owners and users to

assess, develop and manage their marine resources; establish supportive networks with neighboring *qoliqoli*, government agencies, non-government organisations and other community-based interest groups in marine conservation and initiate changes to procedures, policies and legislation in support of community based marine conservation areas.

WWF conducted a review to inform the staff of the Fiji Country Programme on how well the MMA had been implemented; whether the current management structure was sufficient; how the implementation was being monitored; how knowledgeable and engaged the households in the 37 villages were about monitoring of management plan actions; and such that it was adapted to be more effective (Tabunakawai 2006).

According to WWF South Pacific Program, nature conservation in the Pacific should be centered on the local owners of natural resources, and their cultures and customs. This was why WWF South Pacific Program adopted the following principles:

- Recognition of the indigenous peoples as the guardians of the natural resources of the Pacific and respect of their cultural values and rights to use their resources for their own development;
- Establishment of effective and innovative models of conservation and sustainable development by communities in four critical Pacific biomes;
- Promotion of the Pacific Island attitudes, policies, institutions and practices that support community-based conservation;
- Striving to work in appropriate partnerships with local communities, other organisations, and government agencies, respecting their positions and addressing their needs; and
- Aiming for consistent best available information to seek solutions to the conservation and development issues of Pacific Island countries (WWF no date).

In Gau, the villagers in Vanuaso Tikina were mostly concerned about the importance of a respected leader as elucidated by the following direct quotes, which highlighted some potential for taking advantage of the cultural roles (Muehlig-Hofmann 2008):

'It's up to the elders, it's up to the church elders, or the family elders, to tell the children how to keep the village and the life for tomorrow; it's up to the family, [they] got to teach their children, [they have to] see the future of Lamiti, and make a good Lamiti in the future.'

'[There is] no chief here now, the one that died in February was not a real chief, [he] was not installed to be a chief, the Fijian way. We have to make a chief, and [then] he can speak, one talks and the others listen; at the moment there is none [no chief] but if we have one next year, we will see the change.'

'It will be better next time [in the future], more people to come to the village, good for the tikina and the school, many school kids would be good.'

'I am praying for a good chief, [a] good village, one talks, [people] respect each other, that's what I hope.'

The chief's decisions were respected by community members, who cooperated and agreed with the established rules. In this sense, the MMA had strengthened the

traditional system whereby the community observes “respect for resource rules and the leadership.”

Awareness – meaning understanding, responsiveness and consciousness – of marine resource management practices would not be achieved through decentralization alone. There were many things that had to take place first, starting maybe with increased information transfer, education and improved transport possibilities on and off the islands (Muehlig-Hofmann 2008). Destructive fishing methods and other such activity were no longer allowed due to the awareness programs with additional people’s consciousness on the positive impacts of their actions (van Beukering *et al.* 2007).

Previous research (e.g., Muehlig-Hofmann 2007, unpublished thesis) indicated that greater compliance of villagers was also linked to, and would only be achieved through, strong and respected leadership, increased environmental education at all social levels, and greater support of basic family needs, all of which again required better correspondence of the remote islands with authorities on the main island Viti Levu.

A neglect of management and conservation necessities and possibilities in the communities in this study was caused by the general loss of ‘community’ perception and identity, coupled with lack of knowledge of the surrounding environment. The resources were declining; therefore community members bought larger and more expensive nets, spearguns and smashed coral heads to get even smaller fish hiding in them. An accepted, and not necessarily traditional, leadership could support the revitalisation of identity and responsibility for the environment, resources and their management, which is crucial for the compliance with measures and thus stabilization of management (Muehlig-Hofmann 2008).

The people of Kubulau have benefited from the MMA work in their district. Apart from the great awareness about their fisheries, the people are receiving assistance to manage their MMA as well as to better their lives. The people received financial assistance for their resource management work. School children had an annual scholarship fund of \$15,000 that was administered by the Resource Management Committee. The Committee also gave \$3,000 a year to Navatu Village to compensate for the fishers loss of income.

People of Navatu had acquired a lot from the resource conservation partners. Greenforce now occupied a beach on their land and provided additional revenue for the villagers. Local communities could now be advised based on the research that was already done. For instance, the people of Navatu were advised to change their *tabu* area. On Gau, the villagers in Nawaikama, Nukuloa and Levuka were warned about the high sedimentation in their coastal waters and the causes by the researchers that had come from abroad to assist the local communities on the island.

It was hoped that *yavusa* heads would establish their Fisheries Management Committee and that people would show their relatives they cared about them by telling them the truth and correcting their ways whenever they were at fault. Effort must be exerted to foster close ties with others to whom people were related and shared customary rights. Likewise, people who broke community rules should be brought to the community elders and chiefs to be counselled and if necessary reprimanded.

Good leadership qualities needed to be nurtured and encouraged for effective MMA. The leadership within government and within the communities must be based on principles of peace, care, hard work, righteousness and truth. In the GCC meeting in 2007, there was a lone chief's plea for chiefs to put aside their armor of pride, and put on sack of humility, lay all linen, dirty and clean on the table, affirm the right, admit the wrong, seek forgiveness, reconcile, consolidate resources and move forward into a new Fiji (Daurewa 2007). This link had been severed and needed mending because it could be the only way people would respect each other's rights and the MMA decisions. Good leaders must make decisions that benefited the people, lead by example, achieve goals, listen to the people, accept advice and share their wealth with the people.

Monitoring was now dominated by scientific interests, which was interesting because if poaching was taking place then the full benefit of MMA was not recognized and the results of monitoring was not conclusive and may even be counter productive. Although there were visible impacts of this poaching in Waitabu, it did not yet appear to be at a level that would permanently damage the population, as shown by a few large Groupers and Wrasse seen in 2008. If poaching was controlled or stopped, fish numbers would quickly return to pre-poaching levels (Sykes and Reddy 2008). Unfortunately, many communities did not realize the impacts of their resource management activities because they continued to relax these arrangements before the data on the state of recovery could be processed.

5.10 Suggestions for How Cultural Roles Can Improve Marine Resource Management

Customary roles could enhance MMAs, which in turn had revived cultural traditions and strengthened links with outside partners and institutions like the University of the South Pacific. This helped to increase the sense of security and belonging in a community (van Buekering *et al.* 2007). The future effectiveness of customary roles however depended on the role that government played as customary roles needed government support if they were to work effectively in contemporary spheres.

Together with others (Cooke & Moce 1995; Tawake & Aalbersberg 2002), this study also showed that management strategies and the level of government involvement varied greatly across the Fijian *qoliqoli* and solely depended on the individual fisheries officers, chiefs and communities involved, causing problems and conflicts where people felt they were treated unequally or with disrespect (Muehlig-Hofmann 2008; Veitayaki 2006).

Commitment of locals was critical in any activity undertaken at the local level. All Fijians knew their *qoliqoli* and *i kanana* so it should be easy to enforce the management if the chiefs led their people in the enforcement of the management. According to a villager, it was not right for the chief to be chasing people off the fishing grounds as the *Turaga ni yavusa* or heads of the clans should be involved in the enforcement of the management because they had people that would carry out their decisions. The approach proposed would allow the use of customary arrangements to solve MMA problems in the communities

To cope with the effects of change and re-establish a firm basis for community function crucial for MMA measures, each community needed to make its own decisions independently. Functional MMAs required good and enlightened leadership, fair and transparent decision making and an effective enforcement arrangement which was absent in many communities. On Gau, the state of the MMAs depended on the individual people involved, their education and character, educated and respected leadership, and a good succession process to prevent long delays in the appointment of their leaders (Muehlig-Hofmann 2008).

The process of re-establishing strong community leadership and stability would be highly complex, varying between communities and *tikina* and thus very difficult to predict; however what this study showed, was that this path could not be found by only looking back. In order to make MMAs work, individual communities had to find ways of establishing a stable community structure, and if this was not possible in the future by following the traditional way of installing a chief, a new type of leadership, including non-traditional leaders might be needed. Also in most cases when there was no clear succession to the leadership role, any temporary hold of the title was seen as a mere act of seat-warming (Fiji Times 2009:8). Although this was known to have happened elsewhere in the Pacific Islands, for example in Palau (Shuster *et al.* 1998), it was not common and might be impossible to achieve in some parts of Fiji. A strong and continuous connection to the government official as well as other agents, supported by improved transport and communication technologies, helped the rural communities to find their responsibilities and strengths to rebuild community structure in terms of community based resource management in modern Fiji (Muehlig-Hofmann 2008).

Christianity and tradition, such as *vaka viti* (Fijian way) or *vaka vanua* (traditional way), was used to formulate and implement MMAs. While this had worked well and resulted in the declaration of close to 200 MMAs, the challenge was now to work on the effectiveness issues. It had been suggested that it was now the time to use the influence of the church to compliment the traditional set up. The feeling was that people should adhere to the teachings of God that were clear on what should and should not be done in terms of someone's relation with another and the environment. People needed to live and speak the truth and confront their relatives if they had broken the MMA arrangements. Moreover, MMAs could be dedicated through a church service.

The normal practice in Fijian Administration was for the Tikina or District meeting to decide, formulate and implement resource management plans on behalf of all villages in the district. This better organised approach could quickly mainstream the resource management practices that worked. Resource management in all villages was the best defense against poverty in rural communities. Given the fact that no ceremonial function was considered complete without a presentation of food (Ravuvu 2005:41), the resource management effort should be attractive and meaningful to Fijians.

Development and sustainability could be incorporated into many areas. The Ecosystem-based management approach to managing marine resources made provision for the social, cultural and economic factors that influenced or are influenced by the utilisation of natural resources by communities. It considered watershed, land use systems and patterns and their impact on the inshore fishing

areas. The approach took into account the correlation between the watersheds and inshore fishing areas in terms of the biodiversity and habitats they supported, and the need to maintain the integrity of watersheds through minimum disturbance and change related to human activities. The approach also included the integrity of natural resource systems in supporting income, health and food security for the communities dependent on these resources and vice versa (WWF 2006).

Divisions, conflicts, rivalry and jealousy exist in the villages so systems and arrangements must be put in place to amicably settle conflicts and dispute. The village was a power base and should not be divided as this would weaken the village's institutions. The role of the chiefs and church leaders were crucial to maintain village unity and not foster divisions and factions.

Sustainable resource use would only work with government reforms resulting in improved communication, information and transport services to enable these officials to work with the people to make their own wise choices. Believing that the situation on the islands (including social and environmental changes and hazards) could be ignored for many years, while financial and natural resources could be used for 'pressing' urban issues, could and may back-fire at some point. The fact that the majority of the population was now in urban areas was a sign of the challenges we face. Government needed to show leadership to prevent the catastrophe of these urbanised communities not being able to feed themselves due to burgeoning poverty. Government needed to remember that the role of the rural communities would become more important for the balancing act of the government between developing the country and safe-guarding it (Muehlig-Hofmann 2008).

In Tikina Vanuaso, changes over space and time were perceived by the villagers in the social and natural environment. Development and livelihood issues, and traditions and traditional authority, all required further adaptations. In order to face these challenges and adapt to future changes while still supporting the livelihoods of island communities, the villages' need for strong and knowledgeable leadership had to be acknowledged. Good and enlightened leadership was critical to successful marine resource management and of direct consequence to community welfare and function, the distribution of responsibilities, transfer of knowledge and acceptance of management measures. Sadly, leadership at community level in many areas had continued to weaken and erode (Muehlig-Hofmann 2008).

The relation with the government must be improved. Report writing and recording should be promoted to ensure accurate records were kept. People needed to be strategic in their dealings with governments and must have some understanding of government processes and procedures. Cooperation and collaboration was required for future prosperity and good life of all people who must act as individuals to address the common problems they faced. Moreover, people must unite in doing MMA work in their place because they were from there and were expected to be the main beneficiaries in these undertakings. They must demonstrate what new things they had learned. Trainings must be manifested in what people do afterwards.

Customary plans and enforcement must be in accordance with the will of the masses. This required good and transparent decision making processes and trusted leadership. There could be periodic relaxation of management but the time had to be

determined and agreed to by all because all of them had made sacrifices for the cause. Anything less would easily segregate the community and weaken support.

The law must be obeyed. Bans that were placed on turtle harvesting and the harvest of endangered fish and shellfish species were not observed. In addition, *duva* (fish poison and stupeficient) and the use of gas should not be allowed; fishing of undersized fish must be prevented and night fishing regulated.

The background information on the community-based resource management projects in Vanuaso Tikina on Gau (Muehlig-Hofmann 2008) presents another step towards a more holistic approach to the management in this area, an approach that could make management measures more meaningful, sustainable and hence successful in the future. The necessity of considering these community aspects towards improved local resource management and conservation with a view to wise decisions must be supported more widely and merged into funding opportunities and policy-making processes.

Rural communities were in danger of becoming less and less traditional, and more and more underdeveloped in relation to the urban regions of Fiji. Although villagers hoped for an improved quality of life, better access to information, improved infrastructure and reinforced community leadership, attempts with regards to these points had been slow and often not successful (Muehlig-Hofmann 2008).

Muehlig-Hofmann's (2008) study on Gau gave an example on how villages could be caught between needing development and wanting adaptation and improvement (e.g. for their children and grandchildren), and their former traditions, which they lost but still mourned (Muehlig-Hofmann 2008). People were becoming less dependent on the traditional cultures, a situation which a few decades ago they could never imagine. Similarly, many people who had made their way to towns or abroad could not imagine coming back to the villages. At the same time, the people in the villages were adopting commercial fishing and farming and were asking for infrastructure and public development that had a huge impact on their lives (van Buekering *et al.* 2007).

Muehlig-Hofmann's (2008) provided an insight into another very old and very complex traditional system losing its efficiency and complexity over time. What remained were societies that were not traditional anymore but still 'developing', versus the 'old' traditional but undeveloped ones. The perception that the traditional system was becoming eroded was thus a reality, but had these rural communities already moved too far from their traditional lifestyles to be able to 'turn back' (re-establish pre-colonial status) or to adapt these lifestyles to the changing circumstances of life in modern Fiji, a country that barely was comparable to its pre-colonial status and identity? The people interviewed on Gau considered "turning back" not the best option for community welfare, nor for the management and conservation of their resources, as the communities did not want to stand back while Fiji and the world developed around them (Muehlig-Hofmann 2008). How then could MMAs work successfully in these communities? The dilemma of being caught between past and future without direction for the present would be lightened by an enforcement of the leadership and authority, e.g., through faster re-installments of new chiefs, under the responsibility of each individual community and each island.

The villages and all management processes within needed appropriate and continuous leadership, useful for all aspects of community reality and linked to the Government, NGOs and their information resources. A key element of success had been the teamwork approach that united traditional values and modern science (Aalbersberg, Tawake & Parras 2005:149). Otherwise the 'traditional' independent island life would be further eroded and the small islands and villages would be even further detached from the general way on which the country steered and tried to represent and identify itself.

Whether the present traditional chiefly system could survive these changes and regained the ability to fulfill its duty of leading and sustaining the communities, or whether it would be replaced by a new type of leadership, for example by including non-traditional leaders into the nomination process, could only be speculated upon at this point (Muehlig-Hofmann 2008). Obviously, the latter would be an even greater departure from tradition in some ways; and even with a locally elected leader having the blessings of the community elders, this way would not be accepted in all communities. However, the fact that some people other than members of the chiefly mataqali now performed as village headman in some of the villages showed that changes could and were being made.

Nevertheless, if the traditional Fijian system could not convey the necessary kind of leadership anymore, for example due to a lack of competent people of chiefly descent – electing an educated and charismatic leader of non-chiefly descent would mean a boost for some communities in terms of identification, welfare and development (Muehlig-Hofmann 2008). Respect, social capital and collective action could be rebuilt and were essential for future community existence and the environment; the islander's "bank and insurance".

Community-based resource management efforts in Fiji would have to remain case-specific – as acknowledged by the fourth principle of local specificity for integrated coastal zone management (Cicin-Sain & Knecht 1993) – despite the fact that generalizations were wanted and needed, e.g. for national management plans. The changes in the villages' everyday lives influencing management regimes were not the same in all villages, and one could not generalize community concerns because the actions highly depended on the individuals involved (Muehlig-Hofmann 2008).

Although traditional respect and social ties were loosening, they did so with varying speed and manner. Hence, the aspects mentioned in this report could not be considered independently; they formed a complex network that differed from community to community and place to place. For deeper insights, understanding and generalisation of statements, larger-scale follow-up research was needed to unequivocally address the issues raised by the interviewees. Furthermore, deeply focused studies on the specific aspects of social environment of the communities themselves and the development history of each island, were needed. Apart from a reinforcement of the leadership system, the paper suggested long-term research and assistance based in and wanted by the communities themselves, in order to detect the specific community concerns and integrate them in the management planning process (Muehlig-Hofmann 2008).

People needed to remember the interests of future generations and must strive to safeguard these. MMA action must be taken based on what was learned and should

be consolidated. Similar to what Mr Kevin Rudd, the Prime Minister of Australia explained in relation to climate change, the cost of inaction was more than the cost of addressing MMAs.

6

THE LESSONS LEARNED

Cultural roles were critical to the effective operation of MMAs. They needed to be better understood and used for the effective implementation of MMAs.

6.1 Cultural Roles and MMAs in Fiji

Cultural roles were crucial to the declaration of MMAs and could support MMAs locally but were not working effectively in contemporary context where government regulations, policies and legislations featured. Faced with the contemporary need for money, the use of modern equipment and the weakened social systems, the MMAs in rural Fiji were vulnerable. The people in local communities needed to be convinced that MMAs worked and that they made a difference to the improvement of life in the communities undertaking resources management. Unfortunately most of the villagers were unable to sustain their MMAs and to realize the benefits because of the outside pressure by traders and poachers to fish the MMAs.

The tradition to set up MMAs in local communities was supported by institutions and custom which were now eroding. Traditional protocols were no longer strongly followed as in the past while the system of enforcement to deal with non compliance within a community had changed. Traditional relations and ties were not well recognized by government institutions that were now responsible for the use and management of the resources. There were also instances where traditional ties were being abused for the benefit of a limited few.

Traditional ties and relations were increasingly abused in an effort to benefit unfairly from MMAs. Some people were taking advantage of their traditional relations to seek to fish in areas where the owners were observing MMAs. These areas were often opened because a relative sought the permission of a chief using the traditional approach. Thus, commercial operators would present a *sevusevu* worth \$30 to fish and earn \$300 from the fisheries products that were obtained.

MMAs greatly benefited coastal communities. The conservation initiatives made people realized the critical importance of their marine resources to their sustenance and of the need to ensure their sustainable usage. The people were made to realize their responsibilities as stakeholders who owned these resources and who depended on these for their livelihood. This was different from earlier roles where the people were mere spectators to what resource management arrangements that government determined and implemented.

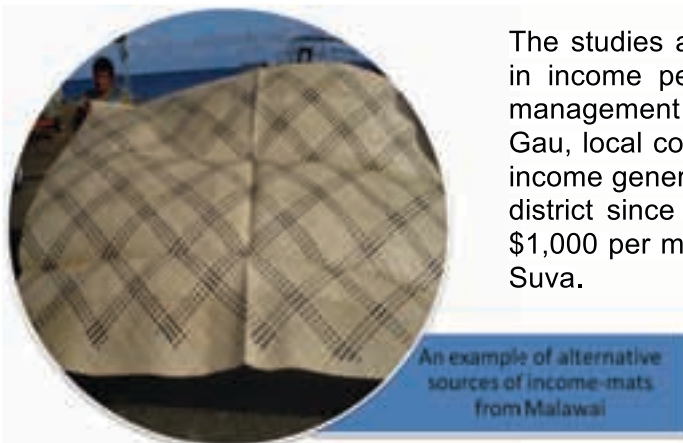
The change in community engagement approach enhanced the management of marine resources and boosted rural development activities. People realized the importance of maintaining the health and productivity of their fishing grounds and how these were interrelated to and affected by all the ecosystems around them. The people understood the need for an integrated resource management approach and adopted the ecosystem based method of managing their resources. The resource

management activities in the managed marine areas were being extended into adjacent and surrounding environments.

According to the people involved in marine resources management, they were getting more resources and were spending less time working to obtain what they wanted. The fishers including men and women were fishing in areas where they had abandoned and were seeing fisheries resources they had not seen in recent times. The people had realized the recovery of their fisheries resources and the marine environment generally. The success in the management of marine resources was extended to other areas of their life and responsibilities. The people were looking for alternative sources of income and were searching for better ways of utilizing their natural resources. Sustainable tourist activities, fisheries development, land use and forestry activities and the sale of artifacts were all being tried in different communities. In many cases, these communities had been assisted by their conservation partners to improve their living conditions.

Socially, the tikina was working together with a better sense of purpose. *Bose* and *Lotu ni Vanua* were now a common features while the social units had been strengthened. Social institutions were revitalized and made more relevant in supporting the people's development aspirations. Community leaders were involved in consultative meetings and training and were introduced to other communities to widen their experiences and expand on their ideas.

Some of the community groups were earning income from their resource management activities. In Kubulau, there was a scholarship scheme for the villagers' children attending secondary and tertiary institutions. The development partners were also collecting money to support the protection of the marine environment. All of the communities where workshops and meeting had been held were well rewarded for their effort. In many of these communities, assistance was offered to the villagers, village schools, kindergartens and even to the health centres.



The studies around Fiji supported the increase in income people earned from their resource management activities. In Vanuaso Tikina in Gau, local communities were supported in their income generating initiatives. The women of the district since 2006 had brought into the island \$1,000 per month from the sale of their mats in Suva.

In Vanuaso village, the youth operated a village store that had not operated for over 20 years, while in Malawai the youth were the proud owners of a cattle farm. These initiatives demonstrated the link between development and the care of the environment which support it. The people were learning that they needed to care for their environmental resources because their lives depended on it.

Unfortunately there were many improvements needed to ensure the effective operation of MMAs in Fiji. Many of these improvements involved the incorporation of traditional practices and cultural roles into the contemporary scenario. In many cases, for instance, not every one in the village was aware of what was going on. The decision to manage the resources was made by a smaller group including the chief so the involvement of the larger group was dependent on how well the message and decision was made known to others in the group. In many instances, the assumption was wrongly made that all the people were involved together. This study highlighted that this was not the case and that the wrong assumption in the end compromised the community support for resource management.

Government support to sustain customary practices in managing resources was poor. The hauling to court of the high chief of Macuata was indicative of Government's dismal support. Government was still promoting resource development over resource management. The support for fishers was based on the possession of a fishing license. The people that did not have licenses such as the communities that were managing their resources were not eligible for government assistance.

Poaching was also a handicap in rural communities where people were least able to defend their resources. Poaching was taking place without the owners' knowledge or because the local people could not do much as they did not have the resources required for enforcement. In many cases, the people's resolve to maintain their resource management activities was badly undermined by the repeated poaching that the people relaxed their management activities. In these communities, the feeling was that it was pointless to be refraining from using portions of their qoliqoli if outsiders were going to be the primary beneficiaries. Poaching is a form of stealing and thus should be treated as such by Government. Sadly, commercial fishers and businesses were stealing from the poorest people in rural areas; people who were least able to defend their resources.

Poaching was also a major threat not only because the end result was not an accurate reflection of the resource recovery but the people also lost respect for MMAs if there were regular infringements. In some of the areas, the people decided to relax their resource management activities because of the regularity with which it was poached.

Village meetings were regularly conducted but were not attended by all of the villagers and not well organised. The meetings were mostly for the men and the assumption was that the women would be informed by their menfolk. Even if the women were expected to attend the meeting these were often impossible because of the timing; village meetings were often organised on Monday mornings. Minutes from these meetings were not kept so the discussions were often not consistent. At times, the decisions at these meetings were even contradictory. Moreover, follow up activities related to MMAs were often not regularly communicated to the villagers who were left in the dark about what the village or district was undertaking and the expected contribution from all its people.

People who were involved in managing their resources were under continuous pressure to relax their management arrangements because they considered their MMAs their premier fishing areas. In many villagers, the limited opportunities to earn an income to pay for all of the people responsibilities were a major threat. Because

of poor leadership, people were never given ample time to meet their financial obligations and consequently were regularly seeking income from their MMAs. These hurriedly organised village income earning activities were conveniently boosted by the arrival on to the scene of commercial operators who then easily convinced people to briefly relax their resource management activities and earn some much needed money.

Members of the communities were pressured by their community obligations (church contributions, payment for education and the need for money) to harvest their resources that they tended to opt for the opening their MMAs. Once the MMA is opened, these communities found it hard to re-close the site or commit to another MMA. Thus, the people relaxed their management plans exposing their resources to greater threats and risk.

Communities perceived the MMAs as belonging to their NGO partners resulting in fewer inputs from the people. The common perception was that the resource management work was done for the partners and not the community and its future needs. There was little that the people did on their own initiative. They acted as observers who waited around for the directives from the partners and threatened the MMAs as if it was the partners that would be suffering if they relaxed or ignored their resource management activities. Shifting demand from local communities was common. The local people expected their partners to deliver on all of their evolving needs even though they were not committed to resource management and the partners had met all of their promised support. People needed to see their partners as they were and not as sources of unlimited riches.

The strong feeling among many villagers that the MMAs belonged to the partners made it easier for the people to trade their MMAs for some much needed goods. The rationale for the MMAs was still distinct between the partners. While the villagers associated MMAs with good fishing areas their external partners were more interested in long term monitoring and conservation that would prove the success of their approach and method. However, work by Veitayaki in Vanuaso Tikina proved that people could take ownership of their MMAs if they were allowed ample time to make these determinations.

There was a poor system of representation in local communities because communication was not well organised. People were not all knowledgeable about what was undertaken, which was a barrier to the full engagement of community members in resource conservation. The lessons learned in trainings or workshops were not well relayed back to communities. On the other hand, the representatives of local communities did not consult with their people before they attended the different meetings in which they represented their people. In addition, these representatives hardly shared the reports from these meeting to the people who were expected to articulate these. Written reports were often in English or appeared in forms that people had problems with. Most reports were with the people who were handed these at the meeting where they were present. The people generally had only limited knowledge of what was going on in these communities.

Traditional leadership was not always well tuned into contemporary challenges. There was therefore the need for traditional leaders to regularly receive advice on issues they were not well versed with. This was where well organised community-

based resource management groups could play an important advisory role. Community leaders needed to understand their responsibilities in leading their people to live in contemporary societies and to look after the interests of their future generations.

In a number of local communities, local communities had formed committees to look after resource management issues as well as development in general. The formation of such committees should be encouraged because of the complexities of the issues that had to be handled by local communities. Development planning and implementation, offer of forest and fisheries licenses and improvement of livelihood of the people.

Changing of guards between the installations of chiefs were times of instability in many local communities. People took advantage of this time when there was no leader to seek relaxation to their communities' resource management activities. Unfortunately, most resource management activities were relaxed when a chief dies or for occasions when the community was responsible for a purpose for which there was not adequate preparation. In other cases, a new chief would have a different view to resource use so people had to readjust their resource management activities accordingly.

Local commitment was critical because these were the people who use the resources. If the partners were relied on to manage the people and they are not the owners then there would be difficulties in maintaining the MMAs. Additional to this, there were still long standing conflicts/issues and rivalry that caused community members to differ and not fully comply with their management plans. These differences were deep rooted and difficult to solve as they were often based on traditional reasons.

Long term commitment to sustainable development was required but was difficult to achieve under current conditions. People were still after the money they would get now for the exploitation of their resources. Conservation for the long term was not as attractive as instant monetary return as people needed money and assistance now. The little number of options available for income generation made people look to their MMAs as a first and last resort.

6.2 The Way Forward

MMAs were part of the traditional resource management practices that potentially could greatly benefit local communities. However, the effectiveness of MMAs could only be realized if the issues that hinder its establishment and maintenance were addressed. This required the assessment and strengthening of the cultural roles that were an intergral part of these MMAs.

Good and visionary leadership is required in local communities where the bulk of the people had never left their villages. The people were new to the contemporary challenges they now had to address. Positive leadership is needed to ensure that the interests of all of their people were protected. The leaders, for instance, needed to convince the people that protecting their natural resources, which were their main

sources of food, were the best way to guard against poverty and that it was critical for the future well being of all the people.

Governance and leadership issues in rural areas needed to be addressed to improve the living standard in these communities in general and enhance the marine resources management in particular. Fijian administration needed to be overhauled to ensure that the people looked after their interests and responsibilities. In a lot of ways, the church was already showing the way in terms of how it was organised and how it conducted its work but this success needed to be extended into all facets of life in local communities.

People needed to better organise village meetings while the records must be properly kept and followed through. Resource management decisions needed to be emphasised and villagers must be regularly reminded at the village meetings and during village announcements, when the Turaga ni Koro broadcast village activities and reminders. This was crucial to ensure that the people's resource management decisions were endorsed and supported by all community members.

Villagers needed to focus on planning longer term development initiatives. Many of these development initiatives to address issues such as sustainable development, climate change and altered habitats required strategic planning and implementation. Development activities needed to be identified and undertaken by all the people in order to bring about the necessary changes that were needed for better results.

Capacity building is critical as new solutions have to be identified for new challenges. Most of these challenges are new to the tradition that people have and must therefore be learned and mastered quickly.

Communities needed to make resource management independently rather than rely on outside members of the group or outside partners to make the decision for them. Local people needed to be involved in the decision making process so that they could take ownership of the initiative and support it. Resource management decisions needed to be endorsed and supported by all in the communities. Because of tradition, the decision making was the privilege of a few whose decisions were supposed to be adhered to by all. This problem required that people reviewed their resource management commitments to ensure that the decisions were known and honoured by everybody.

Communication within the village and all levels of Fijian administration needed to be improved. It was obvious that village decisions must be better recorded and shared with everyone involved. The traditional communication protocol did not reach all the required stakeholders who were using this as the excuse not to adhere to the decision taken by the community.

The Fisheries Division in particular and the Government in general must take leadership at the local, national and international levels. Appropriate legislation, plans and strategies were expected if resource management such as MMAs were to succeed. Government must recognize the importance of MMAs and must render support. Legislation must be formulated to empower local communities to protect their resources while existing laws must be enforced. For example, fishing licence numbers should be clearly marked on the side of the fishing vessels to make

identification manageable. Local communities could submit the numbers on the side of the boats fishing illegally in their waters to allow Government to take harsh actions to curbe lawlessness in this sector. Moreover, poaching could be better controlled if Fisheries Officials accompanied by police manned all main landing spots in the country. Local communities must also be encouraged to report to the authorities all events that were in violation of the law.

MMA's needed to be relevant to local communities. External partners must genuinely involve local people in project activities that were meaningful for them. This required that villagers be engaged in activities that convince them of the importance of resource management to be improvement of their lives.

Long term commitment to sustainable development was required in rural communities and across the land. It was well accepted that sustainable development was necessary given the changes that were taking place. Sustainable development was related to the tradition of relying on the resources available in an area and needed to be shared with future generations.

The children who were to replace the current generation in this areas expect nothing less. They need their parents to be good role models in terms of balancing their development activities with care for the integrity and health of environment systems.

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