

# Community Conserved Areas: A review of status & needs in Melanesia and Polynesia

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## Executive Summary

Melanesia and Polynesia have seen an impressive increase in the number of marine protected areas over the last decade almost entirely due to the implementation or recognition of Community Conserved Areas based on regional assets in the form of traditional tenure and governance mechanisms. The same time period has seen the virtual demise of any other form of marine protected area in the independent countries of the South Pacific. CCAs account for over 500 sites covering over 12,000 km<sup>2</sup> of which more than 1,000 km<sup>2</sup> is no-take.

The characteristics of the CCAs can be summarized as follows:

- **Extent:** May sometimes involve management of the entire marine area under customary tenure but usually comprise (or include) a small closed area with a total ban on extraction.
- **Size:** The closed areas are usually very small (less than 1 km<sup>2</sup>)
- **Permanence and constancy:** Many, possibly a majority of the closed areas are managed with periodic openings to allow occasional harvests
- **Purpose:** Usually the CCAs are explicitly for sustainable livelihood purposes – i.e. conservation through sustainable use.
- **Benefits:** The benefits derived by communities from CCAs may include increased or more predictable harvests but may also include one or several of various alternative benefits – these may outweigh the fishery or biodiversity benefits.
- **Impacts:** The impacts of CCAs are hard to quantify but weighty anecdotal evidence and increasing scientific evidence suggests that CCAs see rapid increases in some species and are likely to have beneficial biodiversity impacts.
- **Networks:** The majority of CCAs are part of support networks through which government or NGOs provide advice and other technical support.
- **Legal support:** In most cases CCAs operate under situations in which strict interpretations of existing legislation may not be supportive (or indeed possible) but de facto customary tenure is so far an adequate basis. CCAs have been recognized in most countries owing to their empirical success rather than any concerted strategy on behalf of governments (with the exceptions of Samoa and Tonga).

The wide spread proliferation of CCAs seems set to define the site based agenda for marine conservation in the South Pacific. Governments are slowly gearing up to increasing support for these sorts of approach and in many ways the very success of phenomenon poses its biggest threat. Large investments and institutionalization of CCAs may undermine their sustainability by decreasing their self reliance or even introducing dependencies such as incentives or external policing.

### Recommendations

- **Tenure and traditional governance:** The success of local management approaches hinges largely on traditional tenure and governance systems. Great care should be taken before undermining or reforming these systems which appear vital to sustainable environmental management in the region and any analysis of tenure reform must pay special attention to the environmental impact of such moves.
- **Characterize and defend local and cultural approaches:** CCAs have developed and re-appeared in response to local needs and culture and may often have characteristics such as small size, periodic opening and location determined by social rather than biological factors. International bodies are not necessarily aware of this and these characteristics may require clarification to

them before international definitions of Protected Areas or Conservation can be assumed to be regionally applicable.

- **Careful scrutiny of international definitions and concepts for regional relevance:** The unique attributes of the region combined with the difficulties of engaging in international fora suggest that great care should be exercised by nations and implementers before assuming that commonly accepted approaches are applicable. The new IUCN definition of Protected Areas is one of the most recent examples and should not be adopted without considerable discussion and further written clarification from IUCN.
- **Improve and enhance participatory processes:** Ongoing evaluation of techniques and processes used to promote and support community management should be performed. Issues that may need particular attention include community involvement and empowerment, development of appropriate mixes of traditional and national governance and marine tenure in Western Melanesia.
- **Integrated island management as the goal:** Protected areas alone will be fragile, costly and unlikely to achieve long-term community or national benefits. The adaptive management processes central to many CCAs should be built on to include ecosystem wide (particularly terrestrial) and sustainable development issues and incorporate climate change adaptation and resilience. These processes should be available to any and all communities interested in managing sustainable development. Some large scale pilots of such approaches may be appropriate where sufficient experience has not been attained.
- **Enabling environment:** Institutions and legislation will need to develop in a fashion more supportive of community initiative towards sustainable management of resources and remove bureaucratic bottle-necks currently insurmountable by communities.
- **Enhancing the role of government:** Future support should seek to consolidate the long term role of the various levels government in supporting and coordinating local marine resource management. Such a strategy, ideally decentralized, might be implemented in a gradual or staggered fashion and would require strong collaboration from civil society organizations in achieving government institutional development goals. An important tool will be national or sub-national social networks or support umbrellas.
- **Multi-sector integration in practice:** Fisheries and environmental sectors will need to put into practice effective and on the ground collaboration to support communities in achieving local and national sustainable development priorities. Legislation for inshore fisheries, protected areas and wider environmental management will need to be improved in tandem.
- **Cost effectiveness:** National budgets are amongst the smallest in the world and face considerable demands to meet human development priorities such as health, education and food production. High priority should be placed on cost-effectiveness of environmental management approaches and maximizing the range of livelihood benefits for such approaches to be feasible strategies for government. These should not require expensive technical inputs or analysis (e.g. natural or social sciences) at the outset. Local government, community or NGO staff can facilitate and initiate management at the earliest opportunity based on experiences elsewhere, rules of thumb and community knowledge, new information can later be incorporated into cycles of adaptive management. The financial costs in establishing and supporting communities must be in the order of hundreds of dollars per year for them to be sustained in the long run by government – emerging data suggests that this is achievable
- **Research needs:** Community members are key decision-makers and resource managers. Researchers and technical institutions urgently need to improve

processes to identify community priority information needs and in ensuring necessary information reaches communities in a timely and useable fashion. Research and scientific monitoring has not cost effectively addressed the needs of community based management and arguably these resources would be better invested in establishing and supporting local adaptive management unless limited funds can be better targeted and results made directly available to end users.

- **Strengthen and adapt national and sub-national policy and institutional frameworks** in support of Integrated Island Management based on community driven adaptive management. This is vital to provide robustness to external drivers such as population increases, market pressure and terrestrial impacts. The strengthening of institutional capacity will require innovative approaches from NGOs and donors, imaginative and tailored institutional structures which may adapt or hybridize traditional or national institutions. Bridges between these and other stakeholders can be built using networks and umbrellas, examples of which are now established in the region. These support networks or umbrellas have proven useful in the advancement of national community based management in Fiji and also Solomon Islands and Micronesia (FLMMA, SILMMA, PIMPAC).
- **Avoid raising unrealistic expectations.** Communities are getting involved because they want to manage their resources better for their own benefit. Unrealistically promoting the benefits of MPAs or providing “incentives” are common strategies despite the lack of demonstrable long term success. These are not only financially un-sustainable in a national ICM framework but also erode the vital empowerment and ownership communities achieve when they observe the connection between their actions and accrued benefits.

In conclusion, CCAs are being revitalized in the South Pacific in a unique global phenomenon and one of the untapped riches of the Pacific has begun to show its true potential; villages, communities, tribes, clans and districts are planning, implementing and enforcing management at the local level based on customary tenure. The challenge for policy-makers, scientists, government and non government institutions is to move beyond the emphasis on protected areas in isolation and support and promote this de-centralized Island way as a vital foundation in a truly regional approach to Integrated Island Management that can address the pressing issues associated with sustaining the region’s biodiversity and livelihoods.



Fishing, Nananu-I-Ra, Viti Levu, Fiji Islands

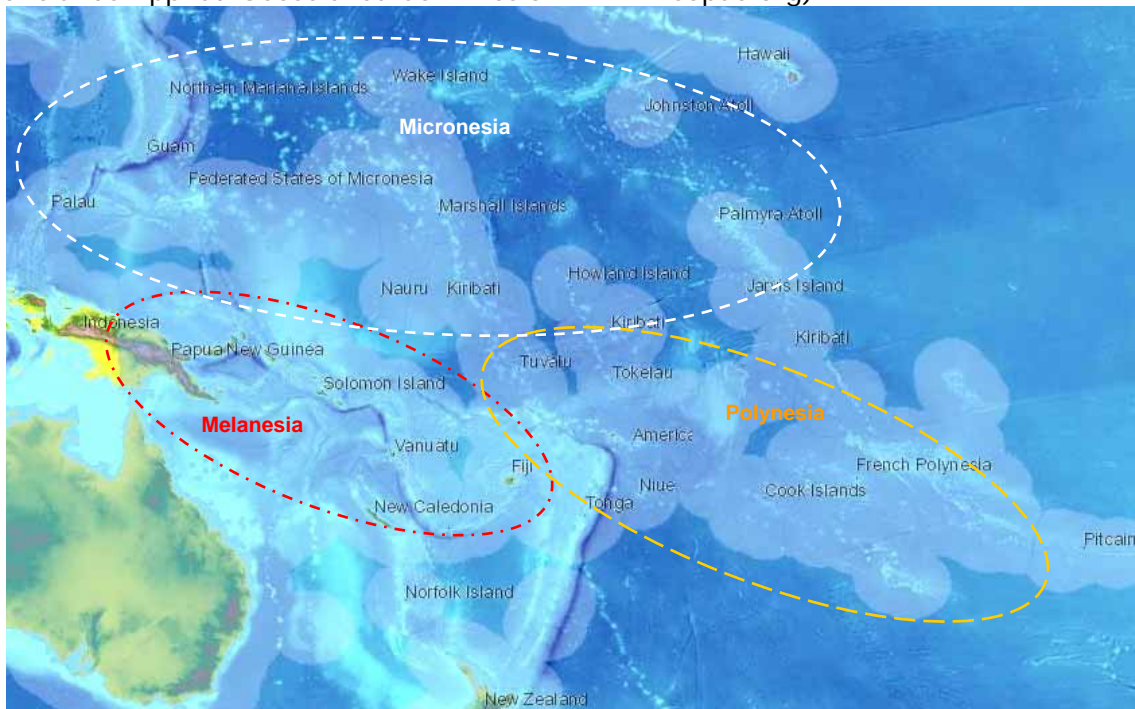
## Acronyms

ACIAR	Australian Centre for International Agricultural Research	IUCN	International Union for Conservation of Nature
ADB	Asian Development Bank	LMMA	Locally Managed Marine Area
AIG	Alternative Income Generation	MDG	Millennium Development Goals
AusAID	Australian Government Overseas Aid Program	MMA	Marine Managed Area
BACI	Before–After Control-Impact	MPA	Marine Protected Area
BINGO	Big International (Environmental) Non-Government Organization	NGO	Non-Government Organization
CBAM	Community Based Adaptive Management	NZAID	New Zealand International Aid & Development Agency
CBD	Convention on Biological Diversity	PA	Protected Area
CBFM	Community Based Fisheries Management	PICT	Pacific Island Countries and Territories
CBM	Community Based Management	PLA	Participatory Learning and Action
CCA	Community Conserved Area	PRA	Participatory Rural Appraisal
CI	Conservation International	SIDT	Solomon Islands Development Trust
CMT	Customary Marine Tenure	SILMMA	Solomon Islands Locally Managed Marine Area Network
CRISP	Coral Reef Initiative for the South Pacific	SOPAC	Secretariat of the Pacific Islands Applied Geoscience Commission
EAM	Ecosystem Approach to Management	SPC	Secretariat of the Pacific Community
EBFM	Ecosystem Based Fisheries Management	SPREP	Secretariat for the Regional Environment Program
EBM	Ecosystem Based Management	TNC	The Nature Conservancy
EEZ	Exclusive Economic Zone	UN	United Nations
FLMMA	Fiji Locally Managed Marine Area Network	USP	University of the South Pacific
FSPI	Foundation of the Peoples of the South Pacific International	WFC	WorldFish Center
GEF	Global Environment Facility	WMA	Wildlife Management Area
IAS	Institute of Applied Science	WSB	Wan Smol Bag
ICCA	Indigenous and Community Conserved Area	WSSD	World Summit (on) Sustainable Development
ICRAN	International Coral Reef Action Network	WWF	World Wide Fund for Nature

## Background

The increasing pressures exerted by mankind on the global environment have resulted in many proposed strategies to mitigate or reverse the degradation that is increasingly evident. Ironically, one strategy that is receiving increasing endorsement<sup>1</sup> also happens to be amongst the most ancient. Indigenous peoples and local communities have for millennia played a critical role in conserving natural environments and species. They have done so for a variety of purposes, livelihood-related as well as cultural, spiritual, aesthetic and security-related. The term “Community Conserved Areas” (CCAs) is now commonly adopted to represent specific sites, resources or species (where areas refer to the species habitats) voluntarily conserved through community values, practices, rules and institutions<sup>2</sup>.

Figure 1. Pacific Island Countries and Territories showing the regions of Melanesia, Polynesia and Micronesia. Note that the indigenous populations of Aotearoa-New Zealand and Hawaii are Polynesian. Exclusive Economic Zones (EEZ) are shown in lighter shading. (Courtesy of the Pacific Islands Applied Geoscience Commission – [www.sopac.org](http://www.sopac.org))



The Pacific Island regions of Melanesia and Polynesia are unique in that the majority of countries are governed by the “indigenous people” and indeed traditional tenure, knowledge and governance are still prevalent in many of these. Perhaps unsurprisingly “CCAs” or their equivalent are enshrined in the culture of island communities and are currently being rediscovered as the most practical resource management tool available in many situations. However, and in common with the rest of the world, there is still a need to explore how this approach can be best utilized and supported in the variety of contexts and challenges facing a very diverse region. The purpose of this study is to deepen the understanding of the CCA phenomenon

<sup>1</sup> World Parks Congress - 2003, - Programme of Work on Protected Areas of the Convention on Biological Diversity (CBD) - 2004 and First Congress on Marine Protected Areas - 2005

<sup>2</sup> Borrini-Feyerabend, Kothari and Oviedo, 2004. The term Community Conserved Areas (CCAs) has been adopted in some countries in the region and although ICCA is the preferred term globally (Indigenous and CCAs) as indigenous tenure is the norm in most of the countries covered by this report “indigenous” is dropped and the shortened term CCA is used throughout the report.



with respect to the Melanesia and Polynesia regional context thereby contributing to strengthening and enhancing the appreciation of the phenomenon throughout the world.

## The Pacific Islands and their Ocean

The Pacific Ocean occupies half of the earth's sea surface and more than a third of the Earth's surface, some 180 million square kilometers. Some 200 high islands and 2,500 low islands or atolls make up the 22 Pacific Islands Countries and dependent Territories (PICTs)<sup>3</sup>. Though small in terms of land mass<sup>4</sup> these PICTs have exclusive rights to the exploitation of 30 million square kilometers of sea area delimited by their Exclusive Economic Zones or EEZ (Figure 1).

Table 1. Population, land and sea characteristics of Pacific Island Countries and Territories (SPC<sup>5</sup> and SOPAC<sup>6</sup>).

Region/country/island (country of association)	Popul'n (2007 est.)	Land area (km <sup>2</sup> )	Popul'n density (/ km <sup>2</sup> )	Annual growth rate (%)	Coast line (km)	EEZ Area (km <sup>2</sup> )
<b>MELANESIA</b>	<b>8,137,100</b>	<b>540,248</b>	<b>15</b>	<b>2.1</b>	<b>39,496</b>	<b>7,430,000</b>
Papua New Guinea	6,332,750	462,840	14	2.2	20,197	3,120,000
Fiji Islands	831,600	18,272	46	0.5	4,637	1,260,000
Solomon Islands	503,900	28,370	18	2.7	9,880	600,000
<i>New Caledonia (Fra.)</i>	241,700	18,576	13	1.6	2,254	1,740,000
Vanuatu	227,150	12,190	19	2.6	2,528	710,000
<b>POLYNESIA</b>	<b>649,650</b>	<b>8,021</b>	<b>81</b>	<b>0.8</b>	<b>3,952</b>	<b>11,194,426</b>
<i>French Polynesia (Fra.)</i>	261,400	3,521	74	1.3	2,525	5,030,000
Samoa	179,500	2,935	61	0.1	403	120,000
Tonga	102,300	650	157	0.4	419	700,000
<i>American Samoa (U.S.)</i>	65,000	200	325	1.7	116	390,000
<i>Wallis and Futuna (Fra.)</i>	15,400	142	108	0.7	129	300,000
<i>Cook Islands (N.Z.)</i>	13,500	237	83	-1.5	120	1,830,000
Tuvalu	9,700	26	373	0.3	24	1,300,000
<i>Niue (N.Z.)</i>	1,600	259	6	-2.4	64	390,000
<i>Tokelau (N.Z.)</i>	1,200	12	100	0.0	101	290,000
<i>Pitcairn Islands (U.K.)</i>	50	39	1	n.a.	51	844,426
<b>MICRONESIA</b>	<b>545,900</b>	<b>3,214</b>	<b>170</b>	<b>1.6</b>	<b>10,782</b>	<b>11,649,000</b>
<i>Guam (U.S.)</i>	172,300	541	318	1.9	126	218,000
Federated States of Micronesia	110,600	701	158	0.5	6,112	2,978,000
Kiribati	95,500	811	118	1.9	1,143	3,550,000
<i>Northern Mariana Islands (U.S.)</i>	84,700	471	180	2.7	1,482	1,823,000
Marshall Islands	52,700	181	291	1.0	370	2,131,000
Palau	20,200	488	41	0.6	1,519	629,000
Nauru	9,900	21	471	2.3	30	320,000
<b>TOTAL</b>	<b>9,332,650</b>	<b>551,483</b>	<b>17</b>	<b>2.0</b>	<b>54,230</b>	<b>30,273,426</b>

The geographical characteristics of the region have to some extent shaped the cultures of its people (Figure 1). The ancestors of the Melanesians arrived some 50,000 years ago and settled in the high islands of the Western Pacific. With abundant resources and a complex topography, Melanesian communities developed largely isolated from one another, leading to a diversity of languages and cultural traits. The resource-poor islands of Polynesia and Micronesia on the other hand,

<sup>3</sup> World Bank 2000b.

<sup>4</sup> With the exception of Papua New Guinea.

<sup>5</sup> www.spc.int

<sup>6</sup> Population and land area data Secretariat of the Pacific Community (<http://www.spc.int/sdp>), EEZ and coastline data from Pacific Islands Applied Geoscience Commission (<http://www.sopac.org>)

provided incentives to subsequent waves of settlers for the undertaking of long ocean voyages and expansion into the Northern, Southern and Eastern edges of the Pacific Ocean.

The present day population of Melanesia comprises some 87% of Pacific Island inhabitants occupying 98% of the land mass with some three quarters of the region's coastline (Table 1). In contrast Polynesia and Micronesia each account for around 6% of the population inhabiting a minuscule fraction of the regional land mass but with rights over three quarters of the regional EEZ.

Since 1962, when Samoa became the first Pacific Island nation to regain independence, a total of 12 countries are independent including Tonga which was never colonized. These countries are governed by their indigenous populations but the remaining 10 territories (Table 1) remain in some form of association with France, New Zealand, USA or the UK.

Table 2. Population (SPC7), language (Gordon 2005) and biocultural diversity (Harmon and Loh 2004) measures of Pacific Island Countries and Territories.

Region/country/island <i>(country of association)</i>	Popul'n (2007 est.)	Popul'n density (/ km <sup>2</sup> )	Urban population (%)	Languages	Biocultural diversity ranking
<b>MELANESIA</b>	<b>8,137,100</b>	<b>15</b>		<b>1,042</b>	
Papua New Guinea	6,332,750	14	13	819	1
Fiji Islands	831,600	46	46	9	101
Solomon Islands	503,900	18	16	69	6
<i>New Caledonia (Fra.)</i>	241,700	13	63	38	22
Vanuatu	227,150	19	21	107	17
<b>POLYNESIA</b>	<b>649,650</b>	<b>81</b>		<b>23</b>	
<i>French Polynesia (Fra.)</i>	261,400	74	53	8	-
Samoa	179,500	61	21	1	170
Tonga	102,300	157	23	2	129
<i>American Samoa (U.S.)</i>	65,000	325	50	1	-
<i>Wallis and Futuna (Fra.)</i>	15,400	108	0	2	-
<i>Cook Islands (N.Z.)</i>	13,500	83	72	4	106
Tuvalu	9,700	373	47	2	156
<i>Niue (N.Z.)</i>	1,600	6	36	1	-
<i>Tokelau (N.Z.)</i>	1,200	100	0	1	-
<i>Pitcairn Islands (U.K.)</i>	50	1	n.a.	1	-
<b>MICRONESIA</b>	<b>545,900</b>	<b>170</b>		<b>28</b>	
<i>Guam (U.S.)</i>	172,300	318	93	1	183
Federated States of Micronesia	110,600	158	22	17	55
Kiribati	95,500	118	44	1	208
<i>Northern Mariana Islands (U.S.)</i>	84,700	180	90	3	-
Marshall Islands	52,700	291	68	1	211
Palau	20,200	41	64	3	58
Nauru	9,900	471	100	2	167
<b>TOTAL</b>	<b>9,332,650</b>	<b>17</b>			

## Pacific Islands diversity

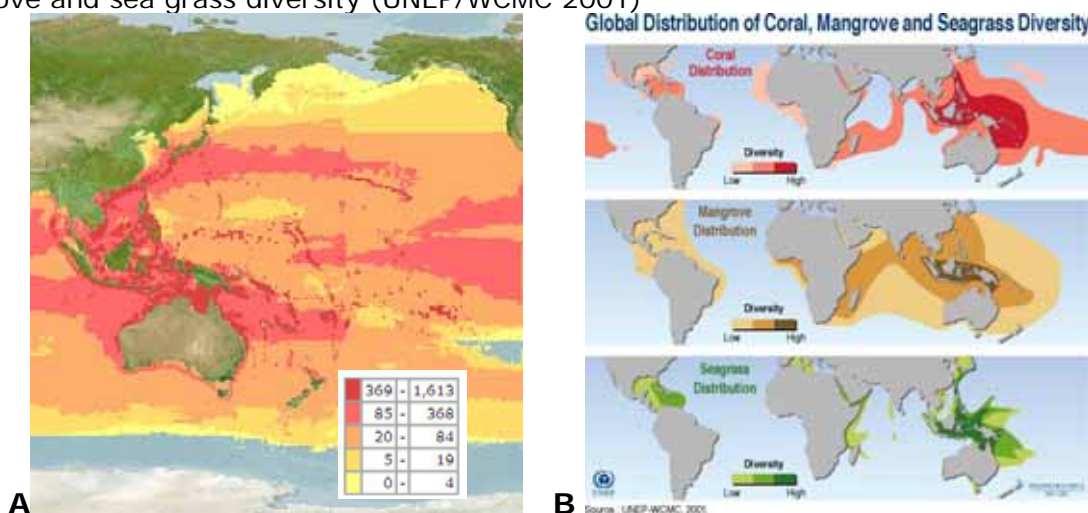
Though the region is often referred to as a single entity such as Oceania, the Pacific, the South Pacific and so on it is in fact an extremely humanly diverse region with over one thousand different ethnic groups or cultures. The four westernmost Melanesian countries consistently rate amongst the 15 most culturally diverse countries at a

<sup>7</sup> www.spc.int

global level (Table 2) whether measured in terms of ethnic groups, religions or languages and adjusted for population size or land area<sup>8</sup>.

The total variety exhibited by the world's natural and cultural systems, known as biocultural diversity, is also extremely high for the Melanesian countries even without the inclusion of the rich marine biodiversity (until recently few data sets were available for marine biodiversity in these countries<sup>9</sup>).

Figure 2. Marine biodiversity in the Pacific Ocean. A. Species richness map for animals in the Pacific Ocean, 7242 species used in analysis (Fishbase/OBIS10). B. Global distribution of coral, mangrove and sea grass diversity (UNEP/WCMC 2001)



The Pacific region is one of the world's centres of biological diversity, or species richness (Fig. 2), possessing the most extensive coral reef system and the highest marine diversity in the world (the western Pacific). The evolution of species and characteristics of the island region have led to a high endemism in terrestrial species, particularly on larger islands, which can also have a high biological diversity. The terrestrial and particularly marine biodiversity are still considered to be poorly inventoried or understood by western science<sup>11</sup>.

## Pacific Islands challenges

The population of 8.6 million in PICTs is projected to double in the next 30 years, and will exacerbate the already high population densities on some islands. This combined with poor economic performance and growing inequalities is leading to problems associated with poverty in most of the independent countries. Indicators of poverty and human development highlight the Western Melanesian countries of PNG, Solomon Islands and Vanuatu as being of most concern with high levels of poverty, relatively low development, high and rapidly growing populations, low employment and weak economies and poor public sector capacity. All the PICTS are highly vulnerable to economic and environmental impacts but this vulnerability combined with high population growth and weak resource bases adds the atoll nations of Kiribati and Nauru to the above list of countries of most concern<sup>12</sup>.

<sup>8</sup> Harmon and Loh 2004, Loh and Harmon 2005.

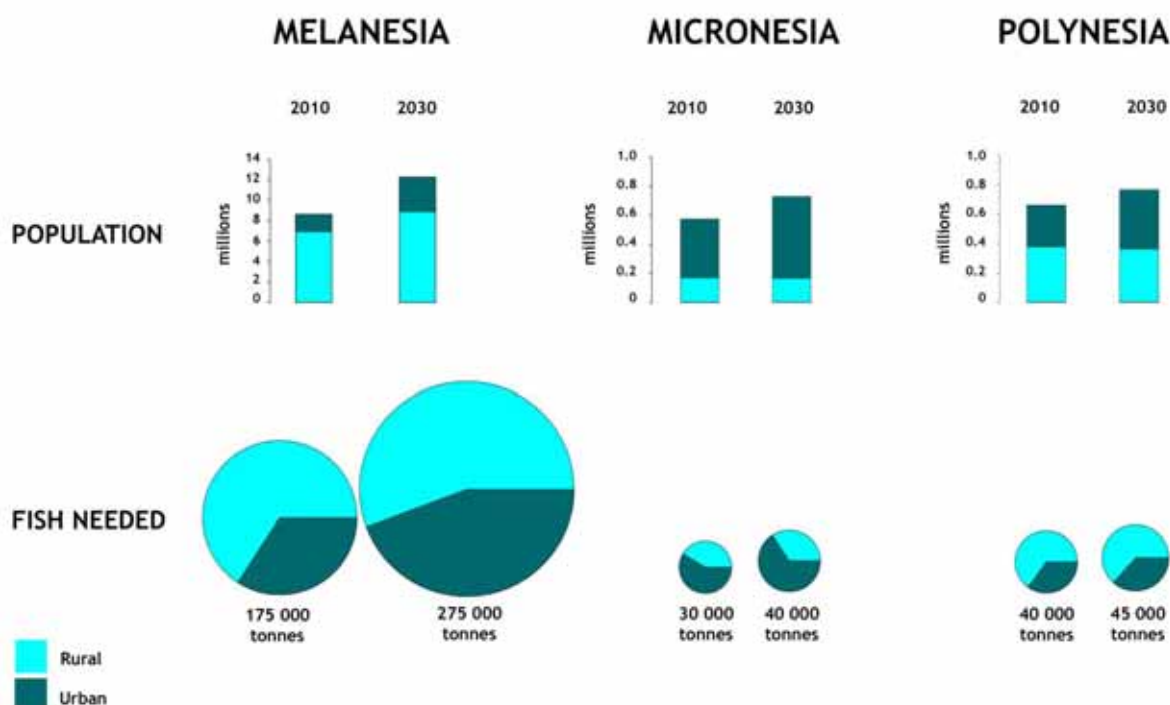
<sup>9</sup> Fedder and Govan 2007

<sup>10</sup> <http://fishbase.sinica.edu.tw/tools/AquaMaps/tools/dynamicRichness.php> and <http://www.obis.org.au>

<sup>11</sup> McIntyre 2005

<sup>12</sup> UNDP 2007, NZAID 2002 based on ADB data

Figure 3. Projected population growth in rural and urban areas of Melanesia, Micronesia and Polynesia to 2030, and the fish needed for future food security (Secretariat for the Pacific Community and Bell 2007).



The socio-economic pressures described above are all taking their toll on the environment, subsistence and commercial activities are impacting forests, agricultural land and fisheries resources. Biodiversity is already paying a price and species extinction rates are reported to be among the highest in the world, particularly for birds<sup>13</sup>.

The future of Pacific Island peoples is inextricably linked to their terrestrial and coastal ecosystems. Unsurprisingly and with the exception of inland populations in Papua New Guinea, fish provides and is expected to provide the major source of protein for a rapidly growing population for at least the next 20 years. This reliance seems likely to spark a crisis of considerable proportions in Melanesia where high population growth and predominantly rural populations with few alternatives have projected food requirements well in excess of what coastal areas are currently likely to produce in the absence of improvements in management and productivity<sup>14</sup> (Fig. 3).

The role played by Pacific Island reef ecosystems, though, extends far beyond that of sustenance or income generation and includes such vital functions as protection from extreme natural phenomena, safe transport and providing a central element of Island society and culture - the very identity of Pacific Islanders<sup>15</sup>.

The independent Pacific Island countries, the bulk of which are in Melanesia and Micronesia, have inherited forms of government that are ill suited to their social and geographical realities. The "command and control" approach to policy and regulation clashes with customary resource tenure prevalent in almost all the PICTs (see below), requires human and financial resources that are beyond the reach of all but the

<sup>13</sup> McIntyre 2005, Chape 2006

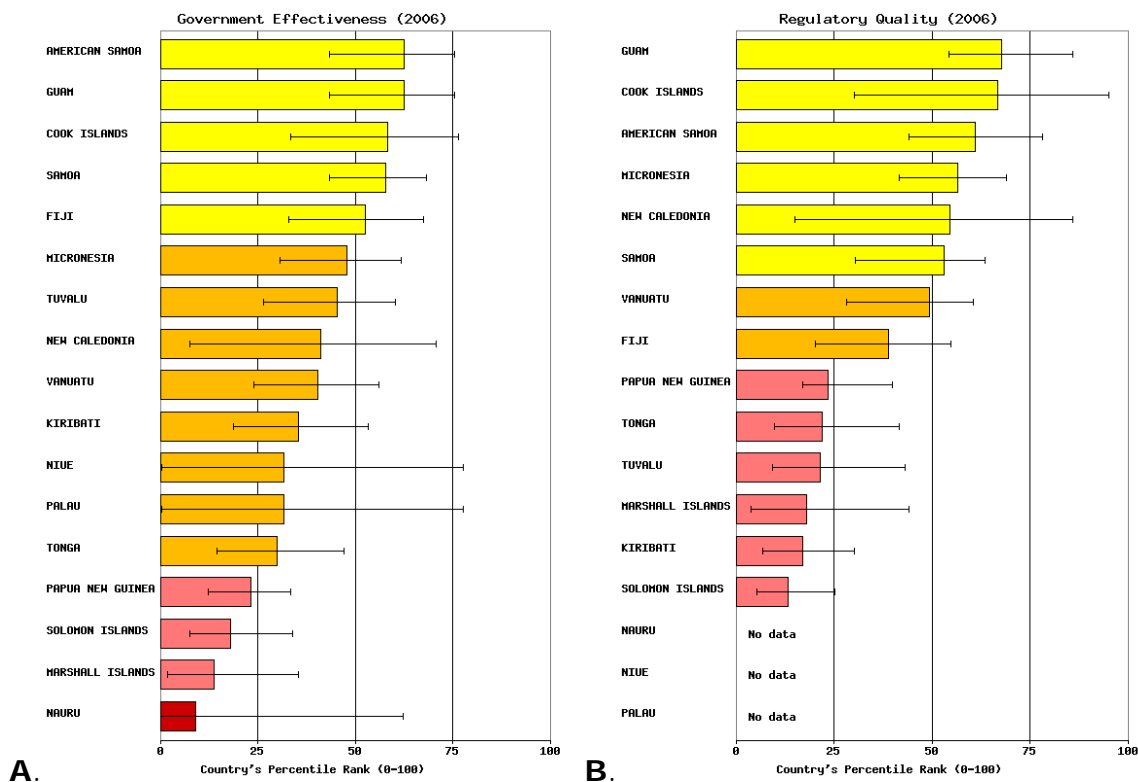
<sup>14</sup> See for instance Bell, J. 2007, Commission of the European Communities, 2000, Gillett and Lightfoot 2002 and UNDP 2002.

<sup>15</sup> Whittingham et al 2003, Johannes 1981, Hviding 1996

wealthier island nations and is well nigh impossible to implement through the complex arrays of traditional and modern sectoral institutions.

Though legally empowered to exercise some jurisdiction, the effective control over natural resource use by government ranges from deficient in the more developed countries in the East to practically negligible in Western Melanesia<sup>16</sup>. This situation is reflected in overall governance indicators monitored by the World Bank (Fig.4).

Figure 4. Governance indicators for Pacific Island Countries and Territories 2006. A. Government effectiveness B. Regulatory quality (Kaufman et al. 2007).



The increasing pressure on life supporting ecosystems and the challenges faced by the post-colonial administrations in developing functional resource management strategies has been cause for concern for decades. Pressing issues in other development fields have obviously taken priority such as health and education (Melanesian countries' progress on between half to all the Millennium Development Goals is estimated to be "of concern" <sup>17</sup>). But as explored above, increasing reliance by growing populations on ever dwindling natural resources is likely to become critical in Western Melanesia - indeed resource issues appear to have been central to at least two recent national conflicts<sup>18</sup>.

<sup>16</sup> Dalzell and Schug 2002, World Bank 2000, Lane 2006a,b,c, Preston 2005, McIntyre 2005,

<sup>17</sup> Ausaid 2008.

<sup>18</sup> The unrest in Solomon Islands (1999-2002) seems to have been primarily driven by manipulation of tensions caused by population pressures in Guadalcanal and Malaita Province and access to land. The 2006 military coup in Fiji was partially motivated by controversial proposals for marine resource legislation, the Qoliqoli bill.

### Vueti Navakavu LMMA, Fiji Islands<sup>19</sup>

Navakavu Locally Managed Marine Area is located on Fiji's main island of Viti Levu near to the capital city of Suva. The Locally Managed Marine Area (LMMA) was established in 2002 by the clan (yavusa) of Navakavu residing in the four villages of Muaivusu, Nabaka, Waiqanake and Namakala, some 600 people. With support from Institute of Applied Science of the University of the South Pacific and other partners in the Fiji Locally Managed Marine Areas Network, yavusa Navakavu has established a community-based tabu or no-take zone and wider marine managed area under customary traditional authority. Governance and enforcement is undertaken by a committee answerable to the "meeting of chiefs" and decisions are enforced by the community through customary mechanisms and honorary fish wardens. Formal legal support is inadequate and the court system provides no support at all. The community perceives a number of benefits from the project including increased fish stocks in the no-take zone and increased value of the fishery overall. In addition the Vueti Navakavu approach exemplifies traditional stewardship in which caring for the resources is a duty towards future generations.



Community meeting at Navakavu at initiation of project (Credit: S. Meo)

<sup>19</sup> Prepared by Semisi Meo and Hugh Govan see Annex 2

## Responding to the challenges in Melanesia and Polynesia

From the above some of the challenges facing Polynesia and particularly Melanesia are clear and to recap include:

- Extremely high population growth and increasing risk of poverty
- Introduced governance systems poorly suited to national circumstances
- Lack of government resources and capacity

All of which are resulting in increased pressure on natural resources leading to erosion of biodiversity, livelihoods and even conflict.

The remainder of this report examines how the independent countries of Melanesia and Polynesia have been responding to these environmental pressures using some of the regional strengths highlighted above – diversity, traditional tenure and local governance and in which the role of “Community Conserved Areas” have been prominent. Most experience and documentation relates to the marine environment so this will be the main focus.

### Customary land and sea tenure – obstacle or opportunity?

With the exception of Tonga between 81-98 percent of the land in independent Melanesia and Polynesia (Table 3) remains under some form of customary tenure and group or individual right of access to land through customary processes still remains one of the main components of ethnic and national identity.

Table 3: Distribution of land by system of tenure in Melanesia and Polynesia (Ausaid 2008).

	<b>Public<sup>a</sup></b>	<b>Freehold<sup>b</sup></b>	<b>Customary</b>
Cook Islands	Some	Little	95%
Fiji	4%	8%	88%
Niue	1.5%	0%	98.5%
Papua New Guinea	2.5%	0.5%	97%
Samoa	15%	4%	81%
Solomon Islands	8%	5%	87%
Tokelau	1%	1%	98%
Tonga	100%	0%	0%
Tuvalu	5%	<0.1%	95%
Vanuatu	2%	0%	98%

**a** Includes Crown land and land owned by provincial and local governments. **b** Includes land that is not strictly freehold, but similar in characteristics, such as the ‘perpetual estates’ found in Solomon Islands.

Customary tenure systems vary from group to group and it is important to avoid assumptions based on practices elsewhere. Generally speaking though the systems are not communal but rather different people or institutions may hold overlapping rights (e.g. travel vs residence vs extraction) over the same land in a hierarchy of entitlements and obligations which are passed down through the generations (although other forms of transfer are possible)<sup>20</sup>. In simple terms, customary tenures can be seen as a balance between group and individual rights and obligations, with

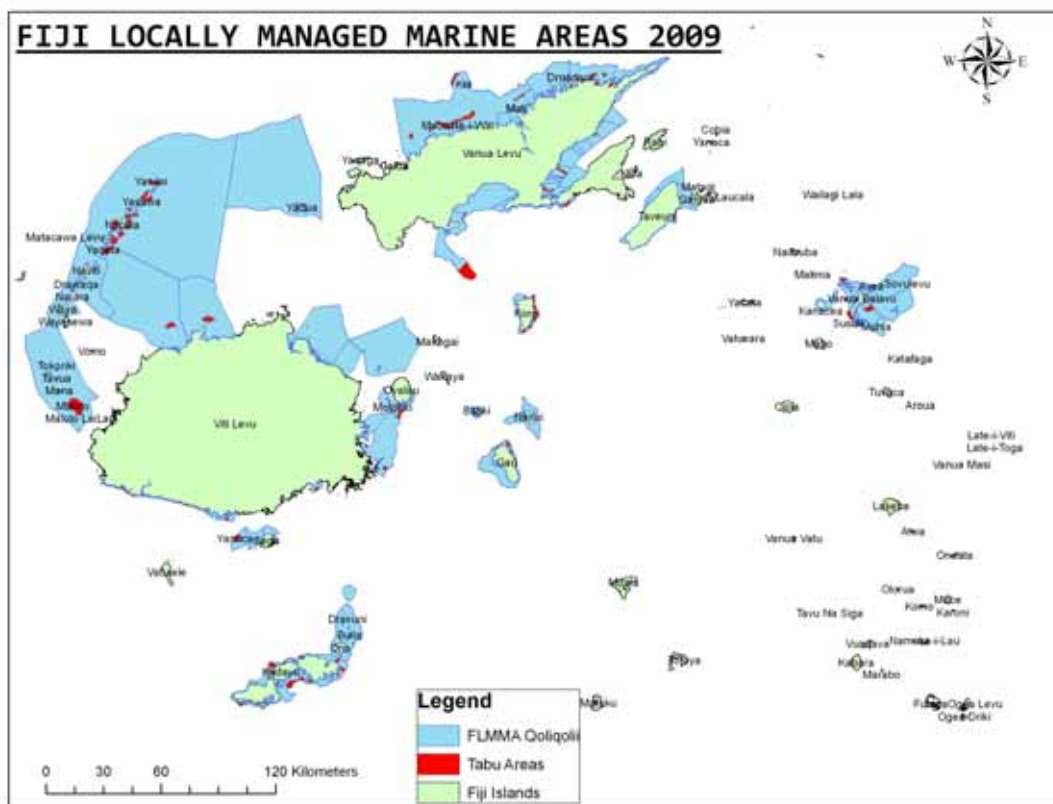
<sup>20</sup> Ward 1998,

land ownership being held at group level and land use being exercised at the individual or household level<sup>21</sup>.

Some countries have codified or formally registered customary tenure attempting to provide a basis more suited to meshing with western style land use planning (e.g. Fijian tenure – Fig. 5). However, it has been convincingly argued that **the flexibility inherent in customary systems make it well suited to adaptation in the face of diversity and constantly changing social, environmental and legislative conditions, this may be undermined by ill-considered attempts at codification**<sup>22</sup>. This does not rule out the potential for codification that incorporates flexibility and takes account of the social context and issues at stake. Importantly, traditional tenure systems are increasingly under external (and sometimes internal pressure) to reform, being seen as a major constraint on economic development by some commentators and donors<sup>23</sup>.

The debate regarding the reform of traditional tenure systems has been a long one and may have progressed towards a more conciliatory and negotiated middle ground<sup>24</sup> from earlier but still pervasive positions calling for outright abolition of customary land tenure and their replacement by systems of individual private property rights<sup>25</sup>. However, **much of the current debate seems to skip lightly over the potentially grave impact that erosion of traditional tenure systems may have on the environment.**

Figure 5: Map showing boundaries of traditional fishing grounds, *I qoliqoli*, in Fiji. The light blue shaded areas denote wider managed areas and darker red denote no-take zones of marine CCAs (source Fiji Locally Managed Marine Area Network).



<sup>21</sup> Fingleton 2005

<sup>22</sup> Hviding 1998, Ruddle 1998

<sup>23</sup> Hughes 2003, 2003

<sup>24</sup> Ausaid 2008

<sup>25</sup> Hughes 2003, 2004



The relationship between people and their land may define among other things the duty of care that people have to each other, the future generations and the environment. Such is the case of the *vanua*, in Fiji and similar concepts are to be found in most of the traditional Pacific societies such as *fenua* (Tuvalu), *enua* (Cook Islands) and the *puava* (Marovo, Solomon Islands). These cultural beliefs affect resource allocations and the potential for responsible environmental stewardship of these property rights regimes contrasts markedly with the pitfalls of the western open access approaches<sup>26</sup>. **In the absence for the foreseeable future of western style command and control mechanisms and the resources to fund enforcement, great care should be taken to avoid further undermining traditional environmental stewardship.**

Typically these tenure systems embrace land and sea without western style distinction in the quality of the ownership of either. Customary owners may often have rights over the areas of sea adjacent to their land but in other cases rights may pertain to more distant groups. Definition of seaward boundaries may be equally variable and indeed have evolved, frequently the drop-off or edge of seaward reefs may constitute a boundary but offshore tuna fishing spots for instance may extend boundaries miles seaward<sup>27</sup>.

Table 4. Historical and contemporary de facto (F) or de jure (J) existence of customary marine tenure (CMT) in the Pacific Islands and evidence for traditional use of closed areas in managing marine resources (Ruddle 1994, Johannes 1978).

Region/country/island (country of association)	CMT historical	CMT current	Traditional closures
<b>MELANESIA</b>			
Papua New Guinea	√	F	√
Fiji Islands	√	F/J	√
Solomon Islands	√	F	√
New Caledonia (Fra.)	√	?	?
Vanuatu	√	J	√
<b>POLYNESIA</b>			
French Polynesia (Fra.)	√	?	√
Samoa	√	F	√
Tonga	√	X (1887)	?
American Samoa (U.S.)	√	?	√
Wallis and Futuna (Fra.)	√?	?	?
Cook Islands (N.Z.)	√	F	√
Tuvalu	√	F	√
Niue (N.Z.)	√	√	√
Tokelau (N.Z.)	√	√	√?
Pitcairn Islands (U.K.)	?	?	?
<b>MICRONESIA</b>			
Guam (U.S.)	√?	X	?
Federated States of Micronesia	√	Some	√
Kiribati	√	F	√
Northern Mariana Islands (U.S.)	√	X?	?
Marshall Islands	√	X	√
Palau	√	?	√
Nauru	√	X?	?

<sup>26</sup> Lal and Keen 2002, Hviding 1996

<sup>27</sup> E.g. Zann 1985

A review of traditional marine resource management in the Pacific Islands (Table 4) suggests that customary marine tenure (CMT) was probably the norm in most coastal communities with the exception of perhaps the relatively few areas where marine resources did not play an important role in life. CMT was the principal and enabling resource management strategy in the Pacific Islands and specific management tools were applied within this context building on these ownership and use rights. Possibly the most prevalent of these tools may have been spatial or temporal prohibitions or bans i.e. closure of access to individual species or marine resources in general in certain areas and/or for defined time periods – generally grouped under the term taboo though the name varies depending on the cultural group (see Box 1)

Box 1: Pacific Island terms describing traditional bans or closures (Govan et al 2008, 2009 Parks and Salafsky 2001)

Cook Islands	<i>ra'ui</i>
Fiji	<i>tabu</i>
Hawaii	<i>kapu</i>
Palau	<i>bul</i>
Papua New Guinea	<i>tabu</i>
Tuvalu	<i>tapu</i>
Samoa	<i>sa</i>
Vanuatu	<i>tabu</i>
New Zealand	<i>rahui</i>
Solomon Islands	<i>tabu</i>
Tokelau	<i>lafu</i>

A myriad of other resource management practices have also been documented and for instance Johannes (1978) lists bans on catching of spawning individuals, limiting quantities of catches, release of a proportion of catch or undersized individuals, holding excess catches in enclosures, limits on effort (e.g. number of traps), ban on taking bird or turtle eggs and reserving easily accessible areas or species for times of poor fishing conditions. In fact it would appear that “modern” fisheries management tools can find traditional counterparts in virtually every case.

There are a wide variety of documented motives behind the declaration of taboos and other marine resource management practices. Areas, species or seasons may be declared off limits due to the death of a prominent community member, as part of rituals such as initiation, as sacred sites or for “re-stocking” in preparation for a feast to name a few. This variety of motivations has led some to question the existence on an indigenous conservation ethic and indeed it appears that this may have only existed in communities highly dependent on relatively limited resources. However, what is less open to dispute is that the effect of these traditional practices was one of limiting or reducing the pressure on resources and indeed although respect for such traditional rules may be seriously under threat from the pressures of modernity there appears to be some basis upon which to construct locally appropriate resource management suitable to the modern context<sup>28</sup>.

## Traditional and local governance systems

Indicators gathered by the World Bank (Fig. 4) serve to underscore the poor performance of introduced governance systems which in addition are challenged by low budgets and the logistical difficulties in governing small countries composed of far flung island groups. It is important to point out firstly that these and other indicators measure governance “by government” and secondly that while communities and external observers readily share this poor assessment of government performance the measures tend to ignore the wealth of systems still operating at the local level based on traditional governance<sup>29</sup>.

Indeed in countries such as Solomon Islands, Vanuatu and Fiji most of the “governance” experienced by the majority of the population is “traditional governance” in some more or less adapted or evolved form. Communities commonly

<sup>28</sup> Johannes 2002, Ruddle 1998

<sup>29</sup> Govan et al. 2005, FSPI 2003

criticize modern governance structures as being top-down, lacking consultation, unresponsive to local needs, bureaucratic and inadequate in dealing with conflict management. Although criticized too for its inadequate service delivery e.g. education and other development services, this is acknowledged as one of its key roles despite the hindrance caused by its incompatibility with local or traditional governance.

Traditional governance, in Melanesia at least, is broadly evolving in an attempt to adapt to change. Communities strongly favour maintaining key features of traditional governance such as transparency, accountability (in that decisions are made locally), relevance and conflict management while also generally supporting the integration of these systems into western governance. One expressed need is for this process of integration to more actively involve local communities in discussing and designing hybrid systems that build on the strengths of each and address some of the weaknesses that have emerged.<sup>30</sup>

The fields of natural resource management and conservation have seen the dawning of similar realizations of the need to build on customary tenure and governance as we shall see below.

### The “demise” and renaissance of Community Conserved Areas

The traditional tenure systems and resource management strategies prevailing throughout the region up until the 20<sup>th</sup> century experienced gradual erosion with the increased impact of colonization. The reasons for this loss were multiple and varied from place to place – populations suffered translocations, reduction and expansion, lived through World War 2 - much of which was fought on the small islands and dense jungles of the Pacific and engaged with (or had imposed) western economic and governance models.

Western colonial governments, following the pattern established in North America and Europe, commenced establishing national parks and similar categories of protected areas, mainly terrestrial and on state land<sup>31</sup> (Table 5). Though CCAs continued to exist these were not formally recognized and indeed the tenure systems and local capacity to enforce tenure was eroded to the extent that by 1978 Robert Johannes warned of the “demise of traditional marine conservation methods”. The coming of independence to the majority of island nations in the 1970s did not immediately change matters but by the 1980s realization of the ineffectiveness of western approaches to conservation in countries with local tenure and little ability to enforce conservation measures began to dawn.

The late 1990s saw concerted attempts to utilize the strengths of customary tenure and traditional practices in several major projects resulting in significant numbers of CCAs being established, reintroduced or reinforced in Samoa, Cook Islands and Vanuatu. An increased emphasis on livelihoods approaches and participatory rural development<sup>32</sup> have seen these initiatives strengthened or expanded and the proliferation of others in Fiji, PNG and Solomon Islands in a veritable “Renaissance of community based marine resource management” as Robert Johannes put it in 2002.

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<sup>30</sup> FSPI 2003

<sup>31</sup> Axford 2007

<sup>32</sup> Chambers 1992, Govan 1997

Table 5. History of protected areas (PAs) and Community Conserved Areas (CCAs) in the Pacific Islands Region (adapted from Axford 2007, Johannes 1978)

	<b>Main developments</b>	<b>Protected areas</b>
→ <b>1900</b>	Widespread customary marine tenure (CMT) and traditional resource management	Taboos, sacred sites, fisheries closures etc. (CCAs)
<b>1900</b> →	Colonial rule – erosion of traditional systems and first “national” approaches to conservation	CCAs (though in decline) and ~5 terrestrial “state” Protected Areas (PAs)
<b>1950</b> →	Colonial rule – imposition of terrestrial “Parks” (paper parks)	CCAs in decline or ignored, 17 state PAs almost entirely terrestrial
<b>1960</b> →	Start of decolonization, western legislative approaches still predominate	11 nature reserves and national parks (state) declared, 1 marine (Kirimati)
<b>1970</b> →	Most island states attain independence, national approaches to conservation along the western model, consideration of how to deal with customary tenure under this approach.	70 PAs declared, mainly state designated and 75% terrestrial. Traditional resource management in “demise”
<b>1980</b> →	Growing awareness of environmental degradation and calls for protected area establishment. Recognition of customary tenure but still generally regarded as obstacle	49 PAs, predominantly state parks and reserves, 30% on customary land mainly in PNG, 5% of area marine.
<b>1990</b> →	Increasing awareness of importance of community participation, ineffectiveness of ‘state’ approaches to PAs, shift reflected in large-scale projects supporting incentive driven community based conservation.	115 PAs of which half CCAs and a third marine PAs.
<b>2000</b> →	Refining of approaches to PAs, smaller scale approaches to community based management promoted in Melanesia and Polynesia with predominant emphasis on livelihoods. Micronesia increases establishment of PAs. Large MPAs and substantial international commitments (Fiji, Micronesian Challenge) as well as emerging mega-projects with as yet unclear strategy for CCAs	Proliferation of PAs, in particular marine CCAs numbering in the 100s (Locally Managed Marine Area approach).

### Aroko/Muri Ra'ui, Rarotonga Island, Cook Islands<sup>33</sup>

Ra'ui or traditional bans have been a resource management and governance system in the Cook Islands for centuries. Ra'ui may be total bans on access to an area or bans on particular resources and may be permanent or more frequently may be periodic or temporary. While these continue in much the same way in the outer islands the use of Ra'ui declined in the 1970's in the main and most developed island of Rarotonga. The late 1990's saw a revival of the Ra'ui system promoted by the Koutou Nui (the Lower House of Traditional Chiefs) and Ra'ui were reinstated in 6 different lagoon areas around Rarotonga. The Aroko-Muri Ra'ui is the largest of these and though it has waxed and waned still exists today.



Aerial view of the Avana Muri Lagoon (Credit: Ewan Smith)

### Marapa / Niu MPA, Marau, Guadalcanal, Solomon Islands<sup>34</sup>

The Marapa/Niu site, situated within Marau Sound, is about 3.3km long and consists of pristine coral reefs, white sandy beaches, mangrove patches and seagrass beds. Marau Sound is an extensive, picturesque lagoonal system with a variety of reef habitat, sheltered bays and exposed outer reefs at the southeastern tip of Guadalcanal Island. Marau sound has a mixture of peoples from the neighboring province of Malaita who inhabit the islands of the lagoon and mainland Guadalcanal people who live in relative harmony despite the recent conflict between these two provinces. The inhabitants of the 6 communities on the islands or Marapa and Niu are highly dependent on their marine resources and like the rest of the lagoon dwellers have been engaged in improving marine resource management over the last 6 years. Marapa/Niu is the largest of the currently 10 marine CCAs that have been established in the lagoon and illustrates the iterative and adaptive approach that has seen such practices revived and extended to more and more communities in the Pacific.



The MPA and its committee (Credit: Hugo Tafea)

<sup>33</sup> Prepared by Sylvia T George, Mona Matepi and Hugh Govan see Annex 2

<sup>34</sup> Prepared by Hugo Tafea and Hugh Govan see Annex 2

# Defining CCAs in the Melanesia-Polynesia region

## A note on terrestrial conservation

The following sections focus mainly on marine CCAs because the majority of work has been carried out in coastal and inshore areas and thus the bulk of experience and documentation has been generated in this area. It is important to highlight though that there is an immediate and vital need for CCAs or appropriate community conservation initiatives addressing land to be put at the forefront because while it is likely that much attention has centered on marine issues because they are more “manageable” and directly relevant to livelihoods. Terrestrial conservation must not be ignored because<sup>35</sup>:

- Endemic species are mainly terrestrial
- The extinction crisis is mainly a terrestrial one
- The pressures on land are far more acute than in the sea
- Clearing of forest areas is rampant
- In high islands at least, the major threats to inshore marine areas are likely to be from water quality and waste issues generated on land.

Novel and existing approaches urgently need strengthening and while terrestrial conservation may be more difficult to address through community conservation alone, much of the experience generated in coastal areas relating to process, techniques and governance will be invaluable.

Before discussing the status of CCAs in the region it is important to attempt to situate the accepted definition of CCA in the context of Pacific Island customary tenure and conservation practices.

## Definition of Community Conserved Area

Indigenous and Community Conserved Areas or ICCAs for short (Borrini-Feyerabend et al. 2004, Dudley, 2008) are natural and/or modified ecosystems containing significant biodiversity values, ecological values and cultural values, voluntarily conserved by indigenous, mobile and local communities through customary laws or other effective means. They can include ecosystems with minimum to substantial human influence, as well as cases of continuation, revival or modification of traditional practices or new initiatives taken up by communities in the face of new threats or opportunities. The nomenclature of Community Conserved Areas (CCAs) has been adopted in the region in a few instances (e.g. in Vanuatu's Environment Act and Crab Bay CCA). Indigenous tenure is the norm in most of the countries covered by this report so “indigenous” is dropped and the shortened term CCA is used in this report though ICCA is the preferred term globally.

Three key features are needed in order to define a CCA:

1. **A strong relationship** exists between a given ecosystem, area or species and a specific indigenous or local community concerned about it because of cultural, livelihood-related or other strongly felt reasons.
2. The concerned indigenous or local **community is a major player** in decision making about the management of the ecosystem, area or species? In other words, the community has—*de jure* or *de facto*— the power to take and enforce the key management decisions.

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<sup>35</sup> Watling 2007

3. The voluntary management decisions and efforts of the concerned community lead to<sup>36</sup> the **conservation** of habitats, species, ecological functions and associated cultural values regardless of the objectives of management as perceived by the community.

## Community Conserved Areas and customary tenure

The first two key features of CCAs are indeed characteristics of the large proportion of terrestrial and marine territory under customary tenure in the independent island countries of the Pacific. In the broadest sense, all areas under customary tenure and for which the inhabitants have that special obligation of stewardship discussed above (typified by the Fijian *vanua*) meet the first two criteria in the definition of Community Conserved Areas.

Regarding the third feature, it could be argued that customary stewardship results in “more conservation” than alternative and elsewhere more common tenure systems in which people have a less engrained “duty of care”. On the face of it, the argument for the enhanced resources management provided by customary tenure is supported by evidence such as expulsion of poachers, prevention or control of squatters or control of access to natural areas (through fees) commonly experienced in the region.

However, despite the genuine and profound relationship between people and land there are many examples of such areas being exploited unsustainably by their “stewards”<sup>37</sup>. Many factors may be at play here including loss of traditional knowledge about the environment, increasingly efficient and speedy methods in which exploitation or damage can be wrought and new interpretations by traditional decision-makers as to the extent of their traditional rights and obligations in modern scenarios of cash incentives, changing governance roles and the ability to be absentee “landlords”.

**It is important to state therefore that customary tenure is a vital basis for sound and appropriate systems of resource management** but that this needs to be more explicitly dealt with in national policy and perhaps provision made to safeguard against some of the weaknesses emerging under modern pressures. In the absence of such guidance, and despite the possibility that many areas under customary tenure may in fact constitute CCAs, it is deemed more prudent for the purposes of this study to consider as CCAs only such areas under customary tenure in which resource management or livelihood objectives have been made explicit and can be deemed to lead to conservation impacts as described in the 3<sup>rd</sup> criteria above.

## Definition of Locally Managed Marine Areas and Marine Managed Areas

In 2000 a regional gathering of Pacific Island community members and practitioners coined the phrase Locally Managed Marine Area (LMMA) as being the most suited to the types of marine resource management being undertaken or envisaged in the region.

The word “local” was chosen over “community” – recognizing that conservation projects are often collaboratively-managed by both the community and the government or some other external body.

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<sup>36</sup> ...or, at least, *are well in the process of leading to* the conservation of habitats, species, ecological functions and associated cultural values ...

<sup>37</sup> For example sale of all giant clams on local reefs to Taiwanese fishers/poachers in Govan et al. 1988; Kinch, 2002, in press

**LMMA:** *An area of nearshore waters and coastal resources that is largely or wholly managed at a local level by the coastal communities, land-owning groups, partner organizations, and/or collaborative government representatives who reside or are based in the immediate area.*

The words “protection” and “protected” are not used because of acknowledgement that the conservation tool(s) employed within an LMMA may involve a combination of management approaches that include species-specific reserves, temporary or shifting reserves, and/or harvest effort limitations (such as gear or seasonal restrictions)<sup>38</sup> and need not imply a complete ban on resource extraction.

Thus LMMAs should not be confused with the closed or taboo portion of marine area. An LMMA could conceivably be entirely open to extractive use following certain regulations or rules although more normally one or several portions of an LMMA will be permanently or temporarily closed to resource extraction. The use of the term LMMA in this document does not imply membership of the “LMMA network” which has operated in some of the countries since 2001.

## Action Strategy for Nature Conservation in the Pacific Islands Region (2008 – 2012)

The Roundtable for Nature Conservation is the Pacific’s largest (by far) cross-sectoral coalition of organizations working to increase effective conservation action in the region. The Roundtable was formed in 1997 on request from Pacific island countries and territories for stronger collaboration and coordination of conservation initiatives and activities. This partnership mechanism is the only forum in which key stakeholders come together to discuss and develop new ways to address the main issues of nature conservation facing the Pacific Islands. The Roundtable exists as the coordination mechanism of organizations and governments that have a role in implementing the Action Strategy for Nature Conservation in the Pacific Islands Region which is reviewed every 5 years<sup>39</sup>.

The Action Strategy for Nature Conservation 2008-2012 was drafted at the 8th Pacific Islands Conference for Nature Conservation and Protected Areas held in Alotau, Papua New Guinea in October 2007 with more than 400 participants from Pacific island governments, Pacific and international organizations and communities. It was strongly felt that the latest Action Strategy should reflect the goals and expectations of Pacific island countries and territories (PICTs) and what countries are actually doing. It sought much better reflection of government goals so that it becomes their regional Strategy linking with the national biodiversity strategies and action plans (NBSAPs). The resulting document was endorsed by Pacific Island governments in September 2008<sup>40</sup> and is perhaps unique in the world not only for its cross sectoral ownership but also for clearly laying out Regional priorities based on experience to date as well as the way in which these priorities should be met by all concerned.

The Action Strategy contains many principles and guidelines for nature conservation deemed important in the region and to which governments and NGOs subscribe

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<sup>38</sup> Parks and Salafsky 2001. Govan et al 2008a

<sup>39</sup> <http://www.sprep.org/roundtable/>

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[http://www.sprep.org/2008SM19/pdfs/eng/Officials/WP\\_9\\_1\\_3\\_Action%20Strategy%20for%20Nature%20Conservation%20in%20the%20Pacific%20Islands%20Region%202008-2012.pdf](http://www.sprep.org/2008SM19/pdfs/eng/Officials/WP_9_1_3_Action%20Strategy%20for%20Nature%20Conservation%20in%20the%20Pacific%20Islands%20Region%202008-2012.pdf)



including areas such as governance, community rights, coordination and capacity building. Extracts of most relevance to this report include:

International and national partners will actively recognise, respect and support:

- Community property rights including traditional rights over natural resources, indigenous intellectual property relating to natural resources, and cultural knowledge.
- Community decision-making practices.

International and national partners will actively recognise, respect and support:

- Community aspirations for development and well-being.
- A Pacific approach to conservation based on sustainable resource use.

International partners will commit to:

- Adopting systems that ensure transparency and accountability of their programmes at a national level.

Guideline: Ensure that conservation programmes are as uncomplicated as possible

## Definition of Marine Protected Areas

Since 1993 the generally accepted definition of Marine Protected Area has been:

*"Any area of intertidal or subtidal terrain, together with its overlying water and associated flora, fauna, historical and cultural features, which has been reserved by law or other effective means to protect part or all of the enclosed environment."*<sup>41</sup>

With the publication of IUCN's new "Guidelines for Applying Protected Area Management Categories" it is expected that the new definition for Protected Area should supersede and encompass the old definition.

The new definition of **Protected Area** (and therefore MPA) is: *A clearly defined geographical space, recognised, dedicated and managed, through legal or other effective means, to achieve the long-term conservation of nature with associated ecosystem services and cultural values*

The new guidelines provide opportunities for Pacific Island resource managers to clarify the status of their MMAs and for instance recognition of ICCAs is discussed along with mention of specific examples from the South Pacific (Samoa community fishing reserves)<sup>42</sup>.

The guidelines outline and clarify categories of protected area with a wide spectrum of potential management objectives - of most use in the Pacific context may be Category V which could include "The preservation of long-term and sustainable local fishing practices or sustainable coral reef harvesting..." and Category VI which may be "predominantly natural habitats but allow the sustainable collection of particular elements, such as particular food species or small amounts of coral or shells". The authors also open the door to different zones within an MMA being placed under different categories and thus some current closed areas could conceivably be assigned to the most restrictive IUCN categories. In addition, cases where "seasonal, fulltime, temporary or permanent controls are placed on fishing methods and/or access" could qualify as MPAs if they meet the protected area definition.

The guidelines are therefore an opportunity for Pacific Islands to ensure that their efforts towards sustainable resource management qualify as MPAs and therefore

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<sup>41</sup> Kelleher and Kenchington 1992

<sup>42</sup> Dudley 2008

towards their international commitments and obligations which would be validation of the region's CCAs. However, the phrase that qualifies all categories and modalities of protected area "if they meet the protected area definition" provides challenges for IUCN and Pacific Island managers in ensuring a satisfactory outcome. As stated by the authors:

*Although [the new definition] loses the specific reference to the marine environment, it does ensure a clearer demarcation between conservation focused sites and those where the primary purpose is extractive uses i.e., fisheries management areas. It does not preclude the inclusion of relevant fishery protection zones but they need to be consistent with the new definition to be included as an MPA by IUCN/WCPA-Marine. Thus all areas of the sea that are dedicated in some way to conservation will qualify and for those that do not, there is clarity on how to move forward to achieve formal recognition by IUCN as a MPA.*

One issue that will need further clarification and discussion with Pacific Island stakeholders is the definition of "conservation" to be applied and whether this includes sustainable use which while contemplated by some of the categories is not explicitly addressed in the document. Contentiously, at least in the context of Pacific Island traditional notions of conservation and CCAs which lean towards sustainable use as a prime driver, the application of the principle qualifying protected areas "*only those areas where the main objective is conserving nature can be considered protected areas; this can include many areas with other goals as well, at the same level, but in the case of conflict, nature conservation will be the priority*". This sits ill with the bulk of Pacific Island CCAs which are periodically opened for harvest or at least have livelihoods as a primary objective as described below. Furthermore, though there may be great diversity (reflecting the myriad cultural groups) in the Pacific Island concepts equating to "conservation" it is unlikely that "extraction" and "sustainable use" are facets that can be meaningfully separated from the generally prevailing concepts of "duty of care" for the environment and conservation in general.

On the other hand, the Subsidiary Body on Scientific, Technical and Technological Advice of the Convention on Biological Diversity (CBD) (Ad Hoc Technical Expert Group on Marine and Coastal Protected Areas) adopted the following definition: "Marine and Coastal Protected Areas mean any defined area within or adjacent to the marine environment, together with its overlying waters and associated flora, fauna, and historical and cultural features, which has been reserved by legislation or other effective means, including customs, with the effect that its marine and/or coastal biodiversity enjoys a higher level of protection than its surroundings" (Secretariat of CBD 2004)<sup>43</sup>. If this definition is maintained by the CBD then there may be no issue for Pacific Island policy makers and planners as it is to the CBD that the main national obligations on MPA coverage pertain.

**In the context of the Pacific and the IUCN definitions the main challenges may be:**

- **Reconciling indigenous understanding and definitions of "nature conservation" with those adopted by the IUCN categories document.**
- **Determining the community's (and thus the site's) "main" objective,**
- **Reliably differentiating between sites based on these objectives**
- **Determining the usefulness of the new IUCN definition compared to the CBD definition in the context of Pacific Island nations and their cultural and national aspirations.**

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<sup>43</sup> World Bank 2006

### **Safata MPA, Samoa<sup>44</sup>**

Safata MPA is one of two large district-wide Marine Protected Areas established through a lengthy community process which started in 2000. The MPA is managed by the local communities through committees comprising chiefs from each of the 9 villages who ensure that management is carried out in the traditional Samoan way (faasamoa) and respect for Christian values. The MPA programme of the Division of Environment and Conservation and Safata MPA comprises some 63.7 Km<sup>2</sup> of which each village has a portion of strict no take reserve following traditional sa or bans which protect over 3 Km<sup>2</sup>. The community members are encouraged with the apparent successes in terms of increased fish catches and decreased time spent fishing as well as income from tourists interested in visiting their areas. The MPA committee has recently attracted a small trust fund that will greatly support basic operations.



Western boundary of Safata MPA (Credit: P. Ifopo)

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<sup>44</sup> Prepared by Pulea Ifopo and Hugh Govan see Annex 2

## The renaissance of community conserved areas - an inventory

The past decade has seen impressive progress in the application of community based coastal resource management in the South Pacific. Traditional knowledge and resource ownership combined with a local awareness of the need for immediate action are frequently the starting points for these community driven initiatives. A number of long-standing CCAs are known from Vanuatu and Cook Islands but the bulk of those documented have been recently (re)established.

Communities setting up local management will often, though not always, seek to complement their existing knowledge and skills by asking government and non-government organizations for advice and assistance in interpreting scientific knowledge and implementing planning processes. Approaches range from the customary or traditional to complex multi-stakeholder co-management<sup>45</sup> and are known by as many names as there are sponsors; LMMA, VBRMA, CBRM, CBFM, VFMP<sup>46</sup> to name a few.

Supporting organizations have increased their emphasis on collaborative and participatory approaches in line with the worldwide realization that local aspirations, livelihoods, conservation and inshore fisheries management should be integrated<sup>47</sup>. In many respects the Pacific has taken the lead with hundreds of communities in Fiji, Vanuatu, Solomon Islands, Samoa, Papua New Guinea, Tuvalu, Cook Islands and Micronesia now proactively managing their coastal resources.

### An inventory of the CCAs of Melanesia and Polynesia

The CCAs of Melanesia and Polynesia have not been hitherto well inventoried. Global databases such as World Database on Protected Areas ([www.unep-wcmc.org/wdpa](http://www.unep-wcmc.org/wdpa)) and MPAGlobal ([www.mpaglobal.org](http://www.mpaglobal.org)) cover legally gazetted protected areas to some extent but so far have not registered the bulk of CCAs. In part aided by the present study it has been possible to compile a preliminary but relatively accurate inventory of minimum numbers of CCAs in the countries of Melanesia and Polynesia<sup>48</sup>. (Table 6).

Preliminary analysis suggests that there is not a great deal of overlap between the WDPA and the newly inventoried CCAs. Analysis is also continuing on the degree to which these CCAs and Protected Areas are "active" in terms of management carried out. The preliminary findings suggest that many sites on the "official" Protected Area list are not currently active whereas most of the CCAs are. Thus marine CCAs account for virtually all active protected areas in the region (independent countries of Polynesia and Melanesia).

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<sup>45</sup> Johannes 2002, Govan et al. 2006. LMMA 2006. FSPI 2004-2006,.

<sup>46</sup> Locally Managed Marine Areas, Village Based Resource Management Areas, Community Based Resource Management, Community Based Fisheries Management, Village Fisheries Management Plans.

<sup>47</sup> Govan, 1997, Whittingham et al. 2003.

<sup>48</sup> This section draws heavily on a companion report which details the status and characteristics of Locally Managed Marine Areas in the South Pacific; Govan et al. 2009.

Table 6. Inventory of Marine Managed Areas in the South Pacific with emphasis on locally managed marine areas and community conserved areas (source Govan et al. 2009).

	<i>Protected Areas with marine component<sup>1</sup></i>	<i>Locally managed marine areas<sup>2</sup></i>	<i>Community Conserved Areas<sup>2</sup></i>	<i>No-take Zones<sup>2</sup></i>	<i>Marine coverage, all records (Km<sup>2</sup>)</i>	<i>LMMMA coverage (Km<sup>2</sup>)</i>	<i>No-take Zones (Km<sup>2</sup>)</i>
Cook Islands	8	23	23	24	19	18	19
Fiji	45	217	217	222	10,880	10,816	593
Papua New Guinea	92	86	79	94	3,764*	59	18
Samoa	8	59	82	82	209	120	16
Solomon Islands	22	113	109	115	1,381*	941	311
Tonga	12	6	0	9	10,009*	93	10
Tuvalu	1	10	10	3	76	76	50
Vanuatu	26	44	44	44	89	58	89
<b>Totals</b>	<b>214</b>	<b>558</b>	<b>564</b>	<b>593</b>	<b>26,427*</b>	<b>12,180</b>	<b>1,107</b>

\* Considered to be substantially inaccurate. 1 World Database of Protected Areas, January 2008. 2 Definitions in main text, LMMAs may contain one or more CCAs or no-take zones.

The effort of communities and their supporting governmental and non-governmental organizations has resulted in over 12,000 km<sup>2</sup> coming under active management in the independent countries of which more than 1,000 km<sup>2</sup> is "no-take". This progress comes at a time when older models of larger, centrally planned, reserves have failed in almost all cases resulting in the need to review the inclusion of some 14,000 km<sup>2</sup> of such "paper parks" in national and global databases of the region.

Samoa has shown strong government investment (originally supported by AusAID) in community based fisheries management that had resulted by the late 1990s in a national network of dozens of village fisheries management areas, some 50 appear to be active today and the numbers remain steady or slowly increasing. Also in Samoa, the Environment Department is supporting more than 20 communities implementing no-take reserves within the two large co-managed MPA systems of Aleipata and Safata.

Fiji has shown an impressive rate of expansion supported by a national network of NGOs and government organizations promoting LMMAs known as FLMMA. More than 200 villages spread across the 14 provinces in Fiji have established some form of community-based management measures and the numbers have increased steadily every year over the last decade. This is due in great part to snow-ball effects which have seen skills passed from village to village and requests from interested communities surpassing available support capacity. Fiji makes by far the biggest contribution to area under management (10,800 km<sup>2</sup>) and no-take (600 km<sup>2</sup>) of the South Pacific countries.

Many communities in Vanuatu have preserved traditional management in the form of 'tabu' areas and in others this tradition has been revived with the support of fisheries officers, other government organizations and NGOs. Over 40 villages have been reported to actively manage their marine resources in this manner in Vanuatu but the real numbers may be significantly higher.

Cook Islands has maintained traditional taboos known as ra'ui of which 15 are recorded in the outer islands. Ra'ui were reintroduced on the main island of Rarotonga in 1998 of which six are still active. Solomon Islands has seen some of the most impressive progress in the last few years with currently over 100 NGO-supported

LMMA, Tuvalu too is promising significant gains with communities keen to register or revive up to 10 local conservation areas. Papua New Guinea has seen progress with strategies becoming more defined and important site level experiences but the country as a whole faces considerable challenges in achieving management of its vast coastal areas. Initiatives are in the early stages for Tonga which has seen the establishment of 6 special management areas so far under a Fisheries Division nation-wide strategy.

The dependent states and territories (Table 7) are progressing using more Western style protected area approaches and New Caledonia has recently made impressive progress with the declaration of a massive lagoonal World Heritage Area. American Samoa and French Polynesia are combining traditional resource management and sustainable use approaches with national protected area systems. In French Polynesia there are at least five *rahui* or traditional closures integrated into the Fakarava Biosphere reserve and at least two documented *rahui* which together total some 430 km<sup>2</sup>.

Table 7. Inventory of Marine Managed Areas in South Pacific Territories and Associated States (source Govan et al. 2009)

	<i>Protected Areas with a marine component</i>	<i>MMA coverage, all records (Km<sup>2</sup>)</i>	<i>LMMA coverage (Km<sup>2</sup>)</i>	<i>No-take Zones (Km<sup>2</sup>)</i>
American Samoa	19	174	>2.6	159
French Polynesia	10	2,837	441	1,282
New Caledonia <sup>1</sup>	20	16,188	-	445
Niue	3	31	>0	>0
Tokelau	3	1	1	?
Wallis and Futuna	0	0	0	0
<b>Totals</b>	<b>55</b>	<b>19,229</b>	<b>445</b>	<b>1,886</b>

<sup>1</sup> Excluding World Heritage site declared in 2008 comprising 28,614 km<sup>2</sup>.

## Typology and characteristics

The diversity of cultural and physical settings in the Pacific have of course given rise to wide variety of CCAs across Melanesia and Polynesia, even more so as these have been revived or adapted into the context of the new and evolving nations. In an attempt to tease out some of the underlying differences the CCA “phenomenon” can be regarded from a couple of broad perspectives:

- Initiator: where does the main driving force for the CCA come from
- Motivation of support institutions: what was the original and continued reason for supporting, establishing or maintaining the CCA

### Initiator

This refers to the spectrum of internally (locally/community) driven initiatives through externally imposed ones. Assessing who is driving community based conservation initiatives has many important implications in terms of the sorts of results to be expected and the likelihood of initiatives being sustained<sup>49</sup>. Classified from internally generated to more externally initiated we may distinguish amongst the CCAs in Melanesia and Polynesia the following examples:

<sup>49</sup> Seymour 1994, Govan 1997

1. **Sacred areas:** Sacred areas still survive in some areas. These are perhaps the most “internally” driven of all in that in many cases they are considered secret or at least sensitive information. Community members may not necessarily associate these areas with “resource management” and may not count them locally as CCAs even though they may well be the most respected of all restricted areas. Inventories of such areas do not appear to exist and given the sensitivities no concerted attempt to inventory them was undertaken in this study though personal observations and communications confirm their existence in Guadalcanal, Malaita, Gela and Shortland Islands in Solomon Islands and the Lihir group of PNG<sup>50</sup>.
2. **Taboos:** Closures or bans go under a variety of names (Box 1) and were probably traditionally used in all areas where communities depended on marine resources. These taboos can apply to specific areas, species, seasons or fishing methods and are usually for a determined time period. Such taboos were and to some extent are still imposed for important events such as the death of an important person in the community or clan, circumcision and other local rituals and in preparation for important feasts or events<sup>51</sup>. An extreme taboo would be that of the sacred areas mentioned above which were usually permanent but other taboos or bans are much more flexible. Although taboos imposed in the traditional manner still occur in Vanuatu, the outer islands of the Cook Islands, Fiji, Solomon Islands and PNG for example, taboos are increasingly externally driven, either as a reaction to outside pressures on resources, as part of cultural revival movements or indeed as a more or less appropriate translation of western resource management concepts and particularly the Marine Protected Area (MPA). In some if not many cases the initiator may thus be an external agency. The mismatch between western concepts of MPA and the local perception of taboo raises various important issues discussed in Table 8.
3. **“MPAs”:** The term MPA is now more and more frequently used by communities. This is often a sign of external “environmental awareness” programmes or indeed projects and usually lends itself to community interpretation that there is something more to be expected than the simple benefits that might be expected from a traditional ban. Whether or not these expectations are justified or realistic they may include increased “tourism”, alternative livelihood projects or other spin-offs from outsiders such as accommodation payments or sales of handicrafts. While some MPAs may be set integrating traditional bans or no-take zones and local governance (e.g. Safata MPA in Samoa) others may be extremely reliant on outside interventions and indeed be hard to sustain after the intervention has finished<sup>52</sup>.
4. **Western style parks, conservation and protected areas:** some of the older protected areas may have been established in relatively top-down and extremely externally driven ways. Those that are still active are likely to have invested considerable resources in attempting to increase community involvement with varying degrees of success or cost effectiveness.

An important correlation is self-evident, the more externally driven the initiative the more the costs in financial terms are borne by external agencies and the less these are borne (in transaction costs and social capital) by the local communities. Therefore the distinctions made above are likely to have profound effects on the sustainability of the approaches.

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<sup>50</sup> Pers. Observation, pers. comms: Hugo Tafea, Simon Foale, Warwick Nash

<sup>51</sup> e.g. the Vanuatu case well documented by Hickey 2006

<sup>52</sup> cf. 2 large regional projects Aitaro et al. 2007, Baines et al 2002 and a large national one Baines 2006

Table 8: Generalized differences between MPAs and taboo areas.

	<b>MPA</b>	<b>Taboo area</b>
<b>Duration</b>	Permanent	Limited or periodically harvested
<b>Size</b>	Small to large	Usually small
<b>Purpose</b>	Biodiversity protection or multiple	Resource management or food security
<b>Enforcement</b>	External assistance	Local
<b>Design considerations</b>	Mainly technical	Mainly social or practical
<b>Perceived analogy</b>	Investment generating bank account	Savings bank accessed when needed

Table 8 illustrates the potentially large differences between the western and local perceptions of closed areas. Despite the words MPA and taboo often being interchanged there are fundamental differences likely to impact on their acceptability by the local population and also their ecological function. Given the increasing success in reviving the traditional taboo it is important that researchers and planners consider how the specificities of the system can best be supported in achieving wider national and global strategies.

### Motivation of support institutions

The renaissance of CCAs in the Pacific has been supported or actively promoted by a variety of institutions varying from local communities themselves, government and a variety of non government organizations and initiatives. Traditional and local initiatives may have a variety of motivations as touched on above but the active support of particular external institutions has up until recently defined the approach taken and in many ways the outcomes.

The motivation of external support institutions can be broadly categorized as:

1. **Fisheries development and management:** Some of the early programmes that resulted in the creation of CCAs were promoted by national fisheries departments, notably those of Vanuatu and Samoa. Both resulted in dozens of CCAs with primary fisheries management objectives and which continue to this day. Recently a Fisheries development NGO has started supporting establishment of CCAs in Solomon Islands.
2. **Conservation:** Undoubtedly the biggest financial investment in the creation of CCAs has been carried out with funds earmarked for conservation via international conservation NGOs, regional intergovernmental organizations and to a lesser extent national NGOs. A notable exception is the case of the Safata and Aleipata MPAs supported by the Samoan department of the environment.
3. **Community development:** A number of national (and at least one regional) community development NGOs have been successful in raising funds, often from conservation sources to promote CCAs as part of community sustainable livelihood or good governance strategies. Other organizations include the regional university and the church has been instrumental in driving at least one network of CCAs.

Experience over the last decade has led to a shift of emphasis and blurring of the above distinctions. The realization that community needs and sustainable livelihoods are vital drivers of protected area establishment has seen the adoption of more or less integrated approaches.



A number of other characteristics are evident in CCAs in the region that are worth drawing attention to because they seem to have major implications and have not been sufficiently recognized to date.

### Extent of the managed area

Customary tenure offers the potential for community resource management over the bulk of Pacific Island land and coastal waters. In the application of CCAs around the region many have chosen to concentrate on localized bans, taboos, closed areas or taboos. However. In line with the definition of LMMAs (above), a significant number of CCAs aim to manage the whole customary fishing ground and in some cases the terrestrial areas as well and a variety of rules may be imposed though usually including a no-take or taboo zone.

Currently most CCAs in Fiji fit the definition of LMMA (see Fig. 5) and some in other countries such as Solomon Islands, Vanuatu and Samoa.<sup>53</sup> A number of sites are now including all or part of their land areas in the community's rules or management plans in a move towards realizing the full potential of customary tenure.

### Tenure systems

The importance and diversity of tenure systems has been highlighted above as underlying all CCAs. To some extent, though, the issue of tenure has been inadequately addressed. For instance a number of guidebooks provide useful approaches, tools and techniques for supporting CCAs, but little of substance is provided on this topic.<sup>54</sup> One main reason is that owing to the diversity it is difficult to generalize but another is that a bulk of the work has been undertaken in Samoa and Fiji.

With apologies for the over-simplification it appears that the marine tenure and governance systems of Polynesia and Fiji are more compatible with swift and easy resource planning and particularly the setting of taboos. In these countries marine tenure or rights reside to a great extent at the village or district level which, combined with the more powerful role of chiefs, greatly facilitates area planning activities and the closure of particular reef areas.

Marine tenure in Western Melanesia is generally far more complex with systems of rights frequently devolving to the family or clan level<sup>55</sup>. In effect this means that a number of issues are likely to arise that complicate wider resource management, a common one is that a specific reef targeted for closure may be the property of one clan, may indeed represent the bulk of their marine area and thus the individual cost to them of the closure is not matched by the wider biological benefits to the rest of the community. Another issue that may arise is the difficulty of enforcing local decisions on people who retain rights of use but may not be resident in the community (through emigration or marriage for example). This has only been systematically addressed in one CCA project by Aswani<sup>56</sup> and there is a need for more thought to be put into this and the development of guidance and strategies.

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<sup>53</sup> Kia and Vella Lavella sites supported by WFC in Solomon Islands, villages employing rules other than no take zones e.g. Johannes and Hickey 2004 and FSPI 2006 in Vanuatu and Safata and Aleipata MPAs in Samoa.

<sup>54</sup> King and Lambeth 2000, Lambeth and Watt 2004, Mahanty and Stacey 2004, Govan et al 2008

<sup>55</sup> See Hviding 1996, Hickey 2006, Aswani and Hamilton 2004b for examples

<sup>56</sup> Aswani and Hamilton 2004a

## Role of legislation

The distinct approaches being taken across the region are discovering or developing very different roles for national or local legal frameworks. In essence most cases are situated somewhere on the spectrum between two extremes:

1. Communities are not interested or actively averse to developing formal legal mechanisms to support their management of the CCA. The reasons and rationale for this may include:

- Little chance that such legalization (gazettal, byelaws, acts, provincial resource management orders) will result in any actual enforcement benefits
- Complex, slow, bureaucratic or even costly processes
- Poor match of the existing legal structures to the actual needs of the community
- Fear that the such formal state or provincial involvement will impinge on local resource rights or even ownership
- Fear that the results will be less flexible than entirely community driven approach for instance for rotating or opening a closed area or changing management objectives

2. Communities actively seek supporting legislation such as byelaws or gazettal. The reasons and rationale for this may include:

- Back up the traditional system for the most serious infringements
- Provide more authoritarian or rigid support for the enforcement of rules within the community as less prone to traditional negotiation
- Provide a tool to enforce rules on community outsiders not necessarily subject to local traditional authority
- Belief that they may obligate government to provide more enforcement
- Belief that it may highlight the community initiatives and attract outside support (projects, tourism etc)
- Complies with modern legal and governance systems.

In reality of course the debate at community level is somewhere between these two positions. Melanesian countries, particularly Solomon Islands, Vanuatu and Fiji tend to be making little use of existing legal structures while Polynesian countries such as Samoa have integrated development of byelaws into the recommended processes for supporting CCAs.<sup>57</sup> This situation reflects the disparities in governance, chiefly systems and government capacity for enforcement remarked on above.

The debate on this matter is lively and should be pursued further, on the one hand raising community expectations as to the potential role of governments and court systems which are patently over-stretched already is likely to demotivate communities in the long term and on the other hand, effective means to support community enforcement particularly in the face of poaching from outsiders are urgently needed as the success of these closures attracts the attention of commercial and neighbouring fishermen.

## Legal framework

CCAs are recognised and supported under the Environmental Management and Conservation Act, 2002 in Vanuatu and the recognition of terrestrial CCAs is apparent in the National Laws of PNG. In neither of these two cases does the legislation appear to effectively enable CCAs nor does appear to encourage communities to make use of

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<sup>57</sup> cf. Fa'asili and Taua. 2001

it. Instead throughout the region CCAs are reliant primarily on the de facto acceptance of customary tenure and the traditional authority of land-owners. Where support is necessary various other legal mechanisms are employed such as village by-laws in Samoa, fisheries legislation (e.g. Vanuatu and Fiji) and respect for the traditional authority of chiefs such as in Rarotonga, Cook Islands<sup>58</sup>.

In many cases the Fisheries Legislation is more suited to supporting CCAs given the resource management objectives of most of these sites and for instance in Vanuatu there is some degree of mismatch or even contradiction between the Fisheries and Environment legislation.

Vanuatu has an Environmental Registry which contains information on CCAs and other protected areas (though this has not been sighted) but it is not clear that such a registry is kept or updated in any of the countries covered by this study. This and other short-comings of the environmental legislation most likely reflect the dire lack of resources of the Environment Departments in the region and the slow progress in implementing the Programme of Work on Protected Areas (POWPA) of the CBD.

Reviews are being undertaken of environmental legislation in Solomon Islands and such reviews may be required in other countries such as Fiji, PNG, and Tonga. Solomon Islands is currently reviewing Fisheries Legislation and is aiming to explicitly make provision for community managed areas. Fiji too is long overdue for an overhaul of fisheries legislation but the move to enhance the role of communities in such legislation is currently on hold owing to the political events of 2006.

Given the lack of resources of government departments, the considerable overlap between their remits, the reliance that the region is necessarily going to place on CCAs to achieve international commitment and the sustainable use or food security emphasis of the majority of CCAs it will be vital that any review of either legislation take into account the other and indeed, integrated legislation dealing with local and community resource management would appear a logical step.

Consideration must also be given to the arguments made above regarding the usefulness of developing legislation that will be too costly to enforce, that may undermine traditional authority and strengths or not have the flexibility of traditional systems as exemplified by the few countries that have attempted to codify customary tenure.

## Some key features of CCAs in Melanesia and Polynesia<sup>59</sup>

### Size

The median sizes of no take zones are approximately 1 km<sup>2</sup> for Fiji and similarly under 1 km<sup>2</sup> in Cook Islands, Vanuatu, Samoa, Solomon Islands and PNG. Thus a feature of taboos or CCA no take zones appears to be their relatively small size compared to western style MPAs probably relating to factors such as ownership, ease of enforcement and reluctance to exclude large areas from livelihood activities.

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<sup>58</sup> Fa'asili and Taua 2001, Troniak this report, Tiraa 2006

<sup>59</sup> Full details provided in Govan et al. 2009

## No take zones versus whole area management

With the exception of Fiji and a few sites elsewhere in general communities are concentrating attention on bans / taboos and not necessarily addressing the management of their whole customary tenured area.

## Networks or clusters

A majority of sites are located in clusters, networks or groupings reflecting in some cases an ecological intent to provide a network of sites but in the majority reflecting logistical or political factors making it easier to support sites in relatively close proximity. Some examples in Fiji and Vanuatu exist of communities picking up the approach inspired by neighbours in a snow-balling or trickle down effect.

## Permanence

A large proportion of no take zones are implemented on a periodic basis. Cases of permanent closure exist but others are implemented on a periodic basis. Some may be opened for harvest rarely (special occasions such as major feasts) while others may be regularly opened e.g. yearly and others may rotate between open and closed. The bulk of no-take zones can be classified as "conditional opening" though traditional closures in French Polynesia (rahui) and Cook Islands (ra'ui) are often rotational and rotational closures are also being implemented in Solomon Islands.

Table 9. Commonly identified community targets to be achieved through CCA implementation at over 40 sites in Fiji (source Tawake and Fong 2008)

More fish catch	Provide opportunities to develop ecotourism and other alternative source of income
More fish, food	Improved social relations
Everlasting fish for our future generations	Respect for chiefly decisions and status
Provides opportunities for Economic and infrastructure development	Abundant marine resource,
Reduction of environmental threats	Roles of the church in resource management clear and upholding of the creation belief
Poaching reduced/ eliminated	Happy and healthy mothers, reduction in their fishing effort
Donation of Patrol boat	Fish for future generation
Fish aggregation sites protected- grouper	Awareness of resources, marine resources
Aware of reasons for the development of resource rules	Awareness of the importance of natural resources
Prosperous, Wealthy and Peaceful island; Protect today for a prosperous tomorrow	Social cohesion improved
Traditional roles and responsibilities fostered (chief/ traditional warrior)	Foster social and community relations
Bring back fish and resources no longer seen	Reduction of solid and liquid waste
Awareness of project objectives and targets	Restoration project
Increase in environment/ qoliqoli awareness	Compensation
Well enforced MPA	Project for school kids

## Purpose

The communities in general have livelihoods as a major priority in setting up CCAs, quite often they are aimed at restoring food stocks. Conservation purposes are expressed but it is not clear that this would be a sufficient motivation, assessing this is obscured by local understanding or perception that outsiders are more interested in supporting conservation initiatives (e.g. Table 9). Interestingly a survey of the Navukavu site (case study), which has a community management plan focused on

livelihood benefits, found that respondents assigned a relatively high bequest value to their area. This may reflect the “duty of care” that the relationship between the people and land in the *vanua* situation entails.

## Benefits or outcomes of CCAs

Monitoring and surveys have been carried out a number of CCAs but for the majority it is hard to assess overall success or benefits based on simple conservation or fisheries outcomes. It appears that the impacts or “benefits” of a CCA at any one site are multiple and varied. The following livelihood benefits have been variously reported:

- **Biodiversity conservation:** localized recovery or protection of vulnerable species such as large food fish or marine turtles<sup>60</sup>.
- **Improved fishery landings:** experiences from within the region and nearby Philippines show that, depending on species, catches may be sustained or increased but usually after some years<sup>61</sup>.
- **Governance:** communities may improve decision-making processes, link to other organizations and institutions, influence policy development, reduce internal conflicts and improve compliance and enforcement<sup>62</sup>.
- **Community organization:** simple resource planning and facilitation processes are being used to support community endeavors in other fields<sup>63</sup>. Community institutions used for management may be used for other purposes or be adapted to handle other types of projects<sup>64</sup>.
- **Resilience and adaptation:** supporting local stewardship and promoting understanding of people’s potential impact on resources provides a basis for response to new threats in the context of adaptive management and helps provide local security<sup>65</sup>.
- **Health:** improving or securing the supply of marine protein has a direct impact on community wellbeing aside from the potential to use the same planning process for other community priorities including health<sup>66</sup>.
- **Integrated resource management:** addressing a wide range of issues such as watersheds, waste management, community events, availability of building materials, erosion control and so on<sup>67</sup>.
- **Cultural survival:** the considered use of traditional management measures and knowledge may slow the loss of valuable aspects of culture and improve management success, for example the use of, and respect for, tabu areas or other traditional closures<sup>68</sup>.
- **Improved social and human capital:** Knowledge, awareness and capacity for resource management and sustainable development in general may be increased as well as governance and other linkages.

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<sup>60</sup> Govan et al. 2009. Hoffman 2002, Johannes and Hickey 2004, LMMA 2006, McClanahan et al 2006. Cinner and Aswani 2007, Jenkins et al. 2007

<sup>61</sup> Tawake et al. 2001, Aalbersberg et al. 2005. and in similar circumstances over longer time periods in Philippines: Russ et al 2004, Abesamis and Russ 2005 but see concerns e.g. Foale and Manele 2004, Hillborn et al. 2004.

<sup>62</sup> Leisher et al. 2007. LMMA 2006. Tawake 2007. Zukuli and Clothier 2008 and in SE Asia Pomeroy et al. 2007.

<sup>63</sup> Chambers 1992, Inglis et al. 1997

<sup>64</sup> FSPI 2006 (cf. Paonangisu, Vanuatu), Participatory marine resource planning exercises have been used subsequently by other projects e.g. Small Grants programmes in Solomon Islands

<sup>65</sup> Cinner et al 2006. Thaman et al 2005.

<sup>66</sup> Leisher et al 2007.

<sup>67</sup> FSPI 2006, Thaman et al 2005.

<sup>68</sup> FSPI 2006, LMMA 2006

- **Security of tenure:** Pacific Island communities usually regard the traditional rights of ownership and access to resources as vital to their livelihoods, and indeed identity, and perceive that these are being eroded. Community based management may be seen as a means of re-asserting these rights.

From the point of view of many external agencies and donors the motivation for supporting CCA development will likely relate to biodiversity and fisheries impacts. Communities frequently report rapid and appreciable increases of marine resources within closed areas but there is an increasing body of technical literature which seems to confirm these observations and indeed the potential speed at which this may occur even in cases of periodic closures. These increases would seem likely to reflect positive impacts on the biodiversity within these areas. Evidence for significant fishery impacts such as overall increased landings or reduced catch per unit effort is scarcer but reported in several instances potentially reflecting the greater time required for such impacts to be detected.

To those benefits identified above must be added others, relating to the impact of support agencies and NGOs although often unintended:

- **Project benefits:** Projects may specifically pay for conservation activities, implement other projects such as “alternative income generation” or provide goods and services as part of the project that serve as incentives, ranging from transport and attendance to national and international meetings, literature, project or sponsor clothing to buildings and vehicles.
- **Money from researchers and projects:** Project activities may lead to income through payment for services (food, accommodation, transport etc.), allowances (sitting fees, per diems), opportunistic sales of handicrafts or other produce
- **Donations of material goods:** Equipment or even personal belongings may be left with the community after activities such as monitoring or trial income generation ventures or as personal gestures.
- **Prestige of project activity or linkages to outside agencies:** Apart from the opportunities that attracting the attention of outside agencies may provide there may be an element of prestige involved with working with these organizations.
- **Improvement of social standing:** Community members who attract projects or are able to muster resources to implement agendas may be motivated by the opportunity this provides to improve their standing within a community or reinforce their existing status (“big man”, chief etc.).

There is potential for the intended or un-intended benefits that function as incentives to obscure assessments of the long term sustainability of CCAs in the event that these incentives are reduced or withdrawn e.g. at the conclusion of a project or handover to government agencies. However, the proliferation and endurance of a great many sites across the region with relatively little outside support indicates that communities do feel that the approaches have an overall beneficial impact on their livelihoods, probably based on some or all the factors mentioned above – quantitative evidence of these wider benefits is emerging<sup>69</sup>.

## Impacts of CCAs

From the perspective of “insiders’ or community members it appears reasonable to state that the bulk of CCAs are “working” based on their proliferation, the continued activity of the majority for several years or more and on a variety of community and

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<sup>69</sup> Leisher et al op. cit.

external feed-back. However, a working CCA may be achieving outcomes that do not necessarily coincide with external motives for supporting the initiative or indeed the community's original stated objectives. The wide variety of benefits and outcomes listed above suggests that different community members may perceive a variety of different benefits of the initiative, the CCA survives presumably if the aggregate of community stakeholders benefits (expected or otherwise) surpass their costs or sacrifices.

There is evidence (almost over-whelming if community perceptions are taken into account) that CCAs can have beneficial impacts on biodiversity and fisheries and this has long been the operating assumption. Communities appear to demonstrate satisfaction at exercising more control over their natural resources through these initiatives, certain species recover in closed areas but these may be harvested during temporary opening of the reserves and thus the benefits may be more tangible in terms of regulating "food flow" or security. But this is not to say that all CCAs have such impacts and indeed in many cases the largest community motivation may come from unintended project spin-offs, opportunities and expectations.

The challenge for international, national and local agencies is to maximize the conservation, fisheries or poverty alleviation impacts that the CCAs may have while not undermining the long term sustainability of their support (i.e. by establishing running costs that cannot be realistically maintained). This requires a clearer understanding of community motivations on the one hand and improvements in financial monitoring of LMMA cost effectiveness from the support agencies perspective on the other. This approach is advanced in Fiji and cost effectiveness is central to some of the approaches in Solomon Islands and Vanuatu.

There appears to be potential for increasing the benefits perceived from LMMAs by communities without incurring significant additional costs, for instance through linkages to other institutions, improved fisheries advice or security of tenure. The community engagement and ongoing adaptive management processes that are central to LMMA approaches also have untapped potential for wider use in other agencies supporting natural resources issues such as ecosystem based management, resilience, disaster preparedness or adaptation to climate change. This potential may even be extended to other areas including health, education and so on offering opportunities for cost sharing, access to other funding sources and wider potential benefits to communities.

### Momea tapu, Nanumea, Tuvalu<sup>70</sup>

Nanumea is a small island atoll, the northernmost of the Tuvalu island group. History says that people of this island were descendents of a Tongan warrior by the name of 'Tefolaha', also popularly known in Samoa as 'Folasa-Aitu' who arrived some 23 generations ago. The people lived a simple Pacific Island way of life, respect and care for the environment have always in the past been an integral part of their culture. Soil is poor and struggles to produce and support enough food crops so people are heavily dependent on the integrity of coastal ecosystems.

With over harvesting of resources, population increase, shortage of imported food, and the emerging threats of sea-level rise and other impacts of global warming, there has been a growing feeling among the community to manage natural resources better and specifically to reinvoke traditional fishing reserves in the form of a 'Momea Tapu' or 'Taboo area' which used to be employed in living memory.

The community of Nanumea through the Kaupule (executive council) requested assistance from an NGO (TANGO) and the government departments of Fisheries and Environment in 2006? to implement a process of community based resources management planning similar to one piloted in the island of Nukufetau.

The community now have developed a resource management plan and agreed to close a marine area near the main settlement covering some 20% of their total reef area. The people view this with pride and there has been evidence of increase in numbers of Mulletts seen by fishermen around several areas near their 'Momea Tapu' which is also well known nationally as 'Koga Tapu o Nanumea'. A numbers of other atoll islands in Tuvalu are committed to following the same simple process in future.



Demarcation of the Koga tapu o Nanumea (Semese Alefaio)

<sup>70</sup> Prepared by Semese Alefaio and Hugh Govan see Annex 2



## Discussion and recommendations

Melanesia and Polynesia have seen an impressive increase in the number of protected areas over the last decade. Even more impressive is the fact that this is almost entirely due to the implementation of CCAs based on regional assets in the form of traditional tenure and governance mechanisms. The same time period has seen the virtual demise of any other form of marine protected area in the independent countries of the South Pacific.

The characteristics of the CCAs can be summarized in general terms as follows:

- **Extent:** May sometimes involve management of the entire marine area under customary tenure but usually comprise (or include) a small closed area with a total ban on extraction.
- **Size:** The closed areas are usually very small (less than 1 km<sup>2</sup>)
- **Permanence and constancy:** The closed areas are frequently managed with periodic openings to allow occasional harvests
- **Purpose:** Usually the CCAs are explicitly for sustainable livelihood purposes – i.e. conservation through sustainable use.
- **Benefits:** The benefits derived by communities from CCAs may include increased or more predictable harvests but may also include one or several of various alternative benefits – these may outweigh the fishery or biodiversity benefits.
- **Impacts:** The impacts of CCAs are hard to quantify but weighty anecdotal evidence and increasing scientific evidence suggests that CCAs see rapid increases in some species and are likely to have beneficial biodiversity impacts.
- **Networks:** The majority of CCAs are part of support networks through which government or NGOs provide advice and other technical support.
- **Legal support:** In most cases CCAs operate under situations in which strict interpretations of existing legislation may not be supportive (or indeed possible) but de facto customary tenure is so far an adequate basis. CCAs have been recognized in most countries owing to their empirical success rather than any concerted strategy on behalf of governments (with the exceptions of Samoa and Tonga).

The wide spread proliferation of CCAs seems set to define the site based agenda for marine conservation in the South Pacific. Governments are slowly gearing up to increasing support for these sorts of approach and in many ways the very success of phenomenon poses its biggest threat. Large investments and institutionalization of CCAs may undermine their sustainability by decreasing their self reliance or even introducing dependencies such as incentives or external policing.

### Community based adaptive management

The approach which can be broadly termed Community-Based Adaptive Management<sup>71</sup> (CBAM) seems to hold much promise for reefs and livelihoods but it is worth outlining what seem to be some of the vital components of the successful and enduring initiatives:

**Community-based:** The management is carried out primarily by the community and the relevant user groups but also, involving appropriately the locally and nationally relevant institutional and private stakeholders. This makes optimum use of social capital such as existing (or assigned) resource rights, local governance, traditional and local information, self-interest and self-enforcement capacity.

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<sup>71</sup> Govan et al. 2008

**Adaptive Management:** The local community sets priorities and establishes objectives and proposed actions based on the available, and usually local, information, actions are implemented and results are checked periodically<sup>72</sup>. Plans represent a community agreement and are frequently simple one page documents. Results of checking / monitoring and any new information are used to review the plan and modify as appropriate. Management tools selected tend to be simple to implement or enforce such as area or seasonal closures, restrictions on specific fishing techniques, waste management and restoration activities. Experience suggests that some benefits should be tangible and prompt in order to fuel continued management but these need not be monetary.

It is clear that community based adaptive management is a simple and not even alien concept given its similarity to many traditional resource management approaches<sup>73</sup>. What is relatively new, or at least so far not widely accepted<sup>74</sup>, is the proposal that this approach should form the basis for securing the wellbeing of both resources and communities of the Pacific Islands and that it should extend to all rural communities that are interested in engaging in resource management or sustainable development.

## Institutional and legal frameworks

In Polynesian countries, governments have played a more or less central role in implementing CCAs within a relatively clear legal context. In contrast, most Melanesian countries have seen the prominent role of civil society organizations in promoting and sustaining support for CCAs.

Although it has been widely recognized that it is neither appropriate nor sustainable for NGOs to play a long term and central support role to CCAs there have been mixed results in attempts to build government capacity to support these networks instead. Where progress has been made it is clear that long term and patient investment in staff training and government institutional priorities are required including cost-sharing of staff and other support. Future initiatives should ensure appropriate government involvement from the design stage through to hand-over.

In most countries the Fisheries Departments are perceived as the most appropriate lead agency but some confusion exists in others. As communities are primarily interested in livelihoods or fisheries benefits Fisheries Departments seem appropriate. In addition, Fisheries Departments are always better resourced and have relatively large numbers of decentralized field staff (provincial fisheries officers and so on) making them well placed for the long term support of communities that will be required.

Environment departments could emphasize their crucial role outside of the routine extension-type work needed to support CCAs. Well placed in terms of access to expertise and possibly external funding, they could ensure an overview of the more ecosystem wide issues including the fulfillment of national obligations within the context of the expanding network of CCAs. In addition, selective monitoring of key issues such as vulnerable ecosystems and endangered species could inform and help coordinate the community based work to achieve the maximum environmental benefits. Specific gaps such as breeding areas for endangered species might be identified and if not addressed under the CCA system could need special protected area approaches. In relation to terrestrial protected areas or other forms of

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<sup>72</sup> In Fiji, many villages even define quantitative goals and then monitor them scientifically

<sup>73</sup> Hickey 2006, Cinner et al 2007.

<sup>74</sup> See for example Johannes 1998 and the case for data-less management

management it may still be beneficial for Environment staff to engage with these issues through the existing adaptive management processes of the coastal CCAs where these are relevant.

It will be important to strengthen and adapt national and sub-national policy and institutional frameworks in support of ICM/EBM (based on community-driven adaptive management) to ensure robustness to external drivers such as population increases, market pressure, climate change and terrestrial impacts. The strengthening of institutional capacity will require innovative approaches from NGOs and donors, imaginative and tailored institutional structures which may adapt or hybridize traditional or national institutions. Bridges between these and other stakeholders can be built using networks and umbrellas, examples of which are now established in the region<sup>75</sup>. These support networks or umbrellas have proven useful in the advancement of national community based management in Fiji and also Solomon Islands and Micronesia and allow for effective partnerships between government and civil society.

A number of agencies have overlapping responsibilities (e.g. environment, fisheries and disaster preparedness/adaptation) which could interface with communities through a single community based adaptive management approach cutting costs and ensuring "holistic" and integrated processes. It would be important to examine how to encourage or at least support interdisciplinary and cross-sectoral approaches in appropriate and sufficiently flexible legal frameworks.

Melanesian countries are still working on the legal backing or support for CCA approaches. For the moment this support is not essential but will become more important as more sites come on-stream and especially if government departments take over formal responsibilities for implementation.

A fundamental requirement of such legislation would be to avoid forming a bottle-neck to community implementation. This situation occurs already and is holding back community initiative forcing them to depend on external assistance to fulfill requirements. Requirements should be as simple as possible, hopefully in line with products and processes that communities are already preparing as part of planning exercises. In addition these should not be subject to the production of additional regulations or legislation by central government which again would represent a bottle-neck out of the control of communities. Some features of such legislation might include:

- Require a simple management plan covering agreed key points such as major resources, key problems and community agreed solutions. This should be community appropriate e.g. flip chart, matrices, or a page or two written in local language.
- Evidence of minimum criteria met by the plan regarding process (participation of appropriate stakeholders, wider community and time span), content (structure, objectives, simple to understand), context (existing legislation, ecological issues, wider coastal zone, national or ecosystem issues).
- The continued acceptance of Community Plan into registry or national database and its legal status is subject to demonstration of regular community review (e.g. every 3 years).

As support agencies have refined their approach and as communities learn from their experiences, processes are improving and a mode of integrated community based

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<sup>75</sup> Cinner et al. 2007, Cinner and Aswani 2007, Anderies et al 2004, Ostrom 1990, Berkes 2004, Tawake et al. 2007.

adaptive management is emerging that has the potential to become a major tool for environmental management in the region – at least for coastal areas and potentially wider sustainable development.

## Integrated resource management as the basis for sustainable livelihoods and conservation?

The features of CCAs, particularly in terms of size and permanence discussed above imply that for these to fulfill their conservation and livelihood potential it is necessary to look beyond their relatively low impact as a protected area mechanism. With relatively little extra investment it would be possible to boost the expansion and growth of the approach to support local adaptive management for sustainable livelihoods as the nation-wide norm rather than the exception in rural areas.

Caution must be exercised in that the success of the CCA movement relies on very specific features of the region and specific needs and perceptions of community members. Unwieldy adaptation of this approach in support of recent calls to promote Marine Protected Areas (MPAs) have the potential to at best waste resources and at worst undermine the progress to date.

The potential of the Pacific Island experience is not so much to attain the Western Conservationists' vision of "representative networks of MPAs" but rather the much more widely called for systems of Integrated Coastal (or Island) Management (ICM) that address livelihoods, development, inshore fisheries and conservation as a whole<sup>76</sup>. The potential here may also apply to the recently recognized (and so far little fleshed out) need to address the expected impacts of climate change. These adaptation approaches which would involve planning for increased incidence of extreme weather or sea levels, threats to food security, infrastructure and water supply would be well suited to community based planning of the sort used for CCAs. The MPA enthusiasts should not fret though; these community based approaches usually generate the most enforceable examples of closed areas/MPAs in the region and often serve as stepping stones to larger systems of protected areas or conservation initiatives<sup>77</sup>.

## Recommendations

- **Tenure and traditional governance:** The success of local management approaches hinges largely on traditional tenure and governance systems. Great care should be taken before undermining or reforming these systems which appear vital to sustainable environmental management in the region and any analysis of tenure reform must pay special attention to the environmental impact of such moves.
- **Characterize and defend local and cultural approaches:** CCAs have developed and re-appeared in response to local needs and culture and may often have characteristics such as small size, periodic opening and location determined by social rather than biological factors. International bodies are not necessarily aware of this and these characteristics may require clarification to them before international definitions of Protected Areas or Conservation can be assumed to be regionally applicable.
- **Careful scrutiny of international definitions and concepts for regional relevance:** The unique attributes of the region combined with the difficulties of engaging in international fora suggest that great care should be exercised by

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<sup>76</sup> Whittingham et al. 2003, Bell et al. 2006, World bank 2006.

<sup>77</sup> Tawake in Prep., Aswani and Hamilton 2004a.

nations and implementers before assuming that commonly accepted approaches are applicable. The new IUCN definition of Protected Areas is one of the most recent examples and should not be adopted without considerable discussion and further written clarification from IUCN.

- **Improve and enhance participatory processes:** Ongoing evaluation of techniques and processes used to promote and support community management should be performed. Issues that may need particular attention include community involvement and empowerment, development of appropriate mixes of traditional and national governance and marine tenure in Western Melanesia.
- **Integrated island management as the goal:** Protected areas alone will be fragile, costly and unlikely to achieve long-term community or national benefits. The adaptive management processes central to many CCAs should be built on to include ecosystem wide (particularly terrestrial) and sustainable development issues and incorporate climate change adaptation and resilience. These processes should be available to any and all communities interested in managing sustainable development. Some large scale pilots of such approaches may be appropriate where sufficient experience has not been attained.
- **Enabling environment:** Institutions and legislation will need to develop in a fashion more supportive of community initiative towards sustainable management of resources and remove bureaucratic bottle-necks currently insurmountable by communities.
- **Enhancing the role of government:** Future support should seek to consolidate the long term role of the various levels government in supporting and coordinating local marine resource management. Such a strategy, ideally decentralized, might be implemented in a gradual or staggered fashion and would require strong collaboration from civil society organizations in achieving government institutional development goals. An important tool will be national or sub-national social networks or support umbrellas.
- **Multi-sector integration in practice:** Fisheries and environmental sectors will need to put into practice effective and on the ground collaboration to support communities in achieving local and national sustainable development priorities. Legislation for inshore fisheries, protected areas and wider environmental management will need to be improved in tandem.
- **Cost effectiveness:** National budgets are amongst the smallest in the world and face considerable demands to meet human development priorities such as health, education and food production. High priority should be placed on cost-effectiveness of environmental management approaches and maximizing the range of livelihood benefits for such approaches to be feasible strategies for government. These should not require expensive technical inputs or analysis (e.g. natural or social sciences) at the outset. Local government, community or NGO staff can facilitate and initiate management at the earliest opportunity based on experiences elsewhere, rules of thumb and community knowledge, new information can later be incorporated into cycles of adaptive management. The financial costs in establishing and supporting communities must be in the order of hundreds of dollars per year for them to be sustained in the long run by government – emerging data suggests that this is achievable<sup>78</sup>
- **Research needs:** Community members are key decision-makers and resource managers. Researchers and technical institutions urgently need to improve processes to identify community priority information needs and in ensuring necessary information reaches communities in a timely and useable fashion. Research and scientific monitoring has not cost effectively addressed the needs

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<sup>78</sup> See Govan et al. 2009 for detailed costing.

of community based management and arguably these resources would be better invested in establishing and supporting local adaptive management unless limited funds can be better targeted and results made directly available to end users.

- **Strengthen and adapt national and sub-national policy and institutional frameworks** in support of Integrated Island Management based on community driven adaptive management. This is vital to provide robustness to external drivers such as population increases, market pressure and terrestrial impacts. The strengthening of institutional capacity will require innovative approaches from NGOs and donors, imaginative and tailored institutional structures which may adapt or hybridize traditional or national institutions. Bridges between these and other stakeholders can be built using networks and umbrellas, examples of which are now established in the region<sup>79</sup>. These support networks or umbrellas have proven useful in the advancement of national community based management in Fiji and also Solomon Islands and Micronesia (FLMMA, SILMMA, PIMPAC).
- **Avoid raising unrealistic expectations.** Communities are getting involved because they want to manage their resources better for their own benefit. Unrealistically promoting the benefits of MPAs or providing “incentives” are common strategies despite the lack of demonstrable long term success. These are not only financially un-sustainable in a national ICM framework but also erode the vital empowerment and ownership communities achieve when they observe the connection between their actions and accrued benefits.

In conclusion, CCAs are being revitalized in the South Pacific in a unique global phenomenon and one of the untapped riches of the Pacific has begun to show its true potential; villages, communities, tribes, clans and districts are planning, implementing and enforcing management at the local level based on customary tenure. The challenge for policy-makers, scientists, government and non government institutions is to move beyond the emphasis on protected areas in isolation and support and promote this de-centralized Island way as a vital foundation in a truly regional approach to Integrated Island Management that can address the pressing issues associated with sustaining the region’s biodiversity and livelihoods.

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<sup>79</sup> Cinner et al. 2007. Cinner and Aswani 2007, Anderies et al 2004, Ostrom 1990, Berkes 2004, Tawake in Prep.

### Paunagisu Village, Efate, Vanuatu<sup>80</sup>

Paunagisu village is a coastal community of more than 700 people who depend heavily on the marine resources and subsistence farming for a livelihood in this beautiful setting bounded by islands to the North, East and West. In common with other communities on the island of Efate, the proximity of the capital, Port Vila, increases the pressure on marine resources and community governance with predictable results. This pressure often leads to conflicts in some areas including Paunagisu.

Historically traditional marine resource management took the form of “tabu” or bans on harvesting which would be set for a specific period of time. The village in common with many others in Vanuatu has been reviving local management and in 2006 the community produced a participatory management plan that is being implemented including a fishing ban or large “tabu” area and other community initiatives such as waste management and protection of mangroves. The community has been supported by the NGO FSP Vanuatu and in close partnership with the national Fisheries Department and also the NGO “Wan Smol Bag” to support a process of village based coastal management planning. The community reports a gradual recovery in marine resources and a revival of collaborative spirit in this large community. FSP Vanuatu is encouraging the North Efate communities to support each other through networking and are now piloting community driven Integrated Coastal and Watershed Management in 5 other sites in Efate and Aneityum.



Custom launching of Paunagisu “tabu” Area organized by the Paunagisu Marine Life Management Committee and the chief counsel (Tevi Maltali)

<sup>80</sup> Prepared by Tevi Maltali and Hugh Govan see Annex 2

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# Annex1: Selected country analyses<sup>81</sup>

## Fiji

*Alifereti Tawake and Kesaia Tabunakawai*

Fiji's effort in community based coastal resource management has been widely publicized over the last 10 years. More recently the World Resources Institute published a chapter in its 2005 Annual Report using Fiji Locally Managed Marine Area (FLMMA) Network experiences as an example demonstrating best practices in managing ecosystems to sustain livelihoods and reduce poverty (Aalbersberg et al, 2005). More than 177 villages spread across the 14 provinces in Fiji have established some form of community-based management measures while additional 50-100 villages have indicated a keen interest and are at the preliminary consultation stage of the community engagement process. The widespread occurrence of community-based work in Fiji is being catalyzed and motivated by resource owners, chiefs and communities' firm belief that CBM is the key towards securing and improving a continuous livelihood/food source. In addition, the NGOs commitments to helping communities realise their vision of a healthy marine ecosystems. In January 2005, the Fiji government have made a commitment that by 2020, "at least 30% of Fiji's inshore (*qoliqolis*) and offshore marine areas will have come under a comprehensive, ecologically representative networks of MPAs, which are effectively managed and financed" at the Mauritius SIDS meeting.

The FLMMA network is a charitable association working to promote and encourage the preservation, protection and sustainable use of marine resources in Fiji by the owners of marine resources. The network is a partnership between government departments (Fisheries, Fijian Affairs Board, Environment and Tourism), NGOs (WWF, WCS, PCDF, FSPI, MES, Resort Support, Fiji Peace Corps, CCC), Institutions (USP, FIT), Hotels and resorts, qoliqoli owners and communities that builds on each partners skills and commitments to mainstream the Fiji's effort in addressing threats, problems and challenges affecting Fijis inshore marine areas. The initiative coordinated by the Fisheries department has gained nation wide support from communities to policy-makers.

The UN and the international community have recognised and promoted this innovative partnership as one of the best practices of community participation in sustainable development demonstrating the reduction of poverty through biodiversity conservation. Since its inception in 2000, the FLMMA network has received the following international awards.

- 2002 UN Equator Initiative Award at WSSD in Johannesburg
- 2004 Whitley Foundation Award for People and the Environment (UK)
- 2005 Gift to the Earth Conservation Leadership Award by WWF International to both FLMMA and the Fiji Government
- 2006 Global Ocean Conservation Award to both Fiji's Prime Minister and the Tui Macuata, a resource owner and paramount chief leading FLMMA work in his province.

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<sup>81</sup> Prepared by the cited authors as part of IUCN WCPA/CEESP 2008. A survey of legal and policy measures related to Indigenous and Community Conserved Areas (ICCAs) in 21 countries. Strategic Direction on Governance, Communities, Equity, and Livelihoods in Relation to Protected Areas (TILCEPA). See Govan et al 2009 for surveys of legal measures in Tonga and PNG.

## Survey of legal measures related to Indigenous Community Conserved Areas in Fiji

*Shauna Troniak, with input from Erika Techera and Hugh Govan*

### Recognition of Indigenous and Community Conserved Areas (ICCAs) in national law or policy or as part of the PA network system

CCAs are not expressly featured in national law. However, provisions in several statutes on forestry, fisheries and natural resources do recognize the right of local communities to control the use of natural resources to varying degrees.

Fiji does not have dedicated legislation dealing with protected areas. Current protected areas established under assorted statutes vary in terms of size and conservation potential and cannot be said to form a representative protected areas system.

### Other general policies/laws that recognize indigenous/community territories or rights to areas or natural resources

#### **Constitution (Amendment) Act, 1997**

The Constitution does not offer a blanket recognition of customary law; instead, the *Constitution (Amendment) Act 1997* recognizes customary law and traditional rights to terrestrial land, provided they are not inconsistent with any law or governing principle of the state. Article 6(b) preserves ownership of Fijian land according to Fijian custom. Section 38 guarantees that the law applies to every person equally, however it also exempts certain laws and administrative actions regarding customary land, and fishing rights from the equality provision. Section 186 of the *Constitution* makes provision for the application of customary laws and for dispute resolution in accordance with Fijian tradition, but this will depend statute law (ie. customary laws do not apply automatically and must be expressly recognized in a piece of national legislation in order to be recognized by the government).

#### **Native Lands Act, 1978, and Native Land Trust Act, 1985**

Under the customary system of land tenure, terrestrial lands and coastal marine areas are the exclusive property of the community. Terrestrial lands were traditionally held by the *vanua* (district) until 1880, when the Great Council of Chiefs (GCC) resolved that native lands should be owned communally by the *mataqali* (clan). This is different to the ownership system in place for coastal marine areas, which are the property of the *yavusa* (tribe), or in some cases the *vanua*. The Native Lands Act was first enacted in 1880 and, following the resolution of the GCC, duly vested customary lands with the *mataqali*. The *Native Land Trust Act*, provides the legal framework for administering native lands in Fiji.

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The *Native Lands Act* implements Article 6 of the Constitution. It states that "[n]ative lands shall be held by native Fijians according to native custom as evidenced by usage and tradition" and provides for the registration of land. A *Native Land Commission* determines the rightful owner of land if there is a dispute. The *Native Land Trust Act*

(NLTA) provides that native lands cannot be alienated even by customary owners, and it vests administrative control of native land in the *Native Land Trust Board* (NLTB). So although the Indigenous people have nominal ownership rights, the control and management of land is vested in the NLTB for the benefit of the traditional owners.

**Strengths:**

Communal ownership of native lands is constitutionally entrenched and reflected in the statutory framework under the Native Lands Act and Native Land Trust Act. This is both a strength and a weakness however, as the national law recognizes customary ownership in terms of the right to use the land, and does not recognize full title to the land (see below).

**Weaknesses:**

Ownership of terrestrial lands and the coastal marine zones is an unresolved issue at law. While customary owners assert their ownership interest in their traditional lands, the laws of Fiji maintain that the government owns the land with only user rights for indigenous people. Section 19 of the *Native Lands Act*, for example, states that all lands left vacant by the discontinuance of a *mataqali* landholding unit will revert to the Crown. Without legal recognition of title to the coastal zones, indigenous people with customary rights to an area are not guaranteed the opportunity to make important decisions on planning and development of their traditional lands.

**Fisheries Act, 1991**

The *Fisheries Act* enables limited community involvement in coastal marine management via provisions that require community consent over commercial and subsistence fishing in their customary fishing rights areas (*qoliqoli*). The law allows for the involvement of communities in the governance of the coastal zones and the application of customary laws to regulate the *qoliqoli* in some circumstances. The Act also creates the position of honorary fish wardens, who are community members appointed to protect the jurisdiction of customary rights holders in the *qoliqoli* areas. Section 13 of the *Fisheries Act* is the window through which customary law may be applied to govern the coastal marine areas. The provision requires commercial and non-commercial harvesters to obtain a permit from the customary owner of the *qoliqoli*, with a few exceptions. Section 13 and Regulation 4 of the Fisheries Regulations require both commercial and non-commercial harvesters to obtain a permit to fish on any reef or shellfish bed in a registered *qoliqoli*, with a few exceptions. For commercial harvesters, this is a precondition on obtaining a license to fish in the area. An exception is contained in the Act for non-commercial harvesters who use a hook and line, spear or portable fish trap that can be handled by one person.

**Strengths:**

The licensing and permit system under Section 13 allow customary owners to exercise jurisdiction over the *qoliqoli*. Any fishing by harvesters from outside the community must obtain a permit from the District Commissioner, which in practice must be based on the approval of the local chief.

While fishing cannot be completely prohibited by the *Fisheries Act* and Regulations, this may be a good thing as it ensures subsistence indigenous fishing rights in a country where the main source of protein for rural people is from marine resources.

**Weaknesses:**

Under the current *Fisheries Act*, it is legally impossible to establish a marine protected area where fishing is strictly prohibited. While both commercial and subsistence harvesters need a license or permit to enter a *qoliqoli*, the exceptions under the

Fisheries Act for certain methods mean that it is legally impossible for a community to set up a protected area without ministerial designation. This gap in the law has led to many complications related to enforcement by the community of both customary and national fisheries laws. In addition, though the definition of “fish” under the *Fisheries Act* is broad, non-living marine resources seem to be beyond the ambit of the Act, and so may not benefit from protections under the Act.

### **National Trust of Fiji Act, 1970**

This law establishes the National Trust of Fiji, with an overall purpose to provide for the sustainability of Fiji’s natural and cultural heritage. In discharging its mandate the National Trust is empowered to enter into conservation agreements with landowners.

#### **Strengths:**

The mandate of this statutory body is broad and includes the protection, preservation and management of any site deemed significant to Fiji’s natural and cultural heritage.

#### **Weaknesses:**

Under the Act, landowners may enter into agreements or accept covenants to preserve a heritage area, but no role for landowners in terms of protection or management of these sites is stipulated under the Act.

### **Overall Comments**

Protected areas may be established under various national laws – for example, the Fisheries Act and Regulations allow for the creation of marine reserves that prohibit fishing except by certain fishing methods. Other relevant legislation would include the Forestry Act and Forestry Decree, which allow for the creation of reserved forests and strict nature reserves, and the Environment Management Act (2005), which requires environmental assessments of development activities likely to have a significant impact on designated or proposed protected areas. The recognition of communal ownership of terrestrial lands (under the Constitution, Native Lands Act and other aspects of the land management framework) and fishing rights in relation to coastal marine zones (under the Fisheries Act) make it likely that customary owners will be engaged in the process of establishing and managing a protected area, but no legislation specifies the nature or extent of their role in these processes.

### **Further references:**

Erika J. Techera, “Customary law and community based conservation of marine areas in Fiji” (Paper presented to the Environmental Justice and Global Citizenship Conference, July 2007)



## Solomon Islands

*With Hugo Tafea*

Solomon Islands has had the usual (for the region) experiences with conservation oriented protected areas with very few surviving in any functional sense due to poor integration with local aspirations or needs. An exception is the Arnavons Marine Conservation Area which is one of the oldest protected areas, surviving largely due to heavy investments, collaboration between government and NGOs and a growing integration of community livelihood expectations. Despite the failure of many of the recent protected area approaches there is a rich background in traditional resource management and customary closed areas and an example of this survived until very recently in the form of the Ontong Java management of the Beche de Mer Fishery. From 2003 or earlier NGOs have adopted a modified approach based on community involvement and meeting community aspirations and this combining with the growing local capacity to work in a participatory fashion. Anthropological and community development work dating back to the 1990's in the Roviana Lagoon also showed early results with a network of village closed areas emerging in 2001.

Early conservation approaches in Solomon Islands seem to have failed to find constructive ground for collaboration between government and civil society with failures attributed to both government and NGO-only approaches. The last 5 years has shown much greater collaboration between government and non-government stakeholders and MoUs and joint government/NGO field teams are now common (e.g. FSPI/SIDT). The government strategy for Fisheries is actively moving towards supporting community based management in partnership with civil society organizations. NGOs actively supporting CCAs include SIDT, WWF, TNC, Tetepare Descendants Association, WorldFish and FSPI. These organizations and also Fisheries and Environment departments are members of a national network active since 2003, SILMMA.

### Survey of legal measures related to Indigenous Community Conserved Areas in Solomon Islands

Shauna Troniak and Hugh Govan

### Recognition of Indigenous and Community Conserved Areas (ICCAs) in national law or policy or as part of the PA network system

CCAs are not formally recognized in national legislation.

The Solomon Islands cannot be said to have a representative network of protected areas, does not have dedicated protected areas legislation, and there is no national system for site selection or guidelines for the establishment of protected areas.

### Other general policies/laws that recognize indigenous/community territories or rights to areas or natural resources

Constitution, 1978

The *Constitution* recognizes the right of landowners to exercise control over their lands and resources. Also, the Solomon Islands shall "cherish and promote the different cultural traditions" and that Parliament shall make provision to apply

customary laws with particular regard to the customs, values and aspirations of the people of the Solomon Islands. Schedule 3 to the *Constitution* confirms that customary law is part of the national law so long as it is consistent with the *Constitution* or a national law; an Act of Parliament may regulate the manners in which customary laws are applied.

**Strengths:**

Customary fishing rights and traditional land ownership are recognized in the Constitution. Land reservation for the purpose of conservation would therefore affect customary rights, and communities would be engaged in this process.

**Weaknesses:**

The legal meaning and extent of customary land ownership is unclear. High court decisions have found that traditional owners do not own land under the high water mark although customary landowners have in practice been consulted and compensated when land is taken up by the government for public purpose.

**Fisheries Act, 1998**

The *Fisheries Act*, in accordance with the constitution, recognizes customary fishing rights. The Act vests responsibility for coastal and inshore fisheries with each of the nine provinces. Provincial assemblies may enact ordinances to perform essential fisheries management functions, including: creating measures for the development of the fisheries, including fisheries management plans; registering customary fishing rights, boundaries and persons entitled to these rights; designating open or closed seasons for fishing of species or within any areas of provincial waters; designating closed fishing areas; and establishing marine reserves. A Fisheries Advisory Council is constituted under the Act, a key role of which is to endorse fisheries management plans, and these may follow a community based management approach. Further provisions in the *Fisheries Act* make commercial fishing subject to customary fishing rights, require compensation be paid to customary owners in event of a breach of customary fishing rights, and create an offence for failure to comply with a compensation order. Though provincial governments have the power, there is no noted provincial ordinance that applies customary fishing rights. The Fisheries Act is now being reviewed and is scheduled to appear in 2009 with substantial improvements in support of community based approaches to management.

**Strengths:**

The Fisheries Act is based on sound principles for sustainable development and protection of biodiversity. Another of its stated core principles is the regard for "any customary rights of customary rights holders over or in relation to any area within Solomon Islands waters" (Section 4).

**Weaknesses:**

Problems relate mostly to implementation, or the capacity of the national fisheries department and provincial officers to carry out the provisions of the Act. No formally endorsed fisheries management plans have been implemented at either provincial or national levels. The Fisheries Advisory Council is reportedly not carrying out its functions as under the Act, and there is a shortage of skilled staff within the national Department of Fisheries and Marine Resources to provide the necessary support to fisheries officers in the provinces or to the communities that want to undertake community based fisheries management plans.

**Overall Comments**

Under the Fisheries Act, provincial governments have the power to implement customary law in the coastal zones, but have not apparently chosen to exercise this power. Decentralization may therefore be in general a positive feature of any legal

regime that implements community based coastal marine management, but cannot itself ensure positive outcomes for the community as much depends on capacity.

#### Further references:

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P. Lokani and W. Atu, "Community Leadership in Managing the Arnavon Marine Conservation Area" in JC Day et al., eds., *Proceedings from First International Marine Protected Areas Congress*, October 2005.

## Vanuatu

*With Tevi Obed Maltali*

Vanuatu has shown some of the most impressive uptake results in terms of community based coastal resource management in the region although this has been relatively little publicised (exceptions being Johannes 1993 etc. and Johannes and Hickey 2004). More than 20 villages are documented to have enacted community based management measures, some estimates place this number nearer 80 and others reckon that many more villages still implement some form of marine resource management. This widespread occurrence of CBM probably has its basis in the strong persistence of tradition and customary marine tenure as well as the fruits of work carried out by the Fisheries Department and the NGO Wan Smol Bag (WSB) in a more or less coordinated manner.

The complementarity of activities between Fisheries Department and WSB have provided perhaps the region's earliest example of effective coordination and collaboration between NGOs and Government departments in this field. In recognition of this precedent and given the major limitations faced by government departments in terms of operational costs the support provided by FSPI in Vanuatu since 2003 has focussed on facilitating the joint work of Fisheries and the NGOs (FSPV and WB) to the extent that a Fisheries officer is seconded to FSPV.

NGOs active in CBM include: Wan Smol Bag, FSP-V, Wantok Environment Centre as well as regional or international organizations like FSPI.

## Survey of legal measures related to Indigenous Community Conserved Areas in Vanuatu

*Jess Feehely and Roy Hills, with inputs from Antoine Lasgorceix and Shauna Troniak*

## Recognition of Indigenous and Community Conserved Areas (ICCAs) in national law or policy or as part of the PA network system

### **Environmental Management and Conservation Act, 2002**

Under Part 4, Division 2 of the **Environmental Management and Conservation Act, 2002**, the Director of Environment can register an area as a Community Conservation Area (CCA). Identification of such sites is made by negotiation between the Director and customary landowners. Communities must agree to establish the CCA, and no site may be registered without the assent of the customary landowner. The Director can negotiate with the custom landowners for the protection and registration of *any* site as a CCA, provided the Director is satisfied that the area: (i.e. there are no restrictions on government or community ownership of land comprising a CCA)

- (a) Possesses unique genetic, cultural, geological or biological resources.
- (b) Constitutes the habitat of species of wild fauna or flora of unique national or international importance.
- (c) Merits protection under the *Convention Concerning the Protection of World Cultural and Natural Heritage*.

Registering a CCA provides formal recognition of the environmental values of the area and conservation activities to protect the area. A registered CCA must have an

approved management plan, and a management committee (comprising representatives from each community within the protected area) who will be responsible for implementing and enforcing the management plan. The *EMC Act* is the responsibility of the Ministry of Lands, Natural Resources, Geology, Energy and Environment, and is administered by a government agency called the Vanuatu Environment Unit. The Environment Unit may provide money or technical advice to help plan the conservation and management of the area. The Committee must report to the Environment Unit each year describing the conservation activities that have been carried out that year, achievements and any punishments for non-compliance. Communities may negotiate with the Director the boundaries of the CCA<sup>82</sup> and the rules that take effect within it.<sup>83</sup> Customary landowners may also apply to the Director to cancel or modify the CCA, or amend the management plan;<sup>84</sup> this is followed by a mandatory consultation between the Director and the applicant landowner and/or other interested parties.<sup>85</sup> In addition, the CCA may be de-registered if the management plan is not being implemented.

### **Strengths:**

In practice, this system allows the community the opportunity to significantly influence the form and content of the management plan, which may lead to the incorporation of traditional knowledge, as well as customary landholders' issues and concerns.

The registration of CCAs provides formal recognition for community based conservation management and keeps primary responsibility for management at a community level. The Environment Unit can provide assistance, such as:

- Assisting with monitoring and gathering baseline data about the proposed CCA.
- Preparing an accurate map of the proposed CCA.
- Assisting in the resolution of outstanding land ownership issues (The Environment Unit does not register any CCA where there is an unresolved land dispute).
- Identifying all the options to achieve conservation objectives and assisting with preparation of a formal management plan.

The fact that CCAs are established and registered at the request of the local community should improve implementation of conservation measures and compliance with management plans.

### **Weaknesses:**

The main weakness relates to enforcement. The landowners or the management committees are responsible for the implementation of the management plan; however, there are no provisions in the legislation that give the landowners power to make regulations to enforce the plan. In practice, communities are primarily responsible, with government support, for monitoring and enforcing the management plan through chiefly authority structures. Therefore, enforcement relies on respect for custom rules and chiefly powers. This is particularly difficult where the offenders are not from the CCA. It is an offence to contravene any "*term or condition of a registered community conservation area*". However, it is not clear whether this would include compliance with the prescriptions of any management plan endorsed by the Director, or if it is intended only to apply to failure to carry out responsibilities relating to the

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<sup>82</sup> *Supra* note 206, ss. 35 and 36

<sup>83</sup> *Supra* note 206, s. 36(d)

<sup>84</sup> *Supra* note 206, s. 38(1)

<sup>85</sup> *Supra* note 206, s. 38(2)

management plan. No action has been taken by the Environment Unit to date in relation to breaches of a management plan for a CCA.

Vanuatu does recognize CCAs as a part of the PA network system. Registered CCAs are entered into the Environmental Registry, after which they receive government recognition along with all other PAs. **But there are some weaknesses to be noticed.** As above, management of a CCA is the responsibility of the landowners, rather than the government (in contrast to conservation areas under the **Forestry Act, 2001** or marine reserves under the **Fisheries Act, 2005**, where the relevant government department is responsible for regulating activities in the PA). It is currently difficult for the landowners or the Environment Unit to take any action to prosecute someone for breaching conditions of a management plan for a CCA – penalties can only be imposed at a custom level. Depending on the strength of the management committee, this may mean that CCAs are less regulated than other PAs.

## Overall Comments

There are a number of options for recognizing PAs in Vanuatu – including conservation areas under the **Forestry Act, 2001**, marine reserves under the **Fisheries Act, 2005**, protected sites under the **Protection of Sites and Artifacts Act** and national parks and nature reserves under the **National Parks Act, 1993**. The Provincial Councils are also empowered to create environmental protection zones under the **Decentralization and Local Government Regions Act, 1994**. However, these options tend to be under-used (e.g. there are no national parks and the only formal marine reserves declared to date are for the protection of tourist dive sites).

The *EMC Act* expressly applies to coastal marine areas, and its provisions may overlap in certain circumstances with provisions aimed at conservation contained in the *Fisheries Act*. It is presently unclear how the *EMC Act* and *Fisheries Act* interact in practice, though generally the more stringent provisions would presumably apply in the event of a direct overlap. Under the *Fisheries Act*, the Minister may designate special conservation or protection measures for certain fisheries, and may also designate marine reserves and make regulations for the establishment, management and protection of marine reserves. The *Fisheries Act* obliges the Minister to consult with owners of adjoining land prior to the establishment of a marine reserve. As a matter of policy, government agencies working under the *Fisheries Act* do engage with and support communities when they must be consulted prior to the establishment of a protected area.

Hopefully, the community-based nature of the CCA provisions of the **Environmental Management and Conservation Act, 2002** will lead to the registration of more PAs as CCAs. However, the system will be more effective if changes can be made to improve the capacity of landowners to take action to enforce their management plans.

## Further references:

Tom Y.D and Hakwa M.T., *Review of Environmental Legislation and Policies in Vanuatu*, 2004, International Waters of the Pacific Islands, SPREP  
Erika J. Techera, "Protected Area Management in Vanuatu" (2005) 2 MqJICEL 107-119.

## Samoa

*Hugh Govan*

The Fisheries Division (FD) initiated a large scale Village Fisheries Program in the late 1990s which resulted in up to 76 villages developing management plans for their marine areas including no-take zones in many cases. Currently some 51 of these Community-Based Fisheries Management (CBFM) sites are active and ongoing assessment by the FD suggests that the CBFM managed areas cover more than 38.3 km<sup>2</sup> with 50 no-take zones covering 9.4 km<sup>2</sup>. The Division of Environment & Conservation (DEC) now supports two marine protected areas initiated with World Bank/IUCN collaboration; the Aleipata and Safata Marine Protected Areas. These MPAs were established in 2002 and cover 81.1 km<sup>2</sup> enclosing 20 village no-take zones amounting to some 6.21 km<sup>2</sup>. The Palolo Deep Marine Reserve is co-managed but essentially all Samoa's marine managed areas can be classified as Community Conserved Areas.

The ASMPA, CBFM sites and marine areas of the terrestrial protected areas comprise a total of 209.1 km<sup>2</sup>. Both DEC and FD aim to continue expanding efforts with the addition of several sites per year each and increased collaboration between the agencies.

### Survey of legal measures related to Indigenous Community Conserved Areas in Samoa

Shauna Troniak

### Recognition of Indigenous and Community Conserved Areas (ICCAs) in national law or policy or as part of the PA network system

CCAs are not specifically mentioned in Samoan law and there is no reference to CCAs in Samoa's existing PA system, however community based conservation is not expressly barred and in at least one case permitted by exception. Under the *National Parks and Reserves Act, 1974*, nature reserves may be established on any public land or area of the territorial sea. Although this provision is geared toward strict nature reserves, this is with the proviso that no nature reserve may restrict the access of rights holders to their customary fishing areas.

### Other general policies/laws that recognize indigenous/community territories or rights to areas or natural resources

#### **Constitution of the Independent State of Western Samoa, 1960**

The *Constitution* provides for a system of customary lands held by chiefly title in accordance with customary law and practice, though this does not on its face include land below the high water mark. Under Article 102, customary land may be taken up by the government for public purposes by negotiation or unilaterally.

#### **Strengths:**

In practice land is taken up by the government usually by means of negotiation. Land below the high water mark appears to be exempt from possible expropriation.

#### **Weaknesses:**

Rights to consent to this type of expropriation is not guaranteed.

#### **Village Fono Act, 1990**

Customary laws and structures are recognized under the *Village Fono Act*, a national law enacted for the purpose of reinforcing the authority of village fono (council of chiefs) to use and apply the custom of the village. The *fono* is empowered to make laws with respect to the management of their customary lands, and enforce these laws against the residents of the village.

**Strengths:**

The law gives statutory recognition to the processes and by-laws enacted by customary authorities.

**Weaknesses:**

The jurisdiction of the *fono* is therefore limited to planning and management of its own lands and enforcement against members of its own community. Individuals from outside the village are subject only to government laws and law enforcement while on village lands, and the decisions of the *fono* do not necessarily affect land management and attendant environmental issues at the district or regional level. Another key gap in the laws is that, on its face, the *Village Fono Act* does not apply to coastal marine areas.

**Fisheries Act, 1988**

Under the Fisheries Act the fono may prepare and enforce laws of general application within their customary fishing areas. The *Fisheries Act* allows village representatives, fishermen and industry to prepare by-laws in consultation with the Fisheries Department. Under an amendment to the *Fisheries Act*, village *fono* may impose penalties on any person who breaches a by-law. By-laws cover a range of issues related to the conservation and management of the fishery resources, and may include restrictions on fish sizes, bans on certain fishing gear or methods, and closures of fishing seasons or areas (*tabus*).

Communities engage in monitoring village by-laws by erecting signs, building watch houses, and using watchmen to patrol their coastal areas. Village *fono* often incorporate existing Fisheries regulations into their by-laws, and may thus become the main monitoring and enforcement body of these rules in their customary fishing areas. When a community member breaches a by-law, the village *fono* handles enforcement and may impose a traditional fine, or a fine not exceeding 100 penalty units and not more than 10 penalty units for each day the breach continues. Any breach of the by-laws should be reported to police, and breaches by individuals from outside the community may be pursued through the court system. Fisheries Enforcement Officers, whose job is to enforce the *Fisheries Act*, are responsible for taking prosecutions through the court system against those from outside the community.

**Strengths:**

The Fisheries Act addresses the main weaknesses in the Village Fono Act, which does not apply to the coastal zones nor to persons from outside the community. The ability to enact laws of general application is a significant power that has been devolved to the village fono. This effectively extends the jurisdiction of village fono to any person who breaches a by-law within the community's customary fishing area.

**Weaknesses:**

The jurisdiction of the village fono is not absolute, though this may not necessarily be termed a weakness in the law. As subsidiary legislation, fisheries by-laws must comply with national laws and regulations in order to be enforceable. The Minister has the authority to manage the fisheries, control harvesting methods and prevent marine pollution through the formulation of regulations.



## Overall Comments

With respect to the coastal zones, the Samoan government established the Fisheries Extension Programme in 1995, in order to maximize community participation in the management of subsistence fisheries and marine environments. A central feature of the Extension Programme is the development of community-based Fisheries Management Plans, which are facilitated by Fisheries Division staff and are passed by village *fono*. Village by-laws are seen as an important management tool within this process. As of March 2007, 87 coastal villages had developed Fisheries Management Plans, 69 marine reserves had been created, 57 by-laws had been approved via the process outlined above, and 21 more by-laws were in the pipeline.

## Further references:

Ueta Fa'asili and Autalavou Tauaefa, *Review of the Village Fisheries Management Plan of the Extension Programme in Samoa* (Field Report #7, Secretariat of the Pacific Community, 2001).

Erika J. Techera, "Samoa: Law, Custom and Conservation" (2006) 10 N.Z. J. Env'tl. L. 361-379.

## **Annex 2: CCA case studies**

**Cook Islands - Aroko Muri Case study**

**Fiji - Vueti Navakavu Case study**

**Samoa - Safata Case Study**

**Solomon Islands - Marau Case study**

**Tuvalu - Nanumea Case study**

**Vanuatu - Paunagisu case study**