



Marine Managed Areas in the Pacific

The Secretariat of the Pacific Regional Environment Programme (SPREP), in cooperation with WWF and the WorldFish Center's ReefBase Pacific Project, has documented and reviewed the marine managed areas (MMAs) in the South Pacific. The study has specifically focused on the status and potential of locally-managed marine areas (LMMAs) in meeting food security, nature conservation and sustainable livelihood targets.

The full results of the study are presented in Govan *et al.* (2009) Status and potential of locally-managed marine areas in the South Pacific: Meeting nature conservation and sustainable livelihood targets through widespread implementation of LMMAs. SPREP/WWF/WorldFish Center-ReefBase/CRISP. 95pp + 5 annexes.

This map presents a summary of data published in that report, as well as additional information that illustrates linkages between coastal communities & livelihoods, critical habitats & biodiversity and MMAs of Pacific Island Countries and Territories. For further information go to <http://pacific.reefbase.org>. To download the full report visit http://www.sprep.org/atl/publication/000646_LMMA_report.pdf.



MMA* = Marine Managed Area Active
 MMA = sites that have been confirmed as being under active management
 MMA Area = Area coverage figures have been calculated from sites of known area and therefore actual area coverage may be higher than this
 No Box = No available data

Critical Habitats & Biodiversity

Mangrove forests, seagrass beds and coral reefs are important and conspicuous natural systems found along coastal areas throughout the Pacific and support a unique set of livelihoods, fisheries and biodiversity. In the face of local and external pressures, the management of interactions between coastal communities and these natural systems contributes to the long term sustainability of these habitats, as well as distinctive Pacific Island cultures.



Coastal Communities & Livelihoods

Pacific Island Countries and Territories generally comprise small land areas, have a high proportion of their population living in very close proximity to the coast and have populations that demonstrate a high reliance on resources from coastal areas. For the people of the Pacific, their way of life, traditions, sources of food, shelter and protection are all inextricably linked with critical coastal habitats.



Locally Managed Marine Areas

Marine Managed Areas (MMAs), particularly those managed locally through community participation and local governance systems (LMMAs), are increasingly being recognised as a useful tool in managing interactions between coastal communities and the natural coastal systems on which they rely. The involvement and leading role of local communities has proven to be a key factor in achieving sustainable fisheries management and biodiversity conservation in the Pacific.



Notes:
 1 : Govan, H. *et al.* 2009. Status and potential of locally-managed marine areas in the South Pacific: meeting nature conservation and sustainable livelihood targets through wide-spread implementation of LMMAs. SPREP/WWF/WFC/ReefBase/CRISP. 95pp + 5 annexes.
 2 : World Database on Protected Areas (WDPA - www.unep-wcmc.org/wdpa), 2009.
 3 : ReefBase (www.reefbase.org), 2009.
 4 : All Protected Areas with a marine component. It has been reported that many areas in this total count are not actively managed.
 * Figure considered to be substantially inaccurate

	American Samoa	Cook Islands	Fiji	Federated States of Micronesia	Guam	Kiribati	Marshall Islands	New Caledonia	Niue	Northern Mariana Islands	Nauru	Pitcairn Islands	Palau	Papua New Guinea	French Polynesia	Samoa	Solomon Islands	Tokelau	Tonga	Tuvalu	Vanuatu	Wallis and Futuna
Marine Area (km²)^a	390,000	1,830,000	1,217,000	2,980,000	218,000	3,600,000	2,131,000	1,740,000	390,000	1,823,000	436,000	800,000	601,000	2,366,000	5,030,000	120,000	1,630,000	290,000	700,000	757,000	680,000	300,000
Reef Area (km²)^{a,b}	67	212	10,020	3,172	183	1,967	1,995	4,573	15	102	10	39	709	13,840	3,000	200	5,750	97	3,587	872	708	425
Reefs At Risk (%)^a	42	57	68	45	100	48	3	13	43	-	100	0	0	46	29	95	46	0	46	15	70	26
Coastline (km)^{c,d}	116	120	1,129	6,112	126	1,143	370	2,254	64	1,482	30	51	1,519	20,197	2,525	403	9,880	101	419	24	2,528	129
Total Population^e	64,827	12,271	931,741	107,665	175,877	110,356	63,174	224,824	1,444	86,616	13,770	48	21,093	5,931,769	283,019	217,083	581,318	1,433	119,009	12,177	215,446	15,237
Population Density (people/km²)^e	326	52	51	153	325	136	348	12	6	182	656	1	46	13	77	74	21	143	166	468	18	56
GDP (Million Dollars)^f	510	183	5,079	100	2,500	348	115	3,158	8	900	60	-	125	12,050	3,800	1,029	948	2	526	15	983	60
GDP (Dollars) Per Capita^f	5,800	9,100	3,900	2,300	15,000	3,600	2,900	15,000	5,800	12,500	5,000	-	7,600	2,100	17,500	5,400	1,900	1,000	5,100	1,600	4,600	3,800
Human Development Index^g	-	0.684	0.762	-	-	0.556	0.711	-	-	-	-	-	0.833	0.53	-	0.785	0.602	-	0.819	0.547	0.674	-
Current Fish Consumption (kg/capita/year)^h	-	35	21	69	-	62	61	26	79	-	56	-	33	13	70	87	33	129	20	111	20	75
Forecasted Fish Needs for 2030 (tonnes)^h	3,330	510	37,500	4,550	9,390	5,040	2,390	12,300	45	4,720	550	5	890	178,900	12,620	6,840	29,900	45	3,900	390	13,600	680

References:
 a : Spalding, M.D., C. Ravilious and E.P. Green. 2001. World Atlas of Coral Reefs. Prepared at the UNEP World Conservation Monitoring Centre. University of California Press, Berkeley, USA.
 b : Androulakis, S., C. Chauvin and C. Kranenburg. (In Press). Atlas: Pacific Ocean Coral Reefs. Millennium Coral Reef Mapping Project Pacific. Noumea.
 c : Central Intelligence Agency (CIA). 2004. The World Factbook 2004. (<https://www.cia.gov/library/publications/the-world-factbook/index.html>)
 d : Pilot Analysis of Global Ecosystems (PAGE) by the World Resources Institute (WRI) (http://www.wri.org/wr2000/coast_page.html)
 e : CIA. 2007. The World Factbook 2007. (<https://www.cia.gov/library/publications/the-world-factbook/index.html>). The GDP dollar estimates are derived from purchasing power parity calculations. Final figures are estimates in international dollars.
 f : Asia Development Bank. 2008. Human Development Index. Key Indicators of Asia and the Pacific 2008; 39th Edition. Asia Development Bank, Manila. 276 pp. See Table 1.15, p. 129.
 g : UNDP. 2007. Fighting climate change: Human solidarity in a divided world. Human Development Report 2007/2008. <http://hdr.undp.org/en/>. See Global summary data <http://data.un.org/Data.aspx?d=32>
 h : Bell, J. D., M. Kronen, A. Vunisea, W.J. Nash, G. Keeble, A. Demmie, S. Pontifex and S. Androulakis. 2009. Planning the use of fish for food security in the Pacific. Marine Policy 33: 64-76pp.

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