



Solomon Islands National Plan of Action

Coral Triangle Initiative on Coral Reefs, Fisheries and Food Security

April 2010





Solomon Islands **National Plan of Action**

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The CTI NCC would like to thank the following for their inspiring commitment and dedication to making this a valuable tool for strategic and technical directions for the work in ensuring that the Solomon Islands marine and coastal resources are safeguarded and managed properly for the livelihood of its people and the CT region.

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- All representatives, stakeholders and individuals who were consulted and have provided their insights and experiences in the development of the NPOA via organized stakeholder meetings

FOREWORD



Rence Sore, Permanent Secretary, Ministry of Environment, Conservation and Meteorology

The Coral Triangle Initiative on Coral Reefs, Fisheries and Food Security (CTI-CFF) was formally launched by Leaders of the Six Coral Triangle countries (CT6) in Manado, Indonesia, on 15 March 2009.

The launch of the CTI CFF meant that coral triangle was no longer a dream. It was no longer a talk. It was no longer an idea. It has now become a reality. On a regional level, this reality is documented on the Regional Plan of Action (RPoA).

The RPoA was broken down and translated into 6 National Plans of Action (NPoA). Solomon Islands NPoA was developed in-partnership with the Government's multi-lateral stakeholders, namely, The Nature Conservancy (TNC), Wildlife Fund for Nature (WWF) and World Fish Center (WFC) and other locally-based organizations. The USCTI Support Program provided financial support in the development of this NPoA through the Coral Triangle Support Programme (CTSP).

This NPoA is people-centred. It progresses the national priorities of the Government of Solomon Islands. It enables the maintenance of marine resources for reasons of food security and supports people's livelihood. It is not only sustainable but it is also workable. It aspires to do a difference on the livelihood of the people of Solomon Islands and it envisages visible impacts on the ground.

This NPoA is a living and working document. The National Coordinating Committee (NCC) on CTI-CFF is open to any constructive dialogue by any partners of the Government of Solomon Islands that will make this NPoA more liveable and workable.

Let us work together in harmony to implement this NPoA and let us be proud of the yisible impacts that this NPoA will have on the ground.

Rence Sore

Permanent Secretary, Ministry of Environment Conservation & Meteorology

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Acronyms

ADB Asian Development Bank AM Adaptive Management

ACMCA Arnavons Community Management and Conservation Area

ARDS Agriculture and Rural Development Strategy
AusAID Australian Agency for International Development

BSSE Bismarck Solomon Seas Eco-region

CBAM Community Based Adaptive Management

CBD Convention on Biological Diversity
CBM Community-Based Management
CBO Community-Based Organizations

CBRM Community-based Resource Management

CBRM+ Community-based Resource Management approaches covering

climate change vulnerability and adaptation assessment, ecosystem approaches, food security, and management of key species and

habitats and appropriate use of protected areas

CC Climate Change

CI Conservation International

CITES Convention on Illegal Trade in Endangered Species of Flora and

Fauna

CMS Convention on Migratory Species

CTI-CFF Coral Triangle Initiative on Coral Reefs, Fisheries and Food

Security

CTSP Coral Triangle Support Program

EAFM Ecosystem Approach to Fisheries Management

EBFM Ecosystem-based fisheries management

EBM Ecosystem-based management EIA Environmental Impact Assessment

FSP Fisheries Sector Progamme

FSPI Foundation of the Peoples of the South Pacific International

GEF Global Environment Facility
GMOs Genetically Modified organisms
ICM Integrated Coastal Management

ICWM Integrated Coastal and Watershed Management

ICZM Integrated Coastal Zone Management

INGOs International Non-Government Organizations

IUCN World Conservation UnionLMMA Locally-Managed Marine AreaLRFF (T) Live Reef Food Fish (Trade)

MALD Ministry of Agriculture and Livestock Development

MCILI Ministry of Industries, Labor and Immigration

MCA Ministry of Communication and Aviation

MCT Ministry of Culture and Tourism

MDPAC Ministry of Development Planning and Aid Coordination
MECM Ministry of Environment, Conservation and Meteorology
MEHRD Ministry of Education and Human Resources Development

MMERE Ministry of Mines, Energy and Rural Electrification

MFAET Ministry of Foreign Affairs & External Trade MFMR Ministry of Fisheries and Marine Resources

MFT Ministry of Finance and Treasury

MHA Ministry of Home Affairs

MHMS Ministry of Health and Medical Services
MID Ministry of Infrastructure Development
MJLA Ministry of Justice and Legal Affairs
MLHS Ministry of Lands, Housing and Survey

MNURP Ministry of National Unity, Reconciliation and Peace

MoF Ministry of Forestry

MoU Memorandum of Understanding

MPA Marine Protected Area

MPGIS Ministry of Provincial Government and Institutional Strengthening MPNSCS Ministry of Police, National Security and Correctional Services

MPS Ministry of Public Service

MRDIA Ministry of Rural Development and Indigenous Affairs

MWYCA Ministry of Women, Youths and Children Affairs

NAPA National Adaptation Programme of Action

NBSAP National Biodiversity Strategy and Action Plan

NCC National Coordinating Committee NCSA National Capacity Self Assessment NGO Non Governmental Organisations

NPoA National Plan of Action

NRM Natural resources management

NTZ No-take Zones

NZAID New Zealand Agency for International Development

OPMC Office of the Prime Minister & Cabinet

PA Protected Area

PoWPA Programme of Work on Protected Areas

RPoA Regional Plan of Action

SAIG Supplementary and/or Alternative Income Generation

SIDT Solomon Islands Development Trust

SI Solomon Islands

SIG Solomon Islands Government

SILMMA Solomon Islands Locally Managed Marine Areas Network

SIMROS Solomon Islands Marine Resources Organizational Strengthening

SLM Sustainable Land Management

SOPAC Pacific Islands Applied Geosciences Commission

SPC Secretariat of the Pacific Community

SPREP South Pacific Regional Environment Programme

TDA Tetepare Descendants Association

TNC The Nature Conservancy

UNDP United Nation Development Program
V&A Vulnerability and Adaptation Assessment

WFC WorldFish Center

WMA Wildlife Management and Protection Act

WWF World Wide Fund for Nature

Summary

The governments of six countries; Indonesia, Malaysia, Papua New Guinea, the Philippines, Solomon Islands and Timor-Leste have committed to an ambitious regional program to safeguard the region's marine and coastal biological resources: the *Coral Triangle Initiative on Coral Reefs, Fisheries and Food Security (CTI-CFF)*. As part of this initiative Solomon Islands, under the auspices of a National Coordinating Committee chaired by the permanent secretaries of the Ministries of Environment, Conservation and Meteorology and that of Fisheries and Marine Resources, has drafted a National Plan of Action (NPoA) detailing a collaborative and integrated approach for government and non-government stakeholders to achieve a common goal, namely:

Solomon Islands sustainably manages marine and coastal resources to ensure food security, sustainable economic development, biodiversity conservation and adaptation to emerging threats through community based resource management approaches supported by government agencies and other partners.

The NPoA details a people-centred and integrated resource management approach that relies on a core of community based management as a national strategy to improve food security, adaptive capacity (climate change and other pressures), conservation of target or threatened species and habitats appropriate to the context of Solomon Islands.

Background

The "Coral Triangle" (CT) region is located along the equator and covers all or part of the exclusive economic zones of six countries: Indonesia, Malaysia, Papua New Guinea, the Philippines, the Solomon Islands and Timor-Leste.

The marine and coastal resources of the Coral Triangle are under significant and increasing threat. The CT sits at a crossroads of rapidly expanding populations, economic growth and international trade. Fish and other marine resources are a principal source of food, livelihoods and export revenues in all of the CT countries. These and other factors are generating increased pressures on marine and coastal resources, including: overfishing, unsustainable fishing practices, land-based sources of marine pollution, coastal habitat conversion, and climate change.

In response to these alarming trends, in August 2007, President Yudhoyono of Indonesia proposed to other CT leaders a new multilateral partnership to safeguard the region's marine and coastal biological resources: the *Coral Triangle Initiative on Coral Reefs*, *Fisheries and Food Security (CTI-CFF)*.

The six governments have now finalized an ambitious and visionary 10 year *Plan of Action*. It captures the joint priorities and commitments of all of the governments, and reflects extensive inputs over the past year from many partners. The Action Plan is intended to serve as a rallying point for collective and parallel action at regional, national, and sub-national levels. At the *regional* level, multilateral action will be needed by our six governments, along with coordinated action by our partners operating at the regional scale (e.g., funding agencies, international NGOs, and private sector companies). At the *national* level, in each country, broad stakeholder alliances will need to collaborate around a shared national agenda. And at the *sub-national* level, local governments and local stakeholders will need to carry out collaborative efforts to generate needed impacts on-the-ground.

At the regional level commitments to action form the heart of the Coral Triangle Initiative. There are five overall goals, originally agreed at the SOM1 meeting in December 2007, covering: (i) priority seascapes; (ii) ecosystem approach to managing fisheries and other marine resources; (iii) marine protected areas; (iv) climate change adaptation; and (v) threatened species. Under each goal are one or more time-bound targets with one or more time-bound regional-level actions. Under each target each government provided a partial list of up to five specific, prioritized national actions that will be taken over the next three years. Solomon Islands presented its list of priority actions at the Manado meeting in May 2009 based on a first draft National Plan of Action endorsed by cabinet (Annex 4).

Work has proceeded to develop the National Plan of Action in consultation with the two lead ministries (Ministry of Environment, Conservation and Meteorological Services – MECM and Ministry of Fisheries and Marine Resources – MFMR) and other key government and NGO stakeholders. The NPOA is intended to serve as key guidance for future collaboration on CTI-CFF and other relevant initiatives. In the short term the NPOA is intended to guide the selection of priority areas to be presented for support to the Coral Triangle Support Program (USAID) and for negotiation of the support to be provided by GEF-ADB by October 2009.

Consultations on the Solomon Islands' National Plan of Action

The National Coordinating Committee (NCC) is the mechanism designated to coordinate and promote country-level implementation of the national and regional CTI Plan of Action. The NCC is composed of multiple stakeholders from the public, NGO, and private sectors as well as the two lead ministries (MECM and MFMR) and is facilitated by two CTI Coordinators, one from each ministry. The NCC ensures the development and consultation of the SI-NPOA amongst other functions.

Under the regionally agreed targets each government provided a partial list of up to five specific, prioritized *national* actions that will be taken over the next three years. The prioritized list of National Plan of Action (NPOA) activities was an outcome of the CTI-NPOA Consultation Workshop held February 26-27 February 2009 with the National Coordinating Committee and other government and non-government stakeholders. The list of priority activities also provided the first outline of the NPOA and its general structure.

The draft NPOA and the priority activities formed the basis of further consultations on the NPOA and this draft was the basic document discussed and improved at the CTI Visionary Workshop held from 17-18 June 2009 which also began to address the priority areas to be addressed under the CTSP funding. This workshop also examined the policy context and key overlaps that the CTI NPOA should engage. Subsequently the MFMR and MECM have also provided input based on internal planning meetings regarding the priorities relevant to the CTSP. The NCC met on 15th September 2009 to discuss and agree key issues relevant to the NPOA and in particular geographic priorities or phasing, SIG staff commitments to implementation, targets and coordination.

This document presents a shared national agenda for Solomon Islands and its National Plan of Action (NPoA) based on discussions and input to date.

Principles and focus of Solomon Islands' National Plan of Action

The overall **VISION** for the Solomon Islands' National Plan of Action (NPoA) has been characterized as:

- People-centered
- A vehicle for progressing other national priorities
- Enabling maintenance of marine resources for food security and people's livelihoods
- Sustainable & workable
- Visible impacts on the ground

The Coral Triangle Initiative on coral reefs, fisheries and food security (CTI-CFF) embraces the principle of people-centered approaches which is especially relevant in the context of Solomon Islands where communities will be the primary drivers as well as beneficiaries of sustainable resource management as identified in government policy (see Annex 1).

The CTI-CFF, with its broad approach to livelihoods and sustainable resources management, is also extremely timely as Solomon Islands has recently seen the development of a range of policy guidance which is ready for implementation and will benefit from increased coordination, such as the Coastal Community Strategy, revised Fisheries Act, National Adaptation Programme of Action, National Biodiversity Strategy and Action Plan amongst others. It is important that the CTI-CFF support and progress these national priorities.

While supporting the regional collaboration envisaged under the CTI-CFF it is also considered important that the national actions comprise an integrated approach that will be applicable in the current and future national institutional frameworks. The actions contemplated under the NPoA must also achieve maximum impact in coastal communities and natural resources management and development.

Some of the broader needs identified at the national level include:

- Harmonization of local, national, regional & international policies & laws
- Effective coordination and avoidance of duplication
- Sustainability of programmes (financing & capacity issues)
- Capacity for regular monitoring/evaluation.
- Effective & efficient Information Systems
- Increased number of qualified and skilled personnel across a broad range of fields

Geographic priorities

The consultations made clear that the "National Plan" should be just that, the aim is to improve resource management nationally. The NPOA represents a road map to achieving this during the life of the CTI-CFF and beyond. It is accepted that a strategic approach is required as institutional strengthening and capacity building at the national and provincial levels will require considerable work. A phased approach which allows for strategic deployment of resources and ongoing learning seems most appropriate and this requires determining the geographic order of implementation.

While communities are the "building block", in developing an implementation strategy "provinces" are deemed the logical operational level at which community based management can be promoted and supported. This provincial level will be targeted for strengthening along with national coordinating and overview functions. While many NPOA activities will benefit all national and provincial stakeholders (e.g. awareness campaigns, training of field officers, policy and legislation) others will target one or several provinces as fore-runners in a first phase and several more, if not the remainder, in a second phase. The fore-runner provinces will be the areas in which approaches are first tested and perfected and from where experiences will be extended to the remainder of the country. It is not the intention of the NPOA to limit implementation to these first phase provinces in the manner of previous pilots or demonstration area approaches. The criteria for selecting these first phase provinces need to be clear and transparent for the purposes of discussion and selection.

Criteria proposed during consultations are listed below. It was felt that need or resource dependency should be a key criterion along with the existence of inshore fishing habitats (lagoon, reef, and mangrove) and the attention that areas have received already from existing resource management projects.

Criteria proposed for first and second phase demonstration provinces:

Criteria determining need:

- 1. "Need". Human development and Human poverty as measured by available indices. Low HDI and HPI combined and ranked.
- 2. Subsistence dependency. High rural population. Ranked.
- 3. Marine resource dependency / Pressure on inshore fishing areas. Proxy = total fish for consumption and sale by province, ranked.
- 4. Habitat or biodiversity criteria and in particular those related to fishing grounds. Inshore fishing area data not available. The existence of coral reefs is used as a proxy and also indicates the presence of shallow areas available to coastal inshore fishers. Some data are available on the relative abundance of key mangrove and sea grass habitats of biodiversity and fishery importance and can be used as a supplementary criterion.

Criteria determining support strategy:

- 5. Existence of marine resource management projects. Distribution of current LMMAs as proxy for conservation investments. Ranked in relation to province size (none, few, some, many). Determinant of support strategy (i.e. NGO lead or Government lead for initial stages).
- 6. Logistical considerations. Ease of access, frequency and cost of shipping and flights. Existence of provincial infrastructure, location of Met. Office substations. Determinant of pilot or demonstration province selection for first phase.
- 7. Value as learning or demonstration areas for proposed first phase and second phase activities.

Currently available information relevant to these criteria is presented in Annex 5 and summarized in Table 1. These criteria are used to define 2-3 first phase provinces with possibly 2-3 more in a second phase by year 3. The remaining provinces and their staff will be involved with as much implementation support as is available and are expected to benefit from training and information/ awareness campaigns and will be preparing for future full-scale implementation.

The following points were considered:

- An early activity should be a short strategy paper outlining how and when the resource management approaches will be delivered to each province or area.
- In terms of "need" Malaita stands out followed by Guadalcanal and less so; Temotu and Central.
- Inadequate data is available to estimate habitat or inshore fishing area priorities. Most recent but not officially released coral reef maps (see Annex 5) suggest most coral and/or shallow water areas are in Temotu, Malaita, Western Province and Isabel.
- The costs and logistics involved for Temotu suggest that it would not be an ideal
 candidate as first phase demonstration province but should be especially addressed in
 the strategy for implementation as it is habitually left out of national projects for these
 reasons.
- The relative lack of resource management projects to date highlights Malaita, Makira and Temotu for consideration.
- The strong NGO presence and project progress in Western Province suggests that partnership with NGOs to attain wider coverage of CBRM may be cost-effective. In addition this would be an ideal opportunity to trial wider scale approaches allowing

early learning on network and ecosystem benefits of provincial level implementation of CBRM.

The agreed order and priority of engagement / phasing for the NPOA is as follows:

Phase 1 (years 1-3):

- Engage in full implementation of CBRM at provincial level for Malaita
 - community plans
 - Provincial planning (MECM/MFMR/others jointly plans, ordinances and ICM)
- Western Province or Western Bloc (including Choiseul / Isabel)
 - Provincial planning (MECM/MFMR/others jointly plans, ordinances and ICM)
- "Passive" support of Guadalcanal, and possibly Central Province. E.g. provincial networking, opportunistic site support

Phase 2: (years 3-5):

• Focus full implementation on 2-3 provinces selected from Choiseul, Isabel, Makira, Temotu

Table 1: Example matrix for defining selection criteria for geographical phases (highlighting top 3 ranked in each category based on information in Annex 5).

Criteria/Provinces			na						
	<u>la</u>	seul	lalca	_	ra- a	ita	ell-	otu	ern
	Central	Choiseul	Guadalcana I	sabel	Makira- Ulawa	Malaita	Rennell- Bellona	Temotu	Western
SOCIAL								•	
Human development and Human poverty.	7	3.5	7.5	6	3.5	9	5	7	2
2. High rural population.	4	4	8	4	7	10	2	3	8
3. Marine resource dependency / Pressure on inshore fishing areas.	5	2	9	4	6	10	1	3	8
HABITAT									
Habitat linked to fishing grounds - coral reef areas	2	5	1	6	3	8	4	9	7
4a seagrass (S) or mangrove (M) importance				ММ		SS M	M		мм
PREVIOUS INTERVENTIONS									
5. Existence of marine resource management projects.	3	3	4	2	8	5	4	8	1
LOGISTICS									
6. Logistical considerations. Ease of access, frequency ships etc	4	2	6	3	3	5	2	1	5
VALUE OF PRIOR EXPERIENCE									
7. Utility as lessons learned	6	6	6	7	1	4	2	1	8

Map 1. Map showing Solomon Islands' provinces, extent of reef areas (red shading) and towns, villages, hamlets and settlements (yellow dots). Data: Reefs -Temotu Province Sikaiana Island Malaita Province IRD, Institute for Marine Remote Sensing and ReefBase. Villages – SPC PopGIS Makira Province Renbel Province Ontong Java Atoll Central Province **Guadalcanal Province Isabel Province** 400 km 300 km Choiseul Province 200 km Western Province 100 km 0 km

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The Solomon Islands National Plan of Action

Vision and goal of the SI National Plan of Action

Based on the policy and guidance discussed above and in particular an analysis of the SMIFMR and NBSAP the following are proposed as a basis for the Vision and Goal of the SI-NPOA. The target is derived from the SMIFMR.

Vision: Marine and coastal resources are sustainably managed and utilized to secure the long term improvement of the livelihoods of Solomon Islanders

Goal: Solomon Islands sustainably manages marine and coastal resources to ensure food security, sustainable economic development, biodiversity conservation and adaptation to emerging threats through community based resource management approaches supported by government agencies and other partners.

Targets: 50% of Solomon Island coastal, watershed and inshore area under improved management through CBRM and ICM approaches by 2015.

Objectives and approach of the SI National Plan of Action

In order to achieve an integrated ecosystem based management approach that relies on a core of community based management as a national strategy to deliver food security, adaptive capacity (climate change and other pressures), conservation of target or threatened species and habitats the NPoA proposes to:

- Create an enabling environment and key tools: Design of a system of community based resource management appropriate to Solomon Islands (CBRM+ as described below), the production of capacity building and awareness materials, the establishment of multisectoral coordination mechanisms and final details of key national policy and legislation.
- Implement CBRM+ widely and establish long term support systems at national and provincial levels: The implementation of CBRM+ by eventually most Solomon Island communities will be facilitated in a phased approach through access to information and awareness, direct support of seed or fore-runner sites, promotion of experiential learning and peer to peer exchanges and access to appropriate technical advice.
- Establish and operationalize systems for achieving integrated management building on CBRM+: Develop simple and cost-effective mechanisms for mainstreaming and joint policy development at provincial and national levels including multi-sectoral planning and management, data and information management.

Solomon Island model of CBRM - CBRM+

CBRM+ is used to designate an approach to community based adaptive management that incorporates food security, ecosystem approaches to resource management, vulnerability and adaptation planning and protection of key species and habitats. The design of this approach, support materials, supportive policy and capacity building represents the integration or

mainstreaming of all these sectors into a more realistic and achievable delivery suited to the characteristics of Solomon Island rural communities. An appropriate Solomon Island term will be coined by the NCC.

The definition of a minimum standard "model" for CBRM+ should ensure national priorities are being addressed by all implementers whether sponsored by government, NGOs or spontaneously arising from communities. This model will also guide the capacity building, institutional strengthening, awareness raising, monitoring and legal support components. Government and NGO stakeholders defined "Principles for CBRM in Solomon Islands" in 2007 and with the incorporation of climate change and adaptation issues and experiences (e.g. community based vulnerability and adaptation assessments) over the last two years this represents a good starting point. The model will contemplate:

- Cost effectiveness: The aim of achieving widespread national coverage implies that
 the approach must not represent an unsustainable burden on national and provincial
 budgets in the long term. Though startup costs are to be expected (and hopefully will
 be defrayed by donors) these should not create unsustainable precedents and
 dependency in the longer term.
- Adaptive management and learning: Communities and other stakeholders will need to implement based on available information including research in other countries, local and traditional knowledge. Communities and support institutions will need to ensure prompt evaluation and adoption of lessons learned in order to improve management approaches.
- Stakeholders and tenure: Consideration should be given to specific circumstances of tenure and rights holders that may include absentee owners, relations by marriage or non-coastal dwellers with rights of access.
- Adapted to local context of each area and province: The relevant role of traditional
 and other leaders and governing institutions should be accommodated recognizing
 that these may vary between provinces or villages. The role of the church should be
 specifically addressed.
- Rural and peri-urban situations: Situations with greater access to markets or near to population centers will need special consideration in terms of stakeholder participation and enforcement.
- Climate change vulnerability and adaptation: provide opportunities for communities to assess vulnerability to various threats and explore adaptive strategies available to them (e.g. replanting buffers, livelihood diversification, watershed management)
- Ecosystem based management: Ensuring that wider ecosystem issues are incorporated at the level of community and also provincial planning will require the design of approaches to enhance dialogue and awareness between stakeholders and institutions across a number of sectors at national and provincial level.
- Appropriate use of a variety of resource management tools: The CBRM+ approach should enable communities to identify local priority issues. The most appropriate tools for communities to address these will need to be adequately described and supported (e.g. mesh restrictions, protection of spawning areas, reserves and no-take zones, replanting or restoration, Fish Aggregating Devices etc.).
- Ensuring two way flow of information: special provision for ensuring local access to latest available information and best practices and support partners access to local challenges, successes and needs for research and further information.
- Strategic considerations: flexible and adaptive approaches will be needed to assess the options for institutional support in the short (startup) and long terms, approaches to

engaging provincial and local stakeholders, opportunities for communities to implement CBRM with little or no outside support inter alia.

Integrated management and mainstreaming

Integrated resource management has been promoted in the Pacific Islands in its various forms such as Integrated Coastal Zone Management (ICZM), Integrated Coastal Management (ICM), Integrated Coastal and Watershed Management (ICWM) for example. The emerging emphasis on Ecosystem Based Management is regarded by many as the latest version of this concept. The NPOA envisages interpreting and implementing Integrated Resource Management in a Solomon Island context to address food security, ecosystem approaches to resource management (ridge to reef), vulnerability and adaptation planning and protection of key species and habitats.

The integrated approach should be based on the principles identified above and mindful too of the lessons learned from reviews of aid implementation (see Annex 1) and in particular the need to build on local strengths, leadership and ownership, and support and strengthen existing systems and structures and avoiding the over engineering of projects (e.g. by using existing information) and maximizing "experiential learning".

Mainstreaming of biodiversity is a key theme in the National Biodiversity Strategy and Action Plan. Likewise there are calls for the mainstreaming of Climate Change Adaptation and approaches such as the Ecosystem Approach. In ensuring a constant dialogue between the relevant government and non-government stakeholders during the process of NPOA design and implementation major steps can be taken to ensure that the relevant aspects are "mainstreamed" in the most effective manner. Joint exercises in policy development, capacity building, awareness materials design and implementation at community level show some of the most practical and effective opportunities for "mainstreaming" through this integrated approach.

Marine Protected Areas in context

Experience in Solomon Islands and throughout the Pacific suggests that communities usually choose no-take zones amongst other tools to achieve food security. It is expected that implementation of community based management across all interested communities in Solomon Islands will be the single largest contribution to achieving national goals in terms of sustainable Marine Protected Areas (MPAs) especially if it is considered that a well managed customary area may qualify under international definitions of MPAs as well as the smaller no-take zones. Central monitoring and gap analysis of the emerging CBRM panorama should help in identifying important omissions and improvements needed.

A people-centred and integrated approach to implementation

The strategy for Solomon Islands focuses on people-centred approaches where communities will be the primary drivers as well as beneficiaries of sustainable resource management. Early engagement with communities in resource management activities is proposed to ensure prompt benefits as well as active participation at all levels of society in programme development and feedback.

The linkages between biodiversity, fisheries and food security require a high degree of collaboration between the different government and non-government agencies. This collaboration will also be critical to overcome the logistical challenges of delivering services

to communities in a predominantly rural and widespread island country where transport alone may constitute the major cost.

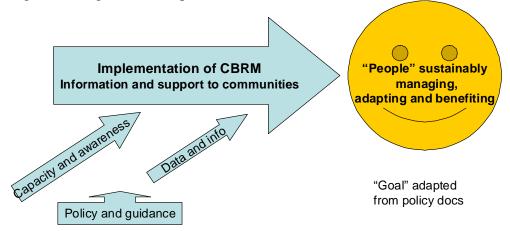
Due to the cross cutting and integrated nature of the proposed national actions these are presented under cross cutting themes which should constitute the main basis for program design and implementation. These may be subsequently presented under the CTI-CFF regional goals and targets or CTSP framework. The proposed cross-cutting themes comprise the major thrust of achieve integrated resource management based on people-centred approaches:

• Support and implementation of Community Based Resource Management for conservation, resource management and adaptation

And three themes intended to support the major thrust:

- Development of policy, legislation, inter-institutional partnerships and other strategies and guidance
- Data and information management for coordination and decision making
- Education and awareness raising

Figure 1: Diagrammatic representation of relations between themes in NPOA



Based on the geographical characteristics of Solomon Islands and the lessons learned to date it is apparent that core actions for conservation and food security will be carried out by communities themselves. It is envisaged that support and advice to communities will be delivered by national and provincial government and other partners through the framework for community based management contemplated under the draft Fisheries Act and National Strategy for the Management of Inshore Fisheries and Marine Resources (SMIFMR) and supported by the National Biodiversity Strategy and Action Plan (NBSAP), Wildlife Management Act and other relevant strategies.

Building on a strengthened provincial and national Community and Inshore Fisheries team will serve as a cost-effective conduit for the delivery and communication of the other aspects of the CTI National Plan of Action to the community level in collaboration with the relevant government and non government agencies. Appropriate coordination, monitoring, and gap analysis will allow for supplementation of this broad approach with other measures including supplementary Protected Area designs (e.g. terrestrial, threatened species under the Programme of Work on Protected Areas under the Convention on Biological Diversity

[PoWPA]) and climate change adaptation and mitigation measures (e.g. National Adaptation Programme of Action).

Central to the SMIFMR is supporting coastal communities to develop clear coastal fisheries objectives and local management actions. These community based planning processes would be used to incorporate support of community adaptation plans as part of resource management (e.g. disaster prevention through reef and mangrove buffers/replanting, awareness of impacts etc), specific fisheries livelihoods approaches when appropriate (eg Fish Aggregation Devices or pond farming), ecosystem approaches (e.g. watershed or upstream impacts) and specific threatened species.

Cross-cutting themes of the National Plan of Action

The cross cutting themes highlighted above emerged during the consultative process and are summarized below. Full details are provided in Annex 3.

Theme 1: Support and implementation of Community Based Resource Management

An improved Community Based Resource Management (CBRM+) approach will be the building block of the NPOA through which at least half the coastal population or coastal areas will have improved food security and resource management by 2015. The emerging importance of ecosystem approaches, vital role of key species and habitats and need to incorporate adaptive strategies will be incorporated in a model of CBRM+ or Community Based Adaptive Management (CBAM) based on Solomon Island experiences at over 80 sites to date and the constraints facing support institutions in the long-term.

In accordance with the stated priority of maximizing people-centred impacts at community level it is proposed to initiate implementation at village level as soon as possible. Implementation will be able to build on existing progress in certain provinces and also use these experiences to engage with provinces which so far have not received support but are regarded as high priority. A staggered approach to engaging with new provinces will allow opportunity for incorporating lessons learned, tailoring approaches to each province as well as reducing staffing and financial burdens of simultaneous nation-wide approaches. The implementation will require evaluation and coordination of the approaches currently taken by different partners, design of appropriate strategies, institutional strengthening and capacity building of key implementers.

At an early stage the most sustainable staffing and infrastructural arrangements for national and provincial support of CBRM will be identified and a mechanism for achieving and sustaining this will be designed in tandem with the capacity building strategy.

Theme 2: Development of policy, legislation, partnerships and other strategies and guidance

Under this theme government (National and Provincial), non-government and other stakeholders develop a shared strategy for joint implementation and jointly advance the necessary legislative and policy frameworks including major Fisheries and Protected Area legislation. These fora also inform best practice and available information is input to the other

themes regarding community level approaches to securing livelihoods, adaptation and conservation targets. This theme is a major opportunity for mainstreaming in practice.

Theme 3: Data and information management for coordination and decision making

Progress in local and provincial natural resource management has vastly outstripped the documentation and collation of information. Existing information will provide a sound basis for strategic planning as well as determining priority gaps for research or monitoring but first it is essential to bring this information together and make it accessible to all stakeholders. Systems for managing and making available this information will need to be established.

Key issues that need to be resolved at an early stage include agreeing community confidentiality and other intellectual property protocols, capacity of existing data and information holders to extract and organize data and clarifying procedures and central clearing house for data transfer.

Theme 4: Capacity building, education and awareness raising

Targeted capacity building will require development of appropriate materials for field staff and communities based on the nationally agreed model for implementation of community based approaches to fisheries management and protected areas. Existing community and public awareness materials to complement this approach will need to be assessed and new materials produced. The awareness materials will be delivered through a strategy coordinated with the timing of implementation of CBRM and will involve multiple media including radio, theatre, posters etc as appropriate and maximize social marketing, networking and peer learning opportunities.

Targeted capacity building will be integral to the implementation of CBRM. Depending on the strategy and approach selected for a given province capacity building will be specifically targeted at staff and other implementers using mentoring and exchanges. Regular exchanges between peers will be crucial as well as long term access to mentors (located nationally or provincially) and support. Structured training events need to be carefully tailored to the specific situations facing implementers and designed to minimize time spent away from implementation duties. Emphasis will be placed on "learning by doing" which has been one of the more successful approaches to date.

Networking at various levels provides an important capacity building and institutional strengthening tool as well providing a basis for ecosystem management and improved resilience and environmental governance. National, provincial and local network opportunities will be explored and developed.

Implementing the National Plan of Action

Implementation of the NPoA can be viewed as a series of actions nested within each other at national, provincial and community levels. Although several discrete activities can be identified in the NPOA they are all intimately linked and a major challenge to donors will be ensuring that these links are preserved even if discrete activities are financed by different donors. Implementation by themes is provided in Table 2 based on the detailed consultation feedback presented in Annex 3 and is summarized graphically in Figure 2.

- **National level**: At the national level joint coordination across ministries and other stakeholders is established which is used to develop appropriate awareness and capacity building, multi-sectoral policy development and high level integrated management, provide ongoing coordination, centralized data management and donor coordination.
- **Provincial level**: Provincial authorities engage with implementation of CBRM+ and initiate partnerships with national and provincial stakeholders. Once a sufficient body of experience in CBRM+ has been generated then provincial level consultation, planning, policy development and integrated management is advanced.
- Community level: Communities carry out improved resource management based on CBRM+ information and awareness. Ongoing support and information limited in accord with expected long term financial and human resource availability is provided though provincial mechanisms.

Key features of National Plan of Action implementation

Invest in maintaining a high degree of interagency collaboration: The linkages between biodiversity, fisheries, diverse ecosystem aspects, adaptation to emerging threats and food security require a high degree of collaboration between the different government and non-government agencies. During the process of NPOA development a high degree of collaboration has emerged between government and non-government agencies, this should be strengthened as a key part of implementation.

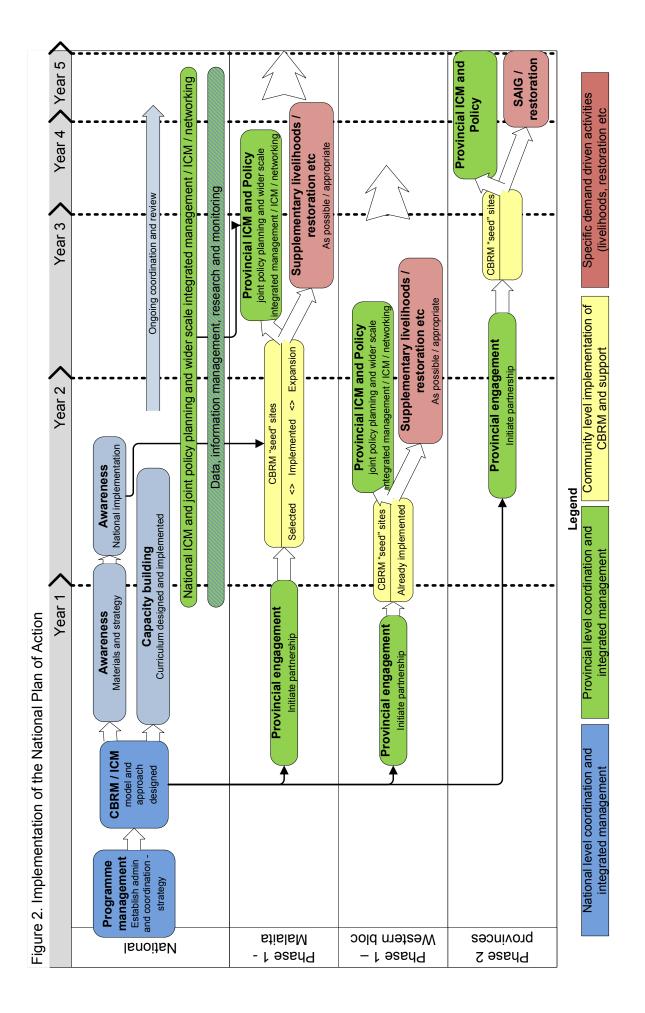
Implementation should be based on a simple and understandable design: Unsuccessful approaches in Solomon Islands have often been based on over-engineered projects excessively reliant on external and short lived technical inputs and complex designs. In view of this the project design and implementation should be kept clearly understandable, rely on existing strengths, staffing, experience and information as much as possible and by the same token caution should be exercised in commissioning technically complex interventions or research.

Project design should be based on likely long term staff, capacity and budgetary constraints: The collaboration mentioned above will also be critical in overcoming the logistical challenges of delivering services to communities in a predominantly rural and widespread island country where transport alone may constitute the major and almost insurmountable ongoing cost. Building on the existing provincial and national Fisheries team will serve as a cost-effective conduit for the delivery and communication of the other aspects of the CTI National Plan of Action to the community level in collaboration with the relevant government and non government agencies. Appropriate coordination, monitoring, and gap analysis will allow for supplementation of this broad approach with other measures (e.g. PAs, threatened species and resource, climate change).

Effective and integrated management will depend on social processes: The needs and motivation of communities and other stakeholders will be the major factor to address in achieving integrated and lasting management. Harnessing existing Solomon Island expertise to facilitate processes of community planning and provincial dialogue may constitute the most effective approach to improving management through improved awareness, increased involvement and influence of communities and provinces in decision making and identification of priority issues and potential solutions.

Table 2. Outline implementation timetable by NPoA themes.

	2009	2010	2011	2012	2013	2014	2015
Policy and strategy	7	7	Ž	7	2	7	Ď
NCC, strategy, roles and coordination,	X	Х	Х	Х	Х	Х	Х
CTI unit (act as projects management unit?)	X	Х	Х	Х	Х	Х	Х
SILMMA (coordination between civil society and SIG)		Х	Х	Х	Х	Х	Х
Define national strategy and priorities		Х	Х	Х	Х	Х	Х
Technical and consultative inputs to implementation		Х	Х			-	
Design model of CBRM+		Х					
Input to Provincial/National model of CBRM+ based ICM		Х	Χ				
Input to awareness materials		X					
Input to capacity building agenda		Х					
Develop national policy and legal environment MFMR, MECM, NBSAP, PAs, Wildlife, POWPA	X X						
Provincial policy and planning (joint) and ICM		X	X	X	X	X	X
Initiate provincial networking and involvement (sub SILMMA or?)		X	X	^	^	^	^
Implement CBRM+ sites		^	X	х	Х	Х	Х
Provincial planning meetings for policy and discussion of ICM approaches				Х	Х	Х	Х
Transboundary and international issues		Х	Х	Х	Х	Х	Х
BSSE turtles		Х		Х		Х	
Others?							
Sustainability strategy		Х	Х	Х	Χ	Χ	Х
Incorporation into government budgets (promote)		Х	Х	Χ	Х	Х	Χ
Cost and effectiveness monitoring			Х	Χ	Χ	Χ	Χ
Sustainable financing options				Х	Х	Х	Х
[Training,] Education and awareness raising							
EBM/CBM/ICM awareness materials (written, radio, video, theatre?)							
Design of materials		Х					
Design awareness strategy		Χ					
Implement and monitor awareness strategy (national and provincial)			Χ	Χ	Χ	Χ	Χ
Targeted capacity building							
Design strategy and curriculum and review		Х		Χ			
Implement inc. mentoring and followup		Х	X		X		
Provincial, communities and support networks Follow up and refreshers			Х	v	X	v	v
Assess and address school curricula				X	Х	Х	Х
				X			
Address professional training				Х	Х	Х	Х
Data and information							
Collation of existing information and info management system							
Design information management approach and protocols		Х	Х				
Produce database and annotated bibliography			Χ	Χ			
Design and implement simple GIS			Х	Χ			
Operate info management system				X	X	X	X
Disseminate information Manitoring				X	X	X	X
Monitoring Toward descent		X	X	X	X	X	X
Targeted research		X	X	X	X	X	X
Stock assessment/priority species e.g. dolphins, turtles, LRF		Х	Х	Х	Х	Х	Х
Vulnerability and adaptation assessment processes		.,	.,	.,	.,	.,	.,
Vulnerability and adaptation assessments as part of CBRM+ in communities Vulnerability and adaptation assessments at provincial level		Х	X X	X X	X X	X	X
Oversight of info and gap analysis			x	×	×	X	X
Oversight of find and gap analysis			_	^	_	_	
Implementation of CBM/EBM/ICM							
Operationalize jointly prepared strategies and materials		Χ	Χ	Χ	Χ	Χ	Χ
Implement capacity building		Х			Х		
Implement awareness strategy		(.)	Х	Х	Х	Х	Х
Implement CBRM/EBM at community level in first phase provinces		(x)	Х	Х	X	X	X
Implement CBRM/EBM at community level in second phase provinces					Х	Х	Х
Implement provincial level EBM/ICM				Х	Х	Х	Х
Supplementary livelihoods MFMR, MAL, Forestry				Х	Х	Х	Х



Donor and funding availability

Funding for the Solomon Islands CTI NPoA

Donors, including the United States, the Global Environment Facility and the Asian Development Bank, have pledged US\$250 million to finance the implementation of the CTI Action Plan across the region.

The two major funding sources that will invest new cash in to the Solomon Islands CTI are the USAID funded Coral Triangle Support Partnership (CTSP) and the ADB-GEF "Coastal and Marine Resources Management in the Coral Triangle of the Pacific". The total funding expected from these two sources is in the order of US\$ 4.5 million over 4-5 years (Table 3). Both of these funding sources are expected to base their investments in Solomon Islands on the NPoA.

Table 3. New funds available for implementation of the CTI-CFF in Solomon Islands. (US\$ excluding Project Preparation Grants, Agency fees, In-kind Contribution etc).

Source and duration	GEF/ADB	USAID
	4 years	5 years
GEF	1,818,500	
(Biodiversity)		
GEF	586,400	
(International Waters)		
GEF	181,820	
(Climate Change)		
ADB	[200,000]	
(RETA study – phase 1)		
USAID		~2,000,000
CTSP		
Total	2,786,720	~2,000,000

ADB-GEF "Coastal and Marine Resources Management in the Coral Triangle of the Pacific"

GEF financing is provided from three strategic Programming Focal Areas:

- **Biodiversity** which seeks to move away from single project site based funding to programmatic support across sites, contemplates amongst other things "increasing representation of effectively managed marine PA areas in PA systems to reduce the gap in marine ecosystem coverage". Implementation is through at least 3 long term objectives:
 - o To catalyze the sustainability of biodiversity conservation in protected area systems,
 - o To mainstream biodiversity in Production Landscapes and Sectors.
 - o To build capacity on access and benefit sharing
- **International Waters:** the application of integrated ecosystems based approaches to management of trans-boundary water issues or, broadly, Integrated Coastal Management. and seeks to achieve the following strategic programs:
 - o Restoring and sustaining coastal and marine fish stocks and associated biological diversity.
 - o Reducing nutrient over enrichment and oxygen depletion from land based pollution of coastal waters in large marine ecosystems consistent with the Global Program of Action.

• **Climate Change:** The piloting of adaptation to address the adverse effects of climate change, including variability.

USAID funded Coral Triangle Support Partnership (CTSP)

USAID funded the Coral Triangle Support Partnership (CTSP) as a platform from which the combined experience and technical depth of the World Wildlife Fund (WWF), The Nature Conservancy (TNC) and Conservation International (CI) could be brought to support the six nations of the Coral Triangle (Solomon Islands, Papua New Guinea, Timor Leste, Indonesia, Malaysia and Philippines – the CT6).

Total funding for the project, administered by WWF, is US\$ 45,088,247 for five years including US\$32 million from USAID and an estimated US\$13 million (41% of USAID funding level) from the three consortium partners. The grant was provided by USAID through a Cooperative Agreement (CA) signed on September 30, 2008. The CTSP involvement for Solomon Islands is estimated to be around US\$ 400,000 per annum for 5 years. In addition some non-cash support will be provided by the USAID Program Integrator (based in Bangkok) through regional learning networks and regional visit.

Other funding sources relevant to the Solomon Islands CTI NPoA

A number of projects and funding sources have been identified that are relevant to the functions, activities or institutions identified in the NPoA, a full list is provided in Annex 2. The most relevant projects are:

Sustainable Land Management (SLM)	US\$475,000	2008-	Donor: GEF
		2012	Government: MAL
			Implementing Agent:
			UNDP
Strengthening Ministry of Environment	US\$2,900,000	2009-	Donor: UNDP/GEF
(UNDP)		2012	Government: MECM
			Implementing Agent:
			UNDP/MECM
Pacific adaptation on Climate Change	Country	2008-	Donor: GEF
(PACC)	allocation to be	2012	Government: MAL
	determined		Implementing Agent:
	Regional:		SPREP
	US\$13,475,000		
Integrated Water resource Management	US\$515,000	2008	Donor: GEF
(IWRM)		- 2013	Government: MME
			Implementing Agent:
			SOPAC
GEF Small Grant Programme (SGP)	US\$150,000 per	2007	Donor: GEF/NZAID
	year	- 2010	Government: MECM
			Implementing Agent:
			UNOPS
Country Action Grants for Programme of	US\$149,000	2008	Donor: GEF
Work on Protected Areas (POWPA)		- 2010	Government: MECM
			Implementing Agent:
			UNOPS
Fisheries Sector Program (FSP)	~NZ\$2,000,000 /	2010 -	Donor: NZAID
	year	2020	Government: MFMR
Pacific Adaptation Strategy Assistance	AUD 700,000? For	2010?	Donor: Ausaid
Program (PASAP)	SI		

Perhaps the three most relevant projects are:

Strengthening Ministry of Environment: This project will be "direct implementation/direct execution" (DIM/DEX) modality where the fund is directly disbursed by UNDP. Strengthening of MECM will include infrastructure improvements, graduate training and an environmental volunteer scheme. This provides an opportunity to address some of the needs for further education and scholarships identified during NPoA consultations.

Fisheries Sector Program (FSP): This program is anticipated to be relatively well funded though it is to cover diverse objectives of offshore fisheries development, inshore fisheries development and institutional development. Areas of particular relevance to the NPoA relate to community based management, provincial and community policy development, capacity building, information and database development and graduate training.

Pacific Adaptation Strategy Assistance Program (PASAP): This new program is still very much in the design phase but is reported to have a focus on Integrated Coastal Zone Management including detailed assessment of climate change impacts on coastal habitats and fisheries in the Roviana / Vonavona pilot area.

Clearly significant investments are being made with much potential for synergy and also overlap. A key challenge is that most donors do not directly support government staff salaries or infrastructure. The risk substantially increasing the demands on existing staff while not significantly increasing their capacity to deliver must be carefully considered. It is suggested that the NPoA and the NCC could be used to ensure coordination and maximum synergies for these and other projects.

Resourcing the NPOA

Resourcing the NPOA presents several challenges:

- Donors prefer clearly demarcated demonstration, pilot or target areas which receive their support. This runs some what counter to the NPOA's nation-wide approach and previous experiences with over-resourced and over-engineered demonstration areas.
- The CTI-CFF has represented an unprecedented attempt to coordinate across sectors and stakeholders at international and international levels. What is needed is a similar degree of coordination and collaboration between donors at national level.
- The complexities of individual donor requirements and the relatively small amounts of funding available from each donor suggest that project management alone may be the largest obstacle to implementation of the NPOA.
- New donors and projects are continually emerging that are interested in topics covered by the NPOA. The risks of duplicating or over-burdening existing government staff area real unless donors can coordinate.

Coordination and project management

The challenges mentioned above combined with the "mainstreaming" and "integrated management" intentions of the NPoA strongly suggest that a coordination mechanism be maintained for donors and national stakeholders relating to the NPoA topics. This mechanism could most likely be a continuation of the NCC and an appropriate executive body in the form of the existing or modified CTI Unit. This coordination unit may offer opportunities for assuming the administrative and accounting burdens associated with the management of the various donor contributions. It is suggested that CTSP and ADB-GEF (and other donors if possible) explore the opportunity and as a minimum ensure that key

project management staff are engaged at this level. The possibility of the CTI Unit carrying out Project/Programme Management Unit functions needs to be further explored.

Preliminary budgeting of the NPoA

An initial costing exercise of the NPOA components described above has been commenced. Table 4 shows minimum estimated amounts for major headings under the four NPoA themes but excluding incremental salary costs (those not covered by government line salaries) and excluding professional training, targeted research and supplementary livelihood and restoration activities. These calculations are indicative only and based on available budget information for projects from FSPI, WorldFish and WWF.

Table 4. Preliminary costing (US\$) of NPoA activities over the five year period from 2010-2014 excluding incremental salary costs and professional training, targeted research and supplementary livelihood and restoration activities. Potential lead (1) or supporting (2) CTI partner donors are highlighted.

	2010	2011	2012	2013	2014	Est. US\$ 2010 - 2014	CTSP	ADB-GEF
Policy and strategy								
NCC, CTI unit, strategy, roles and coordination, and SILMMA	60	60	60	60	60	300	1	1
Technical and consultative inputs to implementation	40	20				60	1	
Develop national policy and legal environment	10	10	30	30	30	110	1	2
Provincial policy and planning (joint) and ICM	15	20	30	50	50	165	2	1
Transboundary and international issues (inc turtles, BSSE)	30	30	30	30	30	150	1	
Sustainability strategy (concept papers for SIG, research)	Χ	10	10	10	10	40	2	1
[Training,] Education and awareness raising								
EBM/CBM/ICM awareness materials and implementation	70	50	50	70	70	310	1	
Targeted capacity building - national and provincial	80	50	25	40	25	220	1	
Assess and address school curricula			30	?	?	30		
Address professional training			?	?	?	?		
Data and information								
Collation of existing information, produce info management system, biblio,	50	60	70	50	50	280	1	2
Monitoring	50	50	50	70	90	310		1
Targeted research	?	?	?	?		?		1
Stock assessment/priority species e.g. dolphins, turtles, LRF	50	50	50	50	50	250	2	
Vulnerability and adaptation assessment processes	30	40	50	50	50	220	2	
Oversight of info and gap analysis		50	70	70	70	260		1
Implementation of CBM/EBM/ICM								
Operationalize jointly prepared strategies and materials	100	140	140	234	234	848		
Implement CBRM/EBM at community level in 2 first phase provinces	Х	140	140				1	1
Follow-up CBRM/EBM at community level in 2 first phase provinces				94	94		1	1
Implement CBRM/EBM at community level in 2 second phase provinces				140	140			1
Follow-up CBRM/EBM at community level in 2 second phase provinces								
Implement provincial level EBM/ICM		50	100	100	150	400		1
Supplementary livelihoods MFMR, MAL, Forestry			?	?	?	?		
TOTAL						3,953		

Assumptions and further costs

Salaries are usually a major component. In the particular case of the NPoA the relevant donors will not allow funding of government line positions. This may reinforce the NPoA aim of ensuring that systems developed are supported in the long term but will represent a challenge in the short term as national and provincial staff will need to be available.

A tentative listing of government staff required for implementation and incremental staff costs for implementation (which would be funded by donors) is shown below based on available information though further discussion is required.

National staff (SIG match funding):

•	MFMR	Full-time	Coordinator CBRM/SILMMA
•	MFMR	Partial	Inshore Fisheries Director
•	MFMR	Partial	Inshore Fisheries officer
•	MFMR	Partial	Donor liaison, legal, planning officers
•	MECM MECM MECM	1-3 Full-time Partial Partial	CTI Unit, admin and coordination Protected Area, EIA, Endangered sp. staff Climate change officers
•	Other Mins.	Partial	Forestry, Lands, Planning, Legal

National technical assistance and short term staff (donor funded)

•	CTSP focal point	Full time	NGO or CTI Unit based
•	CTSP support	1-2 Full time	NGO or CTI Unit based
•	CTSP capac. building coordinator	Full time	CTI, Min or NGO based
•	FSP Adviser/coordinator CBRM?	Full time	MFMR or CTI unit based?
•	ADR TA?	Full time	77

Province based staff (Province/SIG match funding):

•	MFMR	1 Full time	Fisheries officer, per implementation province
•	Prov. Gov.	1 Full time	Fisheries officer, per implementation province
•	Prov. Gov.	Partial	Admin, PS, Health, Tourism etc.
•	MECM	Potential	Meteorological officers, potential role TBD
•	MECM	Projected	Environment officers in corporate plan

Province based staff (donor funding – CTSP, FSP or volunteer):

•	CBRM+ ICM mentor	Full time	Based in each implementation province
•	NGO staff	Various	Assistance from NGOs

The national and provincial government staff listed above need confirmation and commitment from the respective ministries. The donor funded positions will require additional financial commitment to that listed in Table 4.

For the purposes of budgeting CBRM+ implementation at the provincial level each province is assumed to cost US\$70,000 for the first 2 years and around US\$47,000 for follow-up over the two subsequent years based on the following breakdown:

Cost of provincial CBRM+ (per province - avg.)	startup	Follow- up	ongoing
Transport (access to fibre glass canoe, outboard motor, and/or			
truck)	10,000	7,000	7,000
Fuel costs	40,000	30,000	30,000
Per diems	10,000	5,000	5,000
Workshop expenses (food, materials)	10,000	5,000	
Total:	70,000	47,000	42,000

These figures <u>do not</u> include any costs associated with transporting national officers to the province to participate in implementation.

Potential donor support of the NPoA

Table 4 makes suggestions regarding the potential best fit of the donors considered to be partners in the CTI with commitments to support of Solomon Islands priorities. In broad terms the technical facets of each donor would be:

CTSP: Awareness materials and strategy, capacity building, aspects of national policy and implementation of CBRM+ in at least two provinces.

ADB/GEF: Development and implementation of ICM approach at national and provincial level, data management and monitoring, targeted research, implementation of CBRM+ and ICM in at least two provinces and ICM in two CTSP provinces.

Donors that have plans to fund activities that could potentially be relevant to NPOA priorities and activities include NZAID and Ausaid. Though discussions are progressing, donor intentions are not yet clear. It is suggested that in future discussions the NPOA be used as guidance in donor coordination and that the following areas might be considered.

FSP: Capacity building and professional training, stock assessment, supplementary livelihoods and implementation of CBRM+ and ICM at provincial level.

PASAP: Vulnerability and adaptation assessments, targeted research and monitoring, aspects of ICM, implementation of NAPA.

All donors: Investment in and commitment to the national coordination mechanism – NCC and CTI unit. Support provincial implementation and national and provincial policy development.

Sustainable financing approaches

Approaches to achieving financial sustainability of the NPoA aims that have arisen during consultation are:

- A number of stakeholders lament that the committed donors are not able to consider the use of trust funds as the amounts concerned could generate a large proportion of anticipated yearly costs.
- A component of NPoA implementation is intended to address securing long term SIG commitment to the minimum operational costs involved in supporting CBRM+ and integrated management from the National development budget and recurrent budget commitments
- It is considered vital to implement good financial management ensuring:

- Monitoring and reporting
- o Budgeting and forecasting
- o Assess and improve cost effectiveness of approaches
- o Financing gap management and determining priorities
- Securing good financial management may require the establishment of a coordinated unit sharing available project administration expertise, potentially under the CTI unit.
- Explore other funding mechanisms such as private partnerships, terrestrial community conservation incentives, trust funds (community or for government).

Monitoring, targets and indicators

A component of NPoA implementation will be designing a system of monitoring that is adequate and yet does not represent an unrealistic and ongoing burden to provincial and national authorities. Some communities may choose to carry out monitoring of their own actions but the burden of monitoring for provincial and national purposes cannot rest with communities. Potentially a subset (representing e.g. geographic spread or key habitats) of community sites may be selected for more intensive monitoring by national or provincial stakeholders. Targets and indicators for the NPoA may include:

Numbers of policies drafted, approved or implemented:

- National policies, plans, strategy and legislation
- Provincial ordinance, strategy, plans, agreements
- Community plans

Area of sea or land:

- Under improved management
- Under a particular category of management (e.g. no-take)
- Affected by particular policy or agreements

Data on reef/shallow sea and land areas is summarized in Table 5 based on extended data sets presented in Annex 5. Geospatial data sets are also available. The CTSP project has proposed a target of some 552.5 Km² of reef and shallow areas, this equates to just under one third of the area equivalent to the 50% of coastal marine areas stated in as a target in the NPoA.

Table 5. Summary data on reef/shallow sea and land area coverage in Solomon Islands.

	Reef and shallow areas		Land	
	Total (km²)	50%	Total (km²)	50%
Central	135	67.5	615	308
Choiseul	266	133	3,837	1,919
Guadalcanal	83	41.5	5,336	2,668
Isabel	502	251	4,136	2,068
Makira	158	79	3,188	1,594
Malaita	681	340.5	4,225	2,113
Renbel	192	96	671	336
Temotu	1,029	514.5	895	448
Western	545	272.5	5,475	2,738
Total	3,591	1,796	28,378	14,189

Annex 1: Solomon Islands policy and legislative context relevant to CTI-CFF

Key national legislation and policy

- Environment Act
- Wildlife Management Act
- Protected Areas Act
- National Biodiversity Strategy and Action Plan NBSAP
- National Adaptation Programmes of Action (NAPA)
- Fisheries Act
- Draft revised Fisheries Act
- Coastal Community Fisheries Strategy
- SI National Strategy for the Management of Inshore Fisheries and Marine Resources
- Solomon Islands Agriculture & Rural Development Strategy 2007
- MFMR/MECM corporate plans

International instruments

- Convention on Biological Diversity
- Millennium Development Goals
- UN Framework Convention on Climate Change
- Programme of Work on Protected Areas under the Convention on Biological Diversity [PoWPA]

Other relevant policy and strategy documents

- Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES)
- Forest Resources and Timber Utilisation Act
- Sustainable Land Management
- Solomon Islands Agriculture & Rural Development Strategy (ARDS) 2007
- Disaster Risk Management National Action Plan (NAP)
- SPREP agreement
- Marine Turtle Strategic Action Plan for Solomon Islands
- Navy?
- Convention on the Conservation of Migratory Species of Wild Animals
- World Heritage Convention
- Tuna Management Plan and associated international agreements
- Bismarck Solomon Seas Ecoregion Trinational MoU
- National Capacity Self Assessment

NPoA Vision and principles

Key MFMR and MECM policy overlaps

Top-level policy – strong overlap **MECM NBSAP/NAPA/CP**

"...sustainable management and utilization for better livelihood ... of Solomon Islanders" (NBSAP 5.1-2)

People-centred, precautionary, recognize traditional values (NBSAP 5.3.4-7)

Integrate national issues in a holistic way so as to adapt to climate change, restore damaged ecosystems and ensure their survival in the long term. (MECM Corporate Plan --Policy Goal) - economic activities (SMIFMR Principles)

Themes and actions = strong overlap -----MECM NBSAP/NAPA/CP

Protected Area system: Community Based Management approach is the intended approach for conservation and sustainable management of marine resources in SI.

Collate experiences, develop a management framework which accommodates CBM, tabus and others approaches.

Supportive legislation. (NBSAP 5.6)

Build institutional capacity (of ECD): Establish Climate Change Division. Increase capacity at provincial level (ECM Strategies 12.1.2, 3 and 5)

Sustainable livelihood alternatives: for "PA communities" (NBSAP 5.6)

Research, monitoring and information sharing: improve information and monitoring systems for biodiversity data (NBSAP 5.11)

Species conservation: plans for sustainable harvesting and management, build capacity, create awareness NBSAP 5.5

Financial: Trust fund and SIG long-term support for PAs (NBSAP 5.6) and relationships with existing and new donors. (NBSAP 5.9)

Climate change: build capacity at all levels to address climate change issues in biodiversity conservation. (NBSAP 5.13, NAPA)

Coastal protection, Fisheries and Marine resources. Manage and rehabilitate reefs and mangroves. Coastal zone management, traditional resource management. Awareness. Monitoring (NAPA 5.4-5)

Mainstreaming biodiversity: conserving biodiversity integrated into legislation, strategies etc. NBSAP 5.4

MFMR Strategies

"Sustainable and secure inshore fisheries and marine resources by 2020" (SMIFMR Vision)

People-centred, customized to SI, ecosystem approach (SMIFMR Principles)

Multisectoral approach to Environmental Governance incorporating wider ecosystem health, land-use and

MFMR Strategies

NPoA Goal

Community Based Resource Management: CB initiatives will be the engine of sustainable economics development in the inshore marine resource sector. Developing and refining community-based management plans and testing livelihood diversification/supplementation strategies (half of SI villages in CBM by 2015). Enabling legal environment that supports communities.

Integrate NGO initiatives-in SMIFMR. (SMIFMR Principles and activities)

Leadership and institutional strengthening: Create inshore fisheries management division, strengthen government provincial and fisheries capacity. (SMIFMR Principles and activities)

Livelihood supplementation options: test in 3 FADs, freshwater provinces, culture, seaweed. (SMIFMR Activities)

Stock assessment and information systems: Develop stock assessment for 3 national fisheries plans, develop information systems to monitor trends in key fisheries and species. Fisheries fora and networks for information exchange at all levels (SMIFMR Activities)

commercial species: Develop management plans for BdM, trochus, corals, dolphins and LRFT. (SMIFMR Activities)

Financial: Self sustaining and cost effective and therefore fundable from SI resources. Attract SIG budgetary support. (SMIFMR Principle 6)

Climate change: management approaches that allow for fisheries to absorb stress and reorganize.

Ecosystem approach encompasses resilience to variability, adaptation to climate change, biodiversity conservation, coastal zone.

Adaptive management. (SMIFMR Principles 1, 2, 4, 7)

Fisheries cannot be managed in isolation: multisectoral approach to environmental governance incorporating land-use, wider ecosystem health. Integration of policy and implementation among ministries at national and provincial level. (SMIFMR Principle 4)

Excerpts from Solomon Islands Agriculture & Rural Development Strategy (ARDS) 2007

The ARDS and the proposed NPOA are closely aligned and mutually supportive while providing important guidance on CTI NPOA strategy, as demonstrated by the following excerpts:

- 8. The Government foresees responding to rural Solomon Islanders by focusing on three areas: (a) local participation of rural communities in economic development, including through strengthening provincial governments; (b) supporting agriculture, infrastructure and rural finance services; and (c) improving the management and sustainability of the country's rich natural resources. [...]
- 9. Improving local governance and service delivery will support rural growth directly and indirectly. It responds to rural households demand for greater participation in economic development and decisionmaking, and more transparency and accountability of public spending, including at the local level. Properly resourced and well-functioning local governments could provide the indispensable connection between rural communities and the Central Government while improving service delivery in rural areas and contributing to a more favorable investment climate. The Solomon Islands needs to strengthen its national institutions and systems and gradually build their capacity to deliver critical public services and infrastructure in rural areas.
- 10. Making better use of public resources for rural development: strengthening Government systems. Available resources could be used in a more transparent and efficient manner. Support from central agencies is required to improve planning and budgeting systems, both in sector agencies and in the provinces. Predictable resources are needed to move away from ad hoc, uncoordinated rural development investments at the local level and toward more efficient, consistent, and sustainable local development initiatives. In the short to medium term, this could be achieved locally by strengthening simple participatory planning processes on the basis of a predictable resource envelope. This could be done at the provincial level and lower level (depending on the governance structure and size of the province, for example). [...]
- 11. *Improved rural service delivery mechanisms*. Service delivery will remain expensive particularly in more remote areas, and hard choices need to be made in terms of the level of service that can be provided from public resources. *In the short to medium term*, because of insufficient capacity and scarce resources, strengthening partnerships among public public sector agencies, the private sector, and nongovernmental organizations (NGOs) is likely to be the most efficient way to improve service delivery. [...]
- 12. Assuring the linkages among all stakeholders. Local governments, strengthened and accountable to local communities, will be needed to ensure coordinated service provision in rural areas. This can be done through improved linkages between provincial governments and rural communities, as well as central agencies and provincial governments. In the short- to medium-term, provincial governments must have clarification of their specific responsibility for service delivery. Their capacity to implement these functions should be made adequate. And all partnerships with sector agencies (at national level) and with service providers (community-based or private sector at the local level) should be strengthened. Resource transfers to provincial governments would be increased as their capacity for service delivery is built. Progress is expected to be uneven in different provinces, and support would have to be tailored to their respective situation and needs. The possibility to directly involve communities in the management of village development resources would also be tested. In the medium- to long-term, local governance reforms could be consolidated in particular through whole-of-government civil service reform and consolidation of the fiscal position of local governments.
- 21. Fisheries resources management: local and international partnerships. The potential contribution of the fisheries sector to the rural economy has not been fully realized. The key to greater and more sustainable fisheries resource contribution to the rural economy will be both local and international. At the local level, in the short to medium term, successful resource management

initiatives involving local communities need to be promoted, and the capacity of local fisheries officers to facilitate them gradually built. Business management training needs to be provided to support private sector involvement. At national level, strengthening management of offshore fisheries resources will be a long-term process, which could start with further prioritization of the recommendations of the Tuna Management and Development Plan Review. *In the longer term*, continued improvement of governance and institutional reforms in the sector will be needed, as well as stronger involvement in regional cooperation on resource management.

23. Localizing the ARDS: a tailored approach in each province. Substantial resources are expected to be available in the short to medium term to implement the priorities identified in the ARDS. Progress is already under way in addressing them. Some areas have been identified; however, where there are inconsistencies in approaches, policies and further dialogue are needed to resolve those differences and ensure that resources are not wasted through conflicting efforts. There are examples where potential conflicts could arise: the way donor resources are programmed and channeled in the provinces; the focus of agricultural extension services; and the role of the public sector with regard to the provision of rural finance.

ARDS Recommendations include:

- 1. Make better use of available resources.
- Strengthen planning
- Strengthen public budgeting process
- Improve public financial management
- 2. Improve rural service delivery mechanisms.
- Strengthen local government
- Strengthen community involvement in local development
- Strengthen the capacity of the private sector and NGOs to deliver services
- 3. Implement policies supportive of rural development.
- 7. Support the adaptation of land tenure systems.
- 9. Improve fisheries resources management through local and international partnerships.

Principles for NZAID engagement from New Zealand / Solomon Islands Programme Strategy (2009-2018) - excerpts

- 3.1 Build on local strengths, leadership and ownership, and support and strengthen existing systems and structures.
- 3.2 Build relationship, accountability and engagement between government and its citizens.
- 3.3 Promote an inclusive society through inclusive, equitable development
- 3.4 Deliver visible results, particularly in rural areas, in the short-medium term
- 3.5 Set realistic timeframes, ensure predictability, avoid over engineering
- 3.6 Take managed risks, accept mistakes will be made
- 3.7 Develop and promote programmatic approaches
- 3.8 Promote mutual accountability, disciplined and responsible partners
- 3.9 Promote donor coordination and harmonization

Annex 2: Donor projects relevant to CTI NPOA¹

Project/	Theme	Country	Time	Implementin	Description of project outcome
	Theme	•		_	
Programme Sustainable Land Management (SLM)	National Land management	Resource US\$475,000	Start: Apr 2008 End: Mar 2012	g framework Donor: GEF Government: MAL Implementing Agent: UNDP	and activities - Implementing sustainable land management into each level of decision making; from remote farming communities, to provincial government administrations, to the national level agencies responsible for rural land management and economic development in Solomon Islands - Raising community awareness of the need for integrated approaches for SLM. - Developing land use regimes and integrated resource management policy processes to improve the capacity and vertical linkages between the national and
Isabel Conservation Project	National Biodiversity	US\$186,000	Start: Apr 2008 End: Dec 2009	Donor: UNDP Government: MECM Implementing Agent: UNDP	provincial levels of government. - Developing a mechanism for community-led resource management for biodiversity conservation in Solomon Islands. - Enforcing national and provincial legislation appropriately. - Environmentally friendly alternative livelihood approach that contributes to reduce pressure to natural resource exploitation
Strengthening Ministry of Environment	National Multi-focal area	US\$2,900,000 direct implementatio n/ direct execution funds disbursed directly by UNDP to providers	Start: Jul 2009 End: Jul 2012	Donor: UNDP/GEF Government: MECM Implementing Agent: UNDP/MEC M	- Strengthening the capacity of newly established Ministry of Environment, Conservation and Meteorology (MECM) from tree dimensions: 1) policy development and implementation, 2) better use of scientific knowledge for effective monitoring process, and, 3) information management and reporting Establishing framework for community capacity development to environmental conservation and adaptation to climate change.

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¹ sources UNDP June 2009, NZAID, MECM, http://web.worldbank.org

Project/	Theme	Country	Time	Implementin	Description of project outcome
Programme		Resource	frame	g framework	and activities
Pacific Islands Ocean Fishery Management (PIOFM)	Regional Biodiveristy	No country allocation Global = US\$11,644,00	Start: Oct 2005 End: Sep 2010	Donor: GEF Government: MFMR Implementing Agent: FFA	- Improving understanding of the trans-boundary oceanic fish resources and related features of the Western and Central Pacific Warm Pool Large Marine Ecosystem - Creating new regional institutional arrangements, and reform, realign and strengthen national arrangements for conservation and management of trans-boundary oceanic fishery resources
Pacific adaptation on Climate Change (PACC)	Regional Climate change adaptation	Country allocation yet to be determined Regional: US\$13,475,00	Start: May 2008 End: May 2012	Donor: GEF Government: MAL Implementing Agent: SPREP	- Implementing long-term adaptation measures to increase the resilience of a number of key development sectors in the Pacific islands to the impacts of climate change - Key development sectors: 1. water resources management; 2. food production and food security; and 3. coastal zone and associated infrastructure (roads and breakwater)
Integrated Water resource Management (IWRM)	Regional Pollution control	US\$515,000 Regional total = US\$9,748,000	Start: Sep 2008 End: Sep 2013	Donor: GEF Government: MME Implementing Agent: SOPAC	- Strengthening the capacity of countries to implement an integrated approach to the management of their water resources Focus areas include: protection of water supplies; management of land-based sources of pollution; coastal area management including protection of marine waters; hazard assessment, risk management and disaster preparedness.
GEF Small Grant Programme (SGP)	Global Multi-focal area	US\$150,000 per year	Start: July 2007 End: June 2010 (fourth cycle)	Donor: GEF/NZAID (and Ausaid) Government: MECM Implementing Agent: UNOPS	- Delivering global environmental benefits on biodiversity, climate change, land degradation, international water and persistent organic pollutants through community-based approach - Local NGO and CBO will receive up to US\$50,000 grant based on the relevance to its Country Programme Strategy
Country Action Grants for POWPA	Global Biodiversity	US\$149,000	Start: May 2008 End: May 2010	Donor: GEF Government: MECM Implementing Agent: UNOPS	- Legal basis improved for protected areas in Solomon Islands - Completed ecological gap analysis proposing a plan for protected areas accounting for community engagement

Project/	Theme	Country	Time	Implementin	Description of project outcome
Programme		Resource	frame	g framework	and activities
Fisheries	Fisheries	~NZ\$2,000,0	2010 -	Donor:	-Detail due in October 2009
Sector Program		00 / year	2020	NZAID	-To include governance, fisher
					livelihoods
Rural	Rural	US\$22,000,00	2007 -	Donor: World	-includes provincial and ward
Development	development	0	2012	Bank	level planning
Programme				(Ausaid,	-infrastructure, income
				ADB, EU)	generation, agriculture
				Government:	-First phase Malaita, Temotu,
				MDPAC	Choiseul and Western Province
				Implementing	
				Agent:	
				MDPAC?	
Pacific	Climate	AUD		Donor:	Western Province, Roviana?
Adaptation	change and	700,000? For		Ausaid	
Strategy	adaptation	SI		Government:	
Assistance					
Program				Implementing	
(PASAP)				Agent:	

Other support programmes relevant to the CTI NPOA include:

- JICA. Japan International Cooperation Agency. Fisheries support.
- OFCF. Overseas Fishery Cooperation Foundation of Japan. Fisheries support.
- AusAID Rural Livelihoods Program. In design phase.
- EU Rural Advancement Micro-project Program.
- VSA. Volunteer Service Abroad, NZ. Provision of skilled development volunteers
- Various NGO projects and programmes. The full details of these are outside the scope of the study but they include:
 - National and provincial networking of stakeholders for capacity building and integrated management (all NGOs, FSPI)
 - Community based resource management and protected areas: TNC, WWF, Worldfish, FSPI
 - Sustainable/supplementary livelihoods: TNC, WWF, Worldfish, FSPI
 - Mangrove and forestry: WWF, FSPI
 - Climate change: WWF, all NGOs
 - Threatened species: WWF, TNC

Annex 3: Detail of the NPOA themes

Priority activities that emerged during the consultative process were arranged in the following cross-cutting themes.

Theme 1: Support and implementation of Community Based Resource Management

An improved Community Based Resource Management (CBRM+) approach will be the building block of the NPOA through which at least half the coastal population or coastal areas will have improved food security and resource management by 2015. The emerging importance of ecosystem approaches, vital role of key species and habitats and need to incorporate adaptive strategies will be incorporated in a model of CBRM+ or Community Based Adaptive Management (CBAM) based on Solomon Island experiences at over 80 sites to date and the constraints facing support institutions in the long-term.

In accordance with the stated priority of maximizing people-centred impacts at community level it is proposed to initiate implementation at village level as soon as possible. Implementation will be able to build on existing progress in certain provinces and also use these experiences to engage with provinces which so far have not received support but are regarded as high priority. A staggered approach to engaging with new provinces will allow opportunity for incorporating lessons learned, tailoring approaches to each province as well as reducing staffing and financial burdens of simultaneous nation-wide approaches. The implementation will require evaluation and coordination of the approaches currently taken by different partners, design of appropriate strategies, institutional strengthening and capacity building of key implementers.

National plan activity matrix for Theme 1: Support and implementation of Community Based Resource Management for conservation, resource management and adaptation.

Major activities

- 1. Prepare integrated CBRM approaches for staggered national implementation
 - a. Develop national strategy for implementation of CBRM detailing institutional structures and staffing, phased geographic approach, networking opportunities, capacity building and institutional strengthening, awareness campaign, basic monitoring etc.
 - b. Develop best practice, guidance and **model for implementation of community based approaches** to fisheries management and protected areas which include ecosystem approaches and community strategies for adaptation to climate change and early warning of threatened species.
 - c. Reviews and assessments of national experiences (sustainable livelihood experience, awareness materials, capacity building, threatened species and communities)
 - d. Secure adequate staffing and infrastructure arrangements (e.g. transport) for first phase of implementation
- 2. Targeted capacity building and institutional strengthening
 - a. Design strategy for capacity building and institutional strengthening
 - b. Implement and follow-up (mentoring, networking etc)
 - c. Initial training and implementation of CBRM at selected sites and ongoing mentoring and top-up training

- d. Specific training and guidance for community managers, traditional leaders, local enforcement (empowered under acts), police or courts.
- e. Evaluate and improve capacity building strategy
- 3. Implement integrated CBRM in first phase provinces
 - a. Commence awareness strategy (e.g. radio programmes) and capacity building (see above)
 - b. Assessment and selection of first sites/areas for implementation at provincial level (based on criteria such as community commitment, suitability as a "seed" site etc.)
 - c. Follow up management planning with initial sites and assessment of new sites production of draft management plans/agreements
 - d. Follow up with supplementary activities where appropriate e.g. sustainable livelihoods or mangrove planting
 - e. Coordination and monitoring of implementation process and effectiveness and regular review and adaptation of implementation process. Provincial and national level.
 - f. Evaluation of provincial approach and divert national input towards second phase provinces as provincial capacity attained
- 4. Implement integrated CBRM in second phase provinces
- a. Improved CBRM implementation based on first phase experiences
- 5. Implement wider ecosystem approaches
 - a. National level sectoral coordination
 - b. Carry out provincial level awareness, assessments and planning with provincial stakeholders making use of networks and covering ecosystem and wider policy issues in an integrated fashion.
 - c. Support local ecosystem approaches in key clusters of communities or districts
- 6. Develop support networks for information sharing, capacity building, community involvement and ensuring linkages for ecosystem approach.
 - a. Support and develop national network (e.g. SILMMA)
 - b. Support and develop appropriate provincial or sub-provincial networks
- 7. Supplementary livelihood options available and tested
 - a. Assessment of social and economic viability (including market and value chain) of national experiences in supplementary livelihoods
 - b. Test livelihood options in the context of community management plans and appropriate to local context and issues (e.g. deploy low-cost locally maintained FADs, seaweed producer networks, spat collection for pearl culture)
- 8. Data gathering, gap analysis, feedback and sharing

Theme 2: Development of policy, legislation, partnerships and other strategies and guidance

Under this theme government (National and Provincial), non-government and other stakeholders develop a shared strategy for joint implementation and jointly advance the necessary legislative and policy frameworks including major Fisheries and Protected Area legislation. These fora also inform best practice and available information is input to the other themes regarding community level approaches to securing livelihoods, adaptation and conservation targets. This theme is a major opportunity for mainstreaming in practice.

National plan activity matrix for Theme 2: Development of policy, legislation, interinstitutional partnerships and other strategies and guidance.

Major activities

- 1. Establish coordination mechanisms
 - a. Formation of National Coordinating Committee (NCC) and operationalization
 - b. Define role of CTI Unit and operationalize including equipment and appropriate capacity building (e.g. project and good financial management)
 - c. Define role of SILMMA and commence liaison
 - d. Increase involvement of key stakeholders with land-based responsibilities (MALD, MOF, MLHS, MEMRE, Police, Patrol Boat)
 - e. Consider and define long term (post-CTI) institutional mechanism for coordination
 - f. Establish long term institutional mechanism for multi-sector coordination on sustainable development / ecosystem approaches / mainstreaming
- 2. Define institutional roles in collaborative work programme on policy development and outline implementation strategy.
 - a. Joint planning and reviews (Theme 1, 1a-c)
- 3. Develop national policy and legislative environment with partners and incorporating feedback from implementation experiences.
 - a. Finalize MFMR Community and Inshore Fisheries strategies
 - b. Draft and test template for simple community management plans
 - c. Finalize and launch NBSAP
 - d. Finalize review of Fisheries Act 1998 with due regard to Protected Areas policy development.
 - e. Produce Protected Areas policy discussion document with due regard to draft Fisheries Act and Inshore Fisheries Strategy
 - f. Review Wildlife Protection and management Act with regards to threatened species, CITES and update schedules.
 - g. Review penalties, legal procedures, role of police, elders and traditional leaders in enforcement.
 - h. Develop priority species management plans in consultation with provincial and community stakeholders.
 - i. Finalize protected areas legislation (as committed to under PoWPA) which specifically complements Protected Areas and resource management to be achieved under Community Based Fisheries Management contemplated in the revised Fisheries Act.
- 4. Develop provincial policy and legislative environment with partners and incorporating feedback from implementation experiences (supportive of CBRM and community plans).
 - a. Discuss and design appropriate approaches for provincial level policy (including customary) development across all sectors and with due opportunities for community involvement
 - b. Implement joint consultation (across sectors) for cost effective and wide involvement of provincial stakeholders in development of ordinances, plans, bylaws, priority species management plans (Fisheries, Environment, others to be identified)
 - c. Implement further provincial policy consultation or follow up events
 - d. Review penalties, legal procedures, role of police, elders and traditional leaders in enforcement.

- e. Finalize and produce policy
- 5. Ensure long term institutional support for policy processes with coordination between national and provincial levels and cost effective and sustainable implementation (collaborative arrangements)
 - a. Explore appropriate minimum assistance in terms of legal advice and ecosystem approaches with national and provincial Fisheries and MECM staff (e.g. health officers, Met staff)
 - b. Create and/or strengthen appropriate institutions. E.g. Inshore fisheries management division, provincial fisheries officers, health officers, Met. Officers, provincial environment officers etc.
- 6. Develop transboundary policy issues
 - a. Strengthen the regional BSSE Tri-national agreement between Indonesia, PNG and Solomon Islands to improve governance of sea turtles and potentially other transboundary resources and issues. Focus on liaison on capacity between signatories. Timescale, check with MECM

Theme 3: Data and information management for coordination and decision making

Progress in local and provincial natural resource management has vastly outstripped the documentation and collation of information. Existing information will provide a sound basis for strategic planning as well as determining priority gaps for research or monitoring but first it is essential to bring this information together and make it accessible to all stakeholders. Systems for managing and making available this information will need to be established.

Key issues that need to be resolved at an early stage include agreeing community confidentiality and other intellectual property protocols, capacity of existing data and information holders to extract and organize data and clarifying procedures and central clearing house for data transfer.

National plan activity matrix for Theme 3: Data and information management for coordination and decision making.

Major activities

- 1. Collate available information and establish data management systems
 - a. Design simple and effective information management approach and define roles and central information repository or repositories.
 - b. Develop and implement data sharing protocols and guidelines between government, NGO and community partners that respect traditional knowledge and proprietary sensitivities.
 - c. Production of annotated bibliography of information available at various national government and non-government agencies. Copies and digital scans made of all materials
 - d. Design and implement simple GIS system with user-friendly interface for staff and community access and updating e.g. Googlearth
 - e. Capacity building for data management
 - f. Ensure information is readily available or returned to all stakeholders
- 2. Monitoring of CBRM implementation and outcomes
 - a. Design and test simple process monitoring approaches for provincial CBRM implementation

- b. Develop basic community options for assessing progress and impact of their management (e.g. participatory subjective assessment, key indicators, catch/effort, etc)
- c. Design information management system to ensure community info including management plans are centrally available.
- 3. Targeted research and selected monitoring of biological and social parameters.
 - Design and implement more detailed monitoring of environmental and social impacts of CBRM implementation at selected key sites as indicator of overall progress.
 - b. Surveys and stock assessment of priority threatened and target species. Dolphins, LRF, BdM, Trochus, Crocodiles
 - c. Incorporate local knowledge of threatened or decreasing stocks of species as early warning on status of SI threatened species and critical stocks.
 - d. Rapid V and A assessment of information availability, priority adaptation issues and areas of particular vulnerability
- 4. Oversight, coordination and gap analyses based on data management systems
 - a. Regular meetings to ensure information system is functioning and accessible
 - b. Produce regular reports on status of key fisheries
 - c. Produce regular reports on status of key species and habitats
 - d. Produce first gap analysis indicating key habitats, conservation targets, socio-economic and poverty gaps that are not being or likely to be met under current approaches.
 - e. Produce cost benefit analysis of CBRM approaches

Theme 4: Education and awareness raising

Targeted capacity building in Theme 1 will require development of appropriate materials for field staff and communities based on the nationally agreed model for implementation of community based approaches to fisheries management and protected areas. Existing community and public awareness materials to complement this approach will need to be assessed and new materials produced. The awareness materials will be delivered through a strategy coordinated with the timing of implementation of CBRM and will involve multiple media including radio, theatre, posters etc as appropriate and maximize social marketing, networking and peer learning opportunities.

National plan activity matrix for Theme 4: Education and awareness raising. Major activities

- 1. Design appropriate awareness materials and strategy to support CBRM (inc. ecosystem approaches, climate change etc.)
 - a. Inventory and assess currently available materials and experiences
 - b. Design strategy for best impact at national, provincial and community levels and outline materials needed
 - c. Preparation of materials and radio messages. Topics to include: rationale for size limits, restricted gear, community management plans, sale of undersize fish, reproductive ecology, vulnerability and adaptation strategies, ecosystem and watershed issues, key species and management options.
- 2. Implement awareness strategy in coordination with CBRM
 - a. Implement strategy at national and provincial level

b. Monitor use and effectiveness

- 3. Assess school and other curricula for environmental education opportunities
 - a. Discuss with MoE and education organizations to identify gaps and opportunities
 - b. Prepare curriculum development plan
- 4. Enhance professional training of Solomon Islanders
 - a. Identify skills areas needed and appropriate training opportunities
 - b. Seek funding for scholarships

Annex 4: Solomon Islands <u>priority</u> actions for CTI targets as submitted to RPOA in March 2009

In the context of Solomon Islands, the Seascape concept expressed in the Regional Program of Action (Goal 1) merges with other national priorities and the bulk of regionally intended impacts will be achieved under other goals (such as ecosystems approach or networks of Marine Protected Areas). The one proposed area for priority action in the next 3 years particularly relevant to Goal 1 "Seascapes" will be addressed under the policy and partnerships theme, namely:

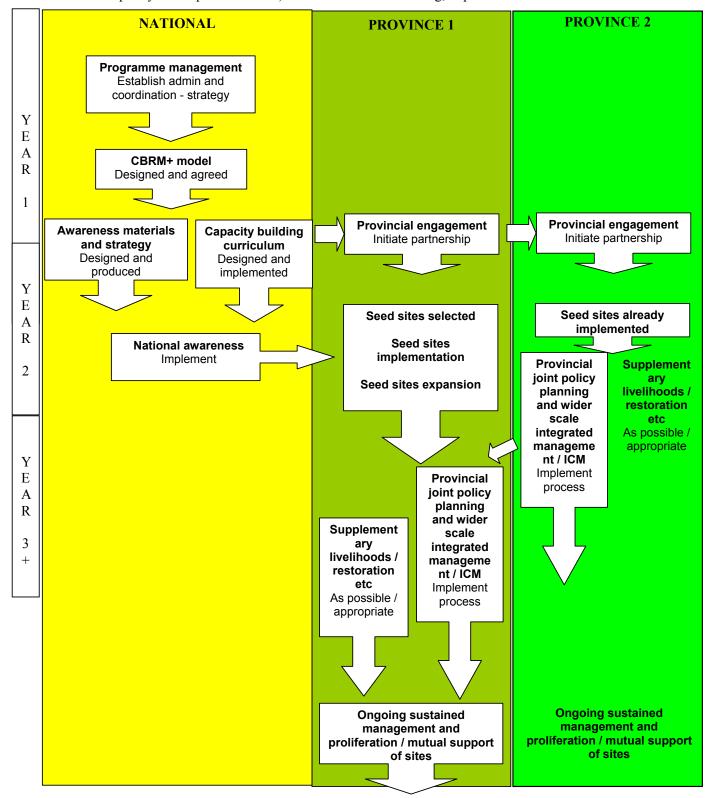
> Strengthen the regional BSSE Tri-national agreement between Indonesia, PNG and Solomon Islands to improve governance of sea turtles and potentially other transboundary resources and issues.

Goal #1: Priority Seascapes Designated and Effectively Managed	
Annotations explaining Goal #1: In the context of Solomon Islands, the Seascape concept merges with other national priorities and the bulk of regionally intended impacts will be achieved under other goals (such as ecosystems approach or networks of Marine	
Protected Areas).	
Target #1: "Priority Seascapes" designated, with investment plans completed and	
sequenced > Action 1: Strengthen the regional BSSE Tri-national agreement between	
Indonesia, PNG and Solomon Islands to improve governance of sea turtles and potentially other transboundary resources and issues.	2009 and ongoing
Target #2: Marine and coastal resources within all "Priority Seascapes" are being	•
sustainably managed	
➤ To be addressed under Goals 2-5	2009- 2012
Goal #2: Ecosystem Approach to Management of Fisheries (EAFM)	
and Other Marine Resources Fully Applied	
Annotations explaining Goal #2: Based on the geographical characteristics of Solomon	
Islands and the lessons learned to date it is apparent that core actions for conservation	
and food security will be carried out by communities themselves. It is envisaged that	
support and advice to communities will be delivered by national and provincial	
government and other partners through the framework for community based	
management contemplated under the draft Fisheries Act and Coastal Community	
Strategy and supported by the Wildlife Management Act and draft National Biodiversity	
Strategy and Action Plan (NBSAP) and other relevant strategies. This framework will	
provide for the community and provincial level implementation of ecosystem and	
livelihood approaches as well as for local fisheries management including fisheries no-	
take zones.	
Target #1: Strong legislative, policy and regulatory frameworks in place for achieving an ecosystem approach to fisheries management (EAFM)	
Annotations explaining Target #1: National and Provincial government, NGOs and	
other stakeholders develop a shared strategy for joint implementation and advance the	
necessary legislative and policy frameworks. Best practice and available information is	
used to design the model and guidelines for implementation of community level	
approaches to securing livelihoods, adaptation and conservation targets. These enabling	
environments for Goals #3, #4 and #5.	
Action 1: Define policy and institutional commitments to a harmonized and collaborative work programme and outline implementation strategy.	2009
Action 2: Consolidate the enabling environment: Finalize review of Fisheries Act	
1998 and adopt Coastal Community Strategy. Produce protected areas legislation (as committed to under PoWPA) which specifically complements	2009
ing. in the committee to an activity the complete to the compl	<u> </u>

	1
Protected Areas and resource management to be achieved under Community Based Fisheries Management contemplated in the revised Fisheries Act.	
 Action 3: Develop best practice, guidance and model for implementation of community based approaches to fisheries management and protected areas which includes ecosystem approaches and community strategies for adaptation 	2009 - 2010
to climate change and early warning of locally threatened species.	2010
> Action 4: Develop and implement data sharing protocols and guidelines	
between government, NGO and community partners, collate available information on natural resources stocks and inventories, MPAs and traditional closed areas, threatened species, climate change, vulnerability, traditional	2009 -
knowledge and governance. Develop and manage simple and accessible joint database and Geographic Information System.	ongoing
> Action 5: Incorporate feedback from trial strategy for joint implementation and	
harmonization of traditional and recent community management and protected areas under national, provincial and traditional governance/management	2011
(including ordinance, bylaws and customary processes)	
Target #2: Improved income, livelihoods and food security in an increasingly significant number of coastal communities across the region through a new Sustainable Coastal Fisheries and Poverty Reduction Initiative ("COASTFISH")	
Annotations explaining Target #2: Building on a strengthened provincial and national	
Community and Inshore Fisheries team will serve as a cost-effective conduit for the	
delivery and communication of the fisheries management and food security component to	
the community level in collaboration with the relevant government and non government agencies as well as other aspects of the CTI National Plan of Action. Actions for this	
target will be implemented in tandem with actions for Goal #3 on MPAs and entail a	
staggered approach to engagement at provincial level with ongoing capacity building.	
> Action 1: Prepare appropriate materials and curriculum for community	2009 -
awareness and field staff training in line with the integrated community based approaches to fisheries management and protected areas.	2010
Action 2: Specific training and guidance for community managers, traditional leaders, local enforcement (empowered under acts), police or courts. Capacity building for data management and analysis	2010 and ongoing
Action 3: Design and initiate programme of institutional strengthening of national and provincial bodies to ensure long-term capacity to sustain environmental management	2010 and ongoing
> Action 4: Prepare and deploy appropriate public awareness materials (size	2010 and
limits, restricted gear, community management plans, sale of undersize fish etc.)	ongoing
Action 5: Expand and consolidate integrated community based approaches to fisheries management and protected areas in selected provinces and initiate staggered implementation in new provinces.	2010 and ongoing
Target #3: Effective measures in place to help ensure exploitation of shared tuna	
stocks is sustainable, with tuna spawning areas and juvenile growth stages adequately protected	
Action 1: Explore synergies with CT governments through BSSE Tri-national agreement between Indonesia, PNG and Solomon Islands.	2010 and ongoing
Target #4: A more effective management and more sustainable trade in live-reef fish and reef-based ornamentals achieved	
> Action 1: Finalize and disseminate management plans in consultation with	2009
provincial and community stakeholders. Goal #3: Marine Protected Areas (MPAs) Established and Effectively	
Managed	
Annotations explaining Goal 3: This goal will be implemented in tandem with Targets #1 and #2 of Goal #2. The framework will provide for the community and provincial level	
implementation of ecosystem and livelihood approaches as well as for local fisheries	
management including fisheries no-take zones, MPAs and traditional tabus. Appropriate	
coordination, monitoring, and gap analysis will allow for supplementation of this broad approach with other measures including other Protected Area designs (e.g. terrestrial, threatened species under the Programme of Work on Protected Areas of the Convention	
amounted species and a morning of work of thotacted Areas of the Convention	

on Biological Diversity [PoWPA]) and climate change adaptation and mitigation measure.	res
(e.g. National Adaptation Programme of Action).	-11
Target #1: Region-wide Coral Triangle MPA System (CTMPAS) in place and functional	aliy
➤ Action 1: Preliminary gap analysis, cost-effective and useful to community a	and
local field staff to define conservation targets, socio-economic and poverty ga	
and inform research and monitoring strategies. In addition this will prov	/ide ongoing
information to refine Protected Area models and strategies supplementary to	the ongoing
extense network of community driven fisheries MPAs	inal
Action 2: Implement targeted and selected monitoring and research of biolog and social parameters based on gap analysis and implementation plan	
integrated community based approaches to fisheries management and protect	
areas.	lou origoning
> Action 3: Ensure support for the expansion and consolidation of integra	ited
community based approaches to fisheries management and protected areas	s in 2010 and
selected provinces and initiate staggered implementation in new provinces. S	See ongoing
Goal #2 Targets #1 and #2.	
> Action 4: Improve and support networking through national network (SILM)	
and provincial networks where appropriate for information sharing, capa building, community involvement and ensuring linkages for ecosystem approach	
> Action 5: Seek funding for scholarships for professional training of Solon	
Islanders and development of national curricula	ongoing
Goal #4: Climate Change Adaptation Measures Achieved	1 0 0
Annotations explaining Goal 4: Central to the Coastal Community Strate	egy
implemented under Goals #2 and #3 is supporting coastal communities to develop cl	
coastal fisheries objectives and local management actions. These community bar	
planning processes would be used to incorporate support of community adaptation plans and the second processes would be used to incorporate support of community adaptation plans and the second processes would be used to incorporate support of community adaptation plans and the second processes would be used to incorporate support of community adaptation plans and the second processes would be used to incorporate support of community adaptation plans and the second processes would be used to incorporate support of community adaptation plans and the second processes would be used to incorporate support of community adaptation plans and the second processes would be used to incorporate support of community adaptation plans and the second plans are second plans are second plans and the second plans are second plans and the second plans are second plans ar	
as part of resource management (e.g. disaster prevention through reef and mangre buffers/replanting, awareness of impacts etc) as well as generating local information	
changes and traditional adaptation and disaster preparedness strategies.	OH
Target #1: Region-wide Early Action Plan for Climate Change Adaption for	the
near-shore marine and coastal environment and small islands ecosyste developed and implemented	
> Action 1: Rapid and preliminary assessment of information availability, price	
adaptation issues and areas of particular vulnerability in conjunction with d	
collection and management under Goals #2 and #3. Includes assessment	^[O] ongoing
coral reefs, fisheries and marine food security adaptation needs and priori and mapping.	ties
 Action 2: Integrate awareness and possible management option advice 	into
integrated community based approaches to fisheries management	and 2010 and
livelihoods. Includes promotion of mangrove/coastal forest planting programs	ongoing
Action 3: Identification and implementation of priority adaptation/mitigation	
actions identified under Action 1 above. Refer also to National Adapta	tion ongoing
Program of Action (NAPA 2008)	0 0
Target #2: Networked National Centers of Excellence on Climate Char Adaptation for marine and coastal environments are established and in	•
operation	iuii
> Action 1: Support Institutional Strengthening of the newly established Clim	ate 2009 and
Change Office under MECM and priority research under Goal #3 Action #2.	ongoing
Goal #5: Threatened Species Status Improving	
Goal #5: Threatened Species Status Improving	
Target #1: Improved status of sharks, sea turtles, seabirds, marine mamm	als
Target #1: Improved status of sharks, sea turtles, seabirds, marine mamm corals, seagrass, mangroves and other identified threatened species	
Target #1: Improved status of sharks, sea turtles, seabirds, marine mamm corals, seagrass, mangroves and other identified threatened species > Action 1: Support and implement surveys on priority threatened / target spec	cies 2009 and
Target #1: Improved status of sharks, sea turtles, seabirds, marine mamm corals, seagrass, mangroves and other identified threatened species ➤ Action 1: Support and implement surveys on priority threatened / target speciand habitats as determined above. These may include turtles, dolph	cies 2009 and
 Target #1: Improved status of sharks, sea turtles, seabirds, marine mamm corals, seagrass, mangroves and other identified threatened species ➤ Action 1: Support and implement surveys on priority threatened / target spec and habitats as determined above. These may include turtles, dolph spawning aggregations and target species. 	cies 2009 and ongoing
 Target #1: Improved status of sharks, sea turtles, seabirds, marine mamm corals, seagrass, mangroves and other identified threatened species ➤ Action 1: Support and implement surveys on priority threatened / target spec and habitats as determined above. These may include turtles, dolph spawning aggregations and target species. 	cies 2009 and ongoing on 2010 and
 Target #1: Improved status of sharks, sea turtles, seabirds, marine mamm corals, seagrass, mangroves and other identified threatened species Action 1: Support and implement surveys on priority threatened / target spec and habitats as determined above. These may include turtles, dolph spawning aggregations and target species. Action 2: Integrate feedback from Community Fisheries Management plans 	cies 2009 and ongoing on 2010 and ongoing

Figure A. Flow of NPOA activities at national and provincial level (Data management and overall policy development omitted). Presented at NCC meeting, September 2009.



Annex 5: Available information relevant to selection of priority geographic areas

Table A1: Example matrix for defining selection criteria for geographical phases (highlighting top 3 ranked in each category based on information Tables below).

Criteria/Provinces	Central	Choiseul	Guadalc anal	Isabel	Makira- Ulawa	Malaita	Rennell- Bellona	Temotu	Western
SOCIAL									
Human development and Human poverty.	7	3.5	7.5	6	3.5	9	5	7	2
2. High rural population.	4	4	8	4	7	10	2	3	8
3. Marine resource dependency / Pressure on inshore fishing areas.	5	2	9	4	6	10	1	3	8
HABITAT									
Habitat linked to fishing grounds - coral reef areas	2	5	1	6	3	8	4	9	7
4a seagrass (S) or mangrove (M) importance				ММ		SS M	М		мм
PREVIOUS INTERVENTIONS									
Existence of marine resource management projects.	3	3	4	2	8	5	4	8	1
LOGISTICS									
6. Logistical considerations. Ease of access, frequency ships etc	4	2	6	3	3	5	2	1	5
VALUE OF PRIOR EXPERIENCE									
7. Utility as lessons learned	6	6	6	7	1	4	2	1	8

Table A2: Rural population in Solomon Islands (Source: 1999 Census Population and Housing Census)

Province	Rural population	Percentage of total rural population
Total	359,935	100
Central	21,577	6
Choiseul	20,008	6
Guadalcanal	60,275	17
[Honiara]	[49,107]	[0]
Isabel	20,421	6
Makira-Ulawa	31,006	9
Malaita	122,620	34
Rennell-Bellona	2,377	1
Temotu	18,912	5
Western	62,739	17

Table A3: Human development indicators (HDI) in Solomon Islands (Source: Solomon Islands Human Development Report 2002 (based on 1999 Population and Housing Census))

Province	Life	Adult	Enrolment	Real GDP	HDI	Rank
	expectanc	literacy	5-19 year	pc at ppp		
	y at birth		olds			
National	61.6	76.6	56.3	1940	0.598	
Central	62.1	72.0	56.6	1940	0.594	7
Choiseul	61.6	92.2	63.4	1940	0.644	3
Guadalcanal	60.7	73.1	41.1	1940	0.571	9
Honiara	62.8	90.5	67.6	1940	0.651	1
Isabel	60.4	75.2	66.2	1940	0.602	6
Makira-Ulawa	61.9	81.0	65.2	1940	0.622	4
Malaita	61.1	61.4	49.1	1940	0.557	10
Rennell-Bellona	62.1	73.9	72.4	1940	0.616	5
Temotu	62.6	60.6	61.5	1940	0.577	8
Western	61.6	94.0	65.4	1940	0.650	2

Table A4: Human Poverty Index (HPI) indicators in Solomon Islands (Source: Solomon Islands Human Development Report 2002 (from 1999 Population and Housing Census, health information system and 1989 nutrition survey))

Province	% pop. not survive to 40 y.o. (1999)	% illiterate (1999)	% w/o safe drinking water (1999)	% w/o access to health services (1989)	% underweig ht under 5 y.o.	HPI	Rank
National	17.8	23.4	31.5	25.3	23	23.2	_
Central	17.2	28.0	16.6	28.1	29	24.1	7
Choiseul	17.8	7.8	31.3	29.3	32	22.8	4
Guadalcanal	18.8	26.9	58.4	28.5	26	29.8	6
Honiara	16.3	9.5	5.2	0.0	14	12.2	1
Isabel	19.1	24.8	15.3	29.3	35	23.9	6
Makira-Ulawa	17.5	19.0	34.2	29.1	21	22.5	3
Malaita	18.3	38.6	39.7	29.6	20	31.3	8
Rennell-Bellona	17.2	26.1	15.3	30.0	29	23.3	5
Temotu	16.6	39.4	27.1	29.4	15	29.8	6
Western	17.7	6.0	19	26.9	32	19.8	2

Table A5. Latest information on reef and other shallow areas (tentative) of Solomon Island provinces (Data obtained from the Millennium Coral Reef Mapping Project, Institute for Marine Remote Sensing, University of South Florida (IMaRS/USF) and Institut de Recherche pour le Développement (IRD/UR 128, Centre de Nouméa) and Reefbase. Assistance in analysis courtesy of P. Anderson).

Reef_L4	Centr al	Choise ul	Guadalca nal	lsab el	Makir a	Malai ta	Renb el	Temo tu	Weste rn	Grand Total
barrier reef pinnacle/pa									0.2	0.2
barrier reef pinnacle/patch		0.1		0.1						0.2
bay exposed fringing		6.8		0.6						7.4
deep drowned reef flat	10.8	5.3		16.8				57.6	3.9	94.3
deep lagoon								440.2		440.2
deep terrace								39.3		39.3
deep terrace with constr									26.6	26.6
deep terrace with constru						412.9		36.8		449.7
deep terrace with constructions		9.4		6.1	10.7					26.2
diffuse fringing								1.0		1.0
drowned bank						16.5		11.0	18.1	45.6
enclosed basin								0.5		0.5
enclosed lagoon or basin								0.2		0.2
faro reef flat			0.6							0.6
forereef	48.3	56.4	28.4	89.4	82.8	84.0	64.4	91.5	98.7	643.9
fractal reef flat									21.3	21.3
haa enclosed lagoon								0.2		0.2
haa subtidal reef flat								0.5	2.4	2.9
immature reef flat								0.7		0.7
inner slope								50.7		50.7
lagoon pinnacle						0.1	1.6	1.8		3.5
land on reef								29.1		29.1
pass								5.0		5.0
pinnacle	0.1								8.1	8.2
reef flat		440.0	44.7	245.	04.0	405.0	4400	400.4	000.0	4 4 4 4 0 0
reticulated fringing	57.2	112.0	41.7	9	61.0	135.0	116.2	162.4	208.8	1,140.2
shallow lagoon								0.4	53.4	53.4
shallow lagoon with const								2.1		2.1
shallow lagoon with		- .						0.9		0.9
constructions shallow lagoonal terrace		7.4						40.7		7.4
shallow terrace								12.7		12.7
shallow terrace with con								11.2	0.0	11.2
shallow terrace with cons								00.5	6.8	6.8
shallow terrace with						4.4		29.3		33.7
constructions shelf terrace with constr		2.6		3.9			7.3	9.4		13.7 9.4
subtidal reef flat				139.				J. 4		J. 4
undetermined envelope	18.7	65.6	12.7	6	3.3	28.6	2.1	23.0	96.3	389.8
undetermined envelope				=65				11.7		11.7
Grand Total	135.1	265.6	83.4	502. 4	157. 7	681.5	191.5	1,029 .0	544.6	3,590.8

Table A6. Summary table of reef and other shallow areas (tentative) of Solomon Island provinces (data and analysis courtesy of IRD, Institute for Marine Remote Sensing and ReefBase. Assistance in analysis courtesy of P. Anderson).

Central	135
Choiseul	266
Guadalcanal	83
Isabel	502
Makira	158
Malaita	681
Renbel	192
Temotu	1,029
Western	545
Total	3,591

Table A7. Summary table of land area estimates by province (data: Wikipedia, the free encyclopedia, http://en.wikipedia.org/wiki/Provinces_of_the_Solomon_Islands_13_October_2009).

		Area
Province	Capital	(km²)
Central Province	Tulagi	615
Choiseul Province	Taro Island	3,837
Guadalcanal Province (1)	Honiara	5,336
Isabel Province	Buala	4,136
Makira-Ulawa Province	Kirakira	3,188
Malaita Province	Auki	4,225
Rennell and Bellona Province	Tigoa	671
Temotu Province	Lata	895
Western Province	Gizo	5,475
Capital Territory	Honiara	22
Solomon Islands	Honiara	28,400

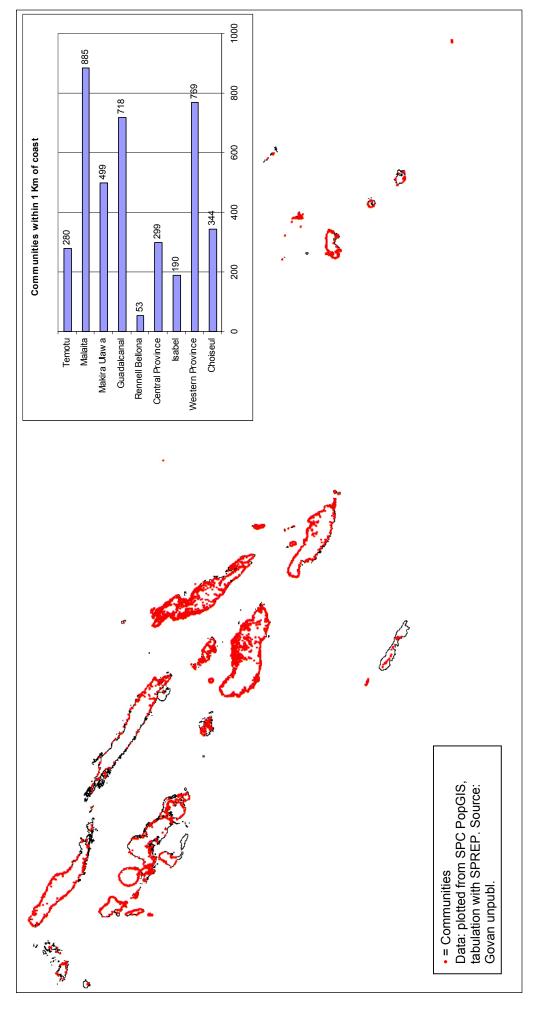


Figure A1: Location and relative numbers of "communities" defined by SPC PopGIS. Insert table shows numbers of such communities within 1 km of coastline estimated by NOAA SWBD.

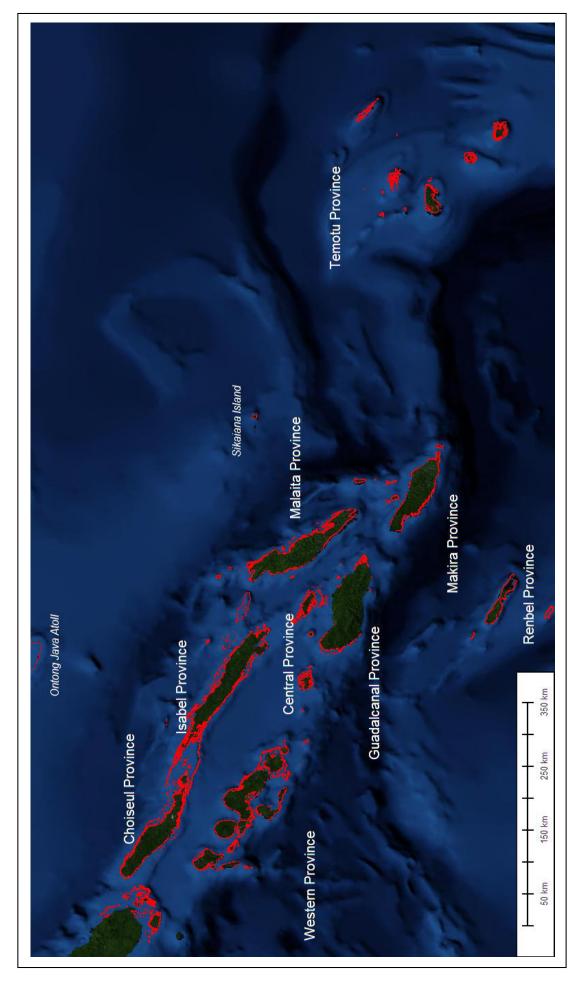


Figure A2: Location and approximate extent of major coral reefs and associated shallow areas in Solomon Islands (IRD, Institute for Marine Remote Sensing and ReefBase).



Figure A3: Total fish consumption by province (source SPC PopGIS, 1999 data).



Figure A4: Total fish consumption by ward (source SPC PopGIS, 1999 data).

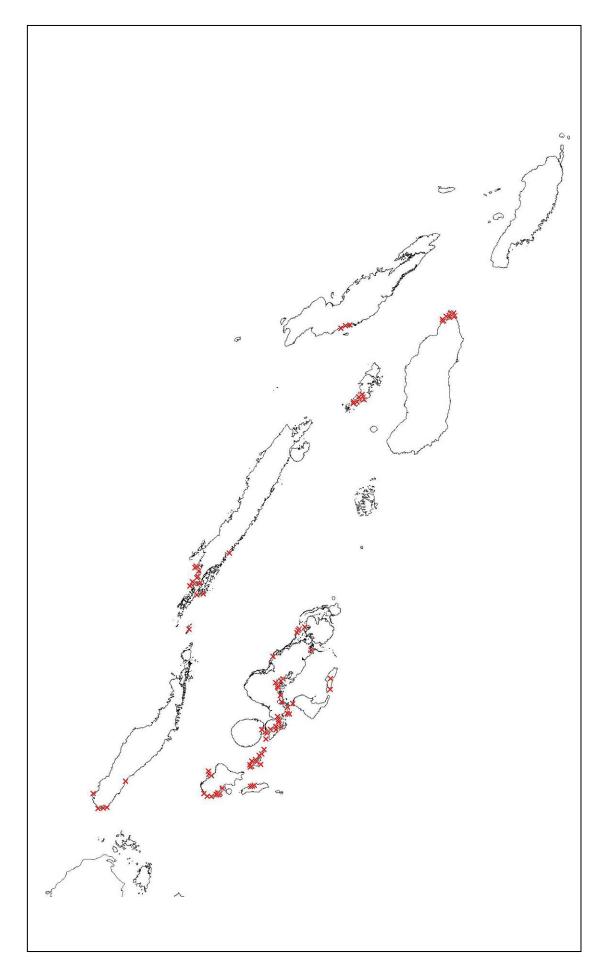


Figure A5: Location of locally managed marine areas in Solomon Islands 2008 (source Govan et al. 2009/SIG data).

