

Pacific Islands in the Year 2000

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Abstract

The coastal areas of Pacific Island Countries are increasingly being disturbed and modified by natural and anthropogenic processes. For many years now SPREP has been assisting its 22 member countries to work towards sustainable development of the resources in coastal areas for present and future generations. The focus of coastal management up until the Year 2000 will be to facilitate the development of a capacity for planning and management of the coastal areas of the Pacific region. To this end, SPREP will continue working with government agencies, individuals and institutions to fund, develop, explore and trial an Integrated Coastal Management framework in the Pacific. Where possible, the priority coastal management and planning issues and needs of each of the Pacific Island Countries will be addressed under the integrated catchment management framework and incorporated into SPREPs coastal management work program.

Introduction

The people of Pacific Island Countries (PIC) depend on the coastal areas and the resources within it, for their survival. However, the coastal environment of the PICs is subject to increasing pressures as it becomes modified by the activities and actions of individuals, communities and populations. The extent to which the coastal area is modified, its ability to adapt to change and the actions we take to accommodate change will influence how the Pacific Islands look in the Year 2000. This paper reviews the coastal management programme organised through SPREP in the past and outlines a possible focus for the programme in the future.

Pacific Island countries are special

The unique customs and practices of the inhabitants of the Pacific and the integrated nature of activities within the coastal and terrestrial areas of PICs is well known. Experience has shown that the techniques developed in other parts of the world cannot be applied *carte blanche* to PICs. For this reason, new management processes and techniques in PICs are best done cautiously through trials and pilot programmes.

Management of coastal areas in Pacific Island Countries

For administrative convenience the coastal area has often been defined as the area from the catchment to the open sea. However such definitions have proved to be inflexible and inappropriate for small Pacific Islands. For example, in the case of small islands, the coast may encompass the entire island as well as the fish populations in the immediate vicinity of the reef flat. It is more acceptable to include all the resources of the 'coast' if those resources are interdependent and extend beyond conveniently defined boundaries.

Neither the ecosystem nor the traditional or customary land ownership will necessarily recognise administrative boundaries. Management solutions cannot necessarily apply to a defined area or jurisdictional boundary but must encompass both spheres to be effective and sustainable.

Concerns of SPREP members, the National Environmental Management Strategies (NEMS) process, initiatives of the South Pacific Forum and recommendations from the World Coast Conference (1993) led to the development and implementation of regional Integrated Coastal Management. ICM is now recognised as an appropriate process for dealing with coastal problems in the Pacific (Fauvao, 1995). ICM ignores the traditional restricted definition of the coast and is particularly suited to PICs where the coast and terrestrial areas need to be managed as a 'whole' system. A tenet of ICM is that it should result in a sustainable level of resource use whilst ensuring that the ecosystems remain fully functional.

The initiation of ICM is akin to the development of any program. It is a process orientated approach with identifiable outcomes. There has to be a vision, goals and objectives need to be set, plans formulated, implemented, monitored, and evaluated. The lessons learnt from the process should be fed back into the system and if necessary some of the strategies adjusted to ensure that the goals and vision are being fulfilled.

The South Pacific Regional Environmental Programme

SPREP, the South Pacific Regional Environmental Programme, was established in 1982 to promote regional co-operation in environmental matters, to assist its members to protect and improve their shared environment and to help them work towards sustainable development for present and future generations. Its mission is to 'promote co-operation in the South Pacific region and to provide assistance in order to protect and to ensure sustainable development for present and future generations.'

SPREP deals with requests from 22 member governments including American Samoa, Cook Islands, Federated States of Micronesia, Fiji, Guam, Kiribati, Marshall Islands, Nauru, New Caledonia, Niue, Northern Marianas Islands, Palau, Papua New Guinea, Pitcairn, Solomon Islands, Tokelau, Tonga, Tuvalu, Vanuatu, Wallis and Futuna and Western Samoa); and four developed countries (Australia, France, New Zealand and the United States).

SPREP recognises the interdependence of environmental issues within the region and internationally. It also recognises that the wide range of values in the marine environment and the multiple use of resources, has led to conflict. To this end SPREP is focused on developing regional co-operation and co-ordination with other agencies and expertise. At the same time it encourages local community participation in the planning and management of local resources, the integration of traditional sustainable resource use and conservation practices and knowledge, action orientated research, application of relevant information and; encouragement of the involvement of non-governmental organizations in environmental management activities and programmes.

SPREP deals with a broad range of issues and nearly all of SPREP's programs have a capacity to deal with coastal management issues. A number of initiatives have been developed over the years to manage the coastal areas while taking account of the setting in which SPREP is required to work. There are very close links with the other SPREP programme areas, especially the Climate Change Programme (e.g., possible sea level rise associated coastal problems), the Biodiversity Programme (e.g., marine protected areas), and the Prevention and Management of Pollution Programme (e.g., SPREP Convention). The Programme also cooperates closely with, and compliments the work of the other regional agencies active in the coastal and marine areas -- Forum Fisheries Agency, South Pacific Commission, South

Pacific Applied Geoscience Commission and the University of the South Pacific. SPREP has also been the South Pacific centre for the UNEP Regional Seas Programme.

The coastal program within the South Pacific Regional Environmental Programme

The coastal management program in SPREP has concentrated on raising awareness for the need for appropriate Integrated Coastal Management (ICM). It is structured to provide a broad range of assistance to member countries and territories. Most of the focus to date has been on the development of an ICM program and the International Coral Reef Initiative (ICRI) Pacific Regional Strategy.

The ICRI aims to increase the capacity of countries and local groups to effectively conserve and sustainably use coral reefs and related ecosystems (SPREP, 1996a). The ICRI Pacific Regional Workshop was convened to give direction and life to International Coral Reef Initiative (ICRI) at the regional, national and local levels (SPREP, 1996b). It was organised by SPREP, funded by AusAID, CIDA, UNESCO and IUCN and attended by 65 people from 22 countries. The ICRI Pacific Regional Strategy which provides issues, goals, objectives and actions to address threats, was endorsed at the workshop. SPREP has taken on the role of ICRI co-ordinator and is developing a 1997 Year of the Reef Campaign. The Year of the Reef Campaign aims to create awareness, acceptance and responsibility for the conservation and sustainable use of coral reefs.

Related coastal management activities (see Smith, 1995) include:

Coastal habitat surveys involving training; linked to

- The development of coastal management plans;
- Commissioning studies on urgent coastal issues, with an emphasis on developing appropriate guidelines;
- Holding in-country and regional workshops and meetings on issues of importance to SPREP members; and
- Developing and promoting proposals for long-term coastal planning and management in the region, with an emphasis on developing appropriate integrated coastal management.

Other key outputs of SPREPs coastal management program during 1995/96 are listed in Annex 1.

Towards the Year 2000

SPREPs overall interest up until the Year 2000 will be to facilitate the development of a capacity for planning and management of the coastal areas of the Pacific region. To this end, SPREP will continue working with government agencies, individuals and institutions to fund, develop, explore and trial a ICM framework in the Pacific. It will focus on the development of the ICM process and on the detail and implementation of that process including, prioritizing of issues, program budget and partnerships/ funding options, as well as an appropriate process for evaluation and setting of performance criteria. This will involve consideration of the setting in which SPREP and the PICs operate including the spheres of influence of each of the major players.

Although ICM provides the framework to deal with coastal issues in a holistic framework, the conservation and protection of individual natural processes is also important. PICs will

continue to be encouraged to alert SPREP to threatening coastal processes and to prioritise their coastal management and planning needs. If possible and where funds are available, the priority needs of each of the PICs will be incorporated into SPREPs annual coastal management work program. SPREP will also co-ordinate the conservation of marine resources with other regional and international organisations (Draft SPREP Action Plan 1996-2000). A climate change and integrated coastal management programme will aim to understand and respond to climate change threats and to promote integrated coastal management approaches which adapt to these threats (Draft SPREP Action Plan 1996-2000). This will result in national staff with the skills needed to develop and adapt strategies which respond to climate change and sea level rise (Draft SPREP Action Plan 1996-2000).

Tools to achieve SPREPs coastal management program

A range of tools and techniques can be applied to protect natural processes. Management plans rely on such tools and techniques to respond to and address issues and threats to coastal areas. An important part of the process is to identify the values of the area to be managed, management objectives and strategies for conserving critical habitats and natural processes. Management plans should be developed through a process. The plan itself is really a document of agreed outcomes amongst all stakeholders.

To avoid incremental and cumulative impact to the coastal environment, cost benefit analysis, environmental impact assessment (EIA) and the adoption of the precautionary principle will be key tools for managing new development proposals in the future. Although the best available information should always be used to develop management plans, the precautionary principle should also be adopted to build into the plan scope for ignorance and changing circumstances.

Tools for the management and communication of information should be utilised to better our understanding of concepts and exchange of experience in the practice of ICM. Institutions are becoming increasingly isolated and fragmented as communication and information technology improve. Information Technology and networks will allow partnerships and alliances to be formed that would be unheard of today. However, the limitations of the information collected for coastal management should be communicated to decision makers and other intended audiences.

All the players in the process should share in the making of difficult choices especially where there is little information to guide those choices. This can only be achieved where there is open and honest dialogue amongst all the key stakeholders. It will be important to feed back the outcomes of programmes to the wider community, not only to the institutions. Unfortunately this can be an expensive and time consuming process because of the distances between islands and because a number of the government agencies are set up as fragmented single sector bureaucracies. The diversity of views can be a source of inspiration for coming up with unique solutions but, at the same time, a source of frustration as stakeholders try and agree on common goals and strategies for reaching those goals. If necessary a wider range of mechanisms for resolving conflict may need to be investigated.

Working out how to manage and mitigate conflict and how to determine the priorities for management of coastal areas will always be difficult. The dynamics of marine systems will require much painstaking research before we can understand the checks and balances that sustain them. In most cases we will never know with certainty the level of impact that an

ecosystem can sustain before its critical survival and reproduction thresholds are breached. Similarly, the dynamics of the societies of PICs must be understood in order to maintain effective alliances and partnerships. At the international level the relationship with donors will be the key to ongoing resourcing of infrastructure, equipment and trained personnel. The efforts to secure funding have to be led and co-ordinated nationally and within the region (Kuluwin, 1996). There may also be opportunities to explore other sources of revenue and income generating opportunities for economic developments, at all levels of society.

In the Year 2000

There can be no single blueprint for managing the coasts and islands of the Pacific. It will be better to plan on the basis of the trends and information available now, not on what is possible in the future. Experience has shown that the key to the future of effective integrated coastal management will be adequate information, education and training, legislation, stakeholder participation, appropriate methodology, research and monitoring and ongoing funding. Stable government and non government institutions and an appropriate policy and legal framework is needed to provide a solid foundation for coastal planning and management. There is a lot to be gained by learning from the successes and failures of coastal planning management techniques and processes, principally in the Pacific but also in other parts of the world.

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Annex 1

Outputs of SPREPs Coastal Management and Planning Program during 1995/96 (After Apis-Overhoff, 1996)

1. *"International Coral Reef Initiative Pacific Regional Workshop"*

The Workshop was held in Suva from the 27th of Nov. to 1st of Dec., 1995. It was coordinated by SPREP and funded by AusAID, CIDA, UNESCO/IOC, and IUCN. Outputs from the Workshop include the ICRI Pacific Regional Strategy, Pacific Regional Report on the Issues and Activities Associated with Coral Reefs and Related Ecosystems; and the Workshop Report. SPREP is to host the ICRI coordinator for the Pacific region and the Pacific 1997 "Year of the Coral Reef" but is waiting on endorsement from a number of member countries. SPREP is in the process of developing the Regional Campaign Plan for the 1997 Pacific Year of the Coral Reef. The next step is to develop in country ICRI work plans based on the Strategy.

2. *"Coastal Management Training Directory for the Pacific Islands Region"*

The Coastal Management Training and Education Directory summaries the various training and education opportunities available in coastal management related fields. The Directory is currently being reviewed and will be updated as regularly as funding permits.

3. *1996 Member country priority needs for the Coastal Management and Planning Programme*

Priority needs of member countries allow SPREP are to be incorporated into the Coastal Management Programme to ensure better service to member countries.

4. *"Coastal Management Profiles" - A Survey of Pacific Island Government Agencies and Non-government Organisations with Coastal Management Related Responsibilities"*

There is currently no document available which provides information on the agencies involved in coastal management in the Pacific islands region. Even within many countries and territories there is uncertainty as to the coastal management and planning responsibilities of agencies. This project aims to document the information on Pacific island government agencies and non-government organisations that have coastal management related responsibilities in order to prepare "Coastal Management Profiles" for the Pacific islands region.

5. *"Conservation and Sustainable Development of the Lagoons, Reefs and Islands of Aleipata District"* (Western Samoa).

This project's goal is to assist with the development of a conservation area covering the offshore islands, reefs and lagoons of the Aleipata District to be managed by the local villages for their long-term benefit. The project includes education, training and assistance to villagers to manage, monitor and develop the natural resources of the area for their sustainable use. In addition, the project aims to develop liaison between DEC and the villages of the Aleipata District to help identify options for the management of their coastal areas and establish a framework for its management and sustainable use.

6. *"Coastal Zone Management Plan Preparation for the Cook Islands (Rarotonga, Aitutaki, Mangaia, Manihiki and Penryhn)"* (Cook Islands)

This project is intended to improve the protection of the coasts including the lagoons and reefs against degradation. For each island the Cook Islands Conservation Service will determine the state of the environment and highlight the environmental concerns of the people of that island; and the identify and prepare practical plans for action which addresses those concerns and assist protection and conservation of island resources.

7. *"Yap State Marine Resources and Coastal Management Plan"* (Yap, FSM)

Yap State has prepared a Marine Resources and Coastal Management Plan (MRCMP) which addresses the marine resources and coastal environment management needs of Yap State, and identifies the issues and strategies needed to address them. Yap State requested SPREP's technical and funding assistance in implementing this plan.

8. ***Regional Wetlands Action Plan Development*** - A draft regional wetlands action plan has been prepared and was reviewed during the ICRI Pacific Regional Workshop. The draft Action Plan will be distributed to member countries for review, approval and adoption.
- 9.. ***Mangrove Posters*** (Fiji) - Assistance has been provided to Fiji's Fisheries Division to print mangrove posters in three languages.
10. ***Coral Reef Survey and Monitoring Training*** - A "train the trainers" workshop was held in Saipan, CNMI, in November 1995. In addition to CNMI based participants, there were off-island participants from College of Micronesia - FSM; the University of the South Pacific; Palau Community College; and the University of Papua New Guinea. The training was conducted by staff of the Australian Institute of Marine Science (AIMS). Follow-up training workshops will be held in PNG and Palau in early 1996.
11. ***Guidelines for Dealing with Ship Groundings in the Pacific Islands Region***. The objective of this project is to develop generic guidelines, from a multi-disciplinary perspective, for dealing with ship groundings within the Pacific islands region; addressing three different phases: 1) immediate responses; 2) medium to long term responses; and 3) mitigative measures.
12. ***Coral Reef Survey: Vava'u, Tonga*** (Tonga) - Publication of a survey report on the coral reefs in Vava'u, Tonga.
13. ***Updating the Coral Reef Researchers Directory*** Partial financial assistance has been provided to the Pacific Science Association to upgrade the Directory.
14. ***Environmental Assessment of Fish Processing Plants*** - This one week workshop was held in December 1991 in Majuro, Marshall Islands in collaboration with the University of Victoria (BC) and the University of the South Pacific. The guidelines developed from the workshop were updated in 1995 and the revised "Environment Guidelines for Fish Processing Plant Discharges into the Sea" are in the process of being printed.
15. ***Environmental Assessment of Marine Mining*** - This one week workshop was held in March 1992 in Honiara, Solomon Islands. The revised "Guidelines for Assessment of Environmental Impact from Tailings Disposal at Tropical Coastal Mines" are currently being reviewed for publication.