

**Action Strategy
for Nature Conservation
in the South Pacific Region
1994 - 1998**



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Foreword

Nature conservation is of fundamental importance to the sustainable development of the Pacific Island countries. This is because the interlinkages between the social, cultural and economic well-being of people and biological diversity are most pronounced and intimate on inhabited small islands and their associated marine ecosystems. Consequently the conservation of biological diversity is, anthropocentric as it may seem, an inherent aspect of sustaining people's livelihood and culture. It must therefore be pursued with the highest priority and urgency, using new approaches that are more effective and appropriate in the context of the South Pacific.

The importance of having a workable strategy in this context cannot be overstated. Previous strategies were well endowed with rich ideas appropriately sensitised to fit the peculiarities of the region. Yet after a decade of increasing development pressure on natural resources and the environment in all South Pacific countries, we are again faced with the challenge of devising an action strategy tailored to new circumstances.

This Action Strategy for Nature Conservation in the South Pacific offers a clear focus and priorities with measurable outputs during its 1994-1998 timeframe. It is also designed to conserve biological diversity using a "people first" approach. To implement this strategy more vigilance and consultation will be required than ever before.

The Strategy is based on the wide array of views and comments received during the Fifth South Pacific Conference on Nature Conservation and Protected Areas in the South Pacific held in Tonga in 1993, reviews of previous strategies and planning documents, and consultations with many of the region's experts in nature conservation.

While the views and ideas cannot be attributed to a single or few individuals, the actual task of formulation and putting them into readable form fell on a few people. The contribution of Audrey Newman and Sam Sesega in this regard is gratefully acknowledged. Thanks also goes to The Nature Conservancy for supporting Ms Newman's involvement. SPREP & IUCN look forward to working closely with South Pacific countries, key non-governmental and government agencies, and especially local communities, to implement this Action Strategy. We anticipate greater progress in nature conservation in the South Pacific as a result of it.

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Director, SPREP.

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Director, IUCN



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Acronyms

EC	European Community
EIA	Environmental Impact Assessment
EU	European Union
GBRMPA	Great Barrier Reef Marine Park Authority
IUCN	World Conservation Union
NEMS	National Environmental Management Strategy
NGO	Non-Governmental Organisation
NSW	New South Wales
SIDS	Small Island Developing States
SPBCP	South Pacific Biodiversity Conservation Programme
SPC	South Pacific Commission
SPREP	South Pacific Regional Environment Programme
UNDP	United Nations Development Programme
USP	University of the South Pacific



1. Introduction

The South Pacific is a vast region occupying 30 million square kilometres of the Pacific Ocean, an area more than three times larger than the United States of America or China. Of this, only 2% is land, scattered over a myriad of large and small islands with a total land area of only 500,000 square kilometers. The region is also home to an incredibly diverse range of peoples and their cultures, with three commonly recognised subregional constituents — Micronesia, Polynesia and Melanesia.

On land, geographic and ecological isolation has led to the evolution of unique species and communities of plants and animals, many of which are adapted to only one island or island group and found nowhere else in the world. On some islands more than 80% of species are endemic. The region's marine environment comprises an even greater array of diversity, including the most extensive and diverse reef systems in the world and the deepest oceanic trenches.

Unfortunately, the extraordinarily high and unique biological diversity of South Pacific islands is among the most critically threatened in the world. Rapid population growth, habitat destruction from increasing demands on limited land and coastal marine resources, and competition and predation by introduced species have combined to put pressure on natural environments and native species.

In their report to UNCED in 1992, the Pacific island developing countries highlight deforestation, land degradation for subsistence and commercial agriculture, mining, introduced pests and uncontrolled disposal of wastes as key threats to the region's biological resources. Overharvesting of fish and wildlife resources, for both commercial and subsistence use, is also a major problem in some areas.

In the nine years since the first *Action Strategy for Nature Conservation in the South Pacific*, there has been significant conservation activity by many island countries, regional institutions and the international community. Yet the overall situation in the South Pacific is largely unchanged.

Since 1985, the number of areas with some level of "official" protection has grown from approximately 95 to more than 200 (see **Annex 1**). However, most of these areas are still without active management or protection from encroachment. Community ownership of land means that the creation of national systems of local protected areas is almost entirely dependent on landowners in some countries. In general, their resources are also poorly known, making it impossible to assess what percentage of the region's diversity is currently represented.

However for the first time, there are regional and international programmes in place to support and evaluate a community-based "conservation area" approach to biodiversity protection that will empower local people to control and wisely manage their own resources. (See the **Approach** section for more discussion of "conservation areas".) A number of projects are underway throughout the region.

In other words, effective action is more possible now than ever before:

- ☒ most Pacific island countries have clear, comprehensive and practical *National Environmental Management Strategies* (NEMS),
- ☒ there are regional conservation programmes for endangered marine turtles, marine mammals and avifauna in the region,



- ✘ the concept of “sustainable development” is receiving broad international acceptance; with an internationally agreed framework for islands in the Barbados Programme of Action for the Sustainable Development of Small Island States,
- ✘ regional, national and local organizations have recruited specialists in population dynamics, microenterprise, and other social disciplines to help conservation managers understand and address the critical human and economic factors,
- ✘ numerous surveys have been initiated or completed; databases are underway in many countries; and conservation information and skills are being spread more widely, more consistently and in more effective “grassroots” ways,
- ✘ organisations, particularly NGOs, are launching community-centred conservation area projects in several Pacific island countries, and
- ✘ countries of the region are developing an interest in ecotourism, its relationship with conservation protection and management, and its potential to generate local income and employment.

While many of the efforts of the past four years have not yet resulted in measurable conservation on the ground, they have added significantly to the infrastructure and capacity for conservation in the region. While still very limited, hopefully this foundation will be adequate to support more direct, on-the-ground conservation action in the next four years.

1.1 A New Action Strategy

The *Action Strategy for Nature Conservation in the South Pacific Region* has been recast based on recommendations and discussions during the *Fifth South Pacific Conference on Nature Conservation and Protected Areas* conducted in Nuku'alofa, Tonga, 4-8 October 1993. While recognizing the value of the comprehensive approach taken by past strategies, the conference participants agreed that a simpler and more focused approach was needed. After adopting a clear mission statement and six major objectives, the Plenary directed the drafters to:

- ☑ set measurable objectives for next 4-5 years;
- ☑ prioritise key actions to accomplish these objectives;
- ☑ identify how (or by whom) these actions will be implemented; and,
- ☑ develop a way to regularly measure progress toward these objectives.

Hence, the Action Strategy for 1994 aims to provide an ambitious, achievable work programme for nature conservation in the South Pacific region. In substance, it draws from key elements of the previous strategy and many other relevant and current planning documents, including the NEMS, the South Pacific Biodiversity Conservation Programme (SPBCP), the IUCN/EC proposal to strengthen institution capacity for biodiversity protection, the *SPREP Action Plan*, the *Programme of Action for the Sustainable Development of Small Islands Developing States (SIDS)*, and the *Biological Diversity Convention*.

The resulting 1994-1998 *Strategy* places a stronger emphasis on:

- q the role of communities and traditional knowledge in conservation;
- q conservation of marine systems;
- q long-term funding mechanisms to support implementation;
- q prevention of biodiversity loss; and,
- q monitoring as an integral part of all objectives/activities.

The 1994 Strategy departs from the previous two strategies in some significant ways. Most notable is absence of any reference to establishing "a representative system of conservation areas to ensure the effective conservation of island ecosystems and species". While this continues to be the ultimate goal for SPREP and others in the region, experience has shown that only incremental progress will be possible in the next four years.

Therefore, the Strategy focuses action in three areas to build toward a representative system:

- 1) establishing some new conservation areas;
- 2) planning and implementing protection plans for the most endangered and threatened ecosystems and species in the region; and,
- 3) developing ways to address the region's most serious and widespread environmental threats.

Two other departures are worth noting:

1. Research, resource inventories and other information gathering are presented as fundamental components of **all** conservation activities, rather than appearing as a separate objective. In this Strategy, they are linked with the conservation actions that they support (e.g. decision-making and implementation of conservation or development

projects) in order to focus research efforts on urgent applied information needs.

2. Community-based conservation areas that include some form of sustainable development are pursued aggressively in this Strategy as the most promising approach for broad-based conservation in the Pacific. (These conservation areas equate to IUCN's *Protected Area Categories IV, V and VI* described in **Annex A.**) This is not intended to discourage the creation of new parks and stricter reserves (as represented by IUCN Categories I, II and III), where feasible. Rather it recognizes that these approaches are probably most appropriate in special circumstances in the South Pacific, such as large unpopulated areas or extremely vulnerable habitats for endangered and threatened species. However, the community-based conservation area approach appears to best accommodate the unique land and resource ownership patterns found throughout the region.

1.2 Who Uses the Strategy?

The Strategy is intended to be used by *any organization or individual interested in helping to protect the rich biological diversity of the South Pacific*. Key players include the *environmental and development agencies* in each country and territory; *individual and community resource owners*; *SPREP and its partners*; *public and private donors*; *non-governmental organizations* (NGOs), including churches, women and youth groups; and formal or informal *community leaders and groups*. Together, these are the people responsible for achieving conservation on the land and in the sea.





2. *Mission Statement*

The mission of this Action Strategy is:

To protect the rich natural heritage of the South Pacific forever through the conservation and sustainable management of its natural resources and biodiversity for the benefit of the peoples of the South Pacific and the world.

This mission and its six **major objectives** were defined and adopted by the Plenary of the *Fifth South Pacific Conference on Nature Conservation and Protected Areas in the South Pacific Region* on 4 - 8 October 1993.

Major Objectives for 1994-1998:

1. To develop National Environmental Management Strategies (NEMS) or equivalents for all countries and territories within the region and to begin implementing priority conservation and sustainable resource management actions from the NEMS in at least half the countries and territories.
2. To develop and advocate appropriate funding mechanisms for the sustained support of conservation and sustainable resource management activities at the local, national and regional levels.
3. To identify and address the most urgent threats to the region's biodiversity and protect the region's plants, animals and ecosystems for future generations.
4. To involve communities and landowners in cooperative natural resource management and conservation that recognises and strengthens local resource owners' rights and uses environmentally sound customs, and develops mechanisms for distributing resource benefits as equitably as possible throughout communities.
5. To strengthen local expertise and technical ability in planning and implementing sustainable natural resource management and conservation programmes for marine and terrestrial environments through programmes of training and extension that utilize local expertise wherever possible.
6. To improve environmental awareness and information sharing and to build working partnerships at the local, national, regional and international levels in support of conservation activities.



3. Approach

The Strategy builds on previous ones and on the accumulated experience of Pacific Islanders over the past several decades in natural resource management and biodiversity conservation. It recognizes the fundamental and historical reliance of Pacific Island peoples on natural resources, the intricate linkages between customary resource ownership and biodiversity, and the traditional practices in resource management and conservation that have served them well over the decades.

The Strategy also responds to the emerging consensus that dedicating land and the sea to national parks and strict reserves is generally inappropriate for Pacific islands. Thus it reflects the continuing shift toward community-based conservation areas that integrate the protection and use of natural resources and biodiversity in a sustainable manner as a means of achieving the dual objectives of conservation and development.

The more conventional protected area approach is emphasized less, though it still plays an important role in some areas and in the protection of endangered, threatened and vulnerable species and ecosystems.

3.1 Community-based Conservation Areas

The community-based conservation area approach seeks to achieve a balance between the conservation and use of biological resources to provide for the cash and subsistence needs of the resident communities while conserving the special ecological or biological features of the area. For purposes of the Strategy, "conservation area" is the same as "integrated conservation and development" (ICAD) area used in other parts of the world. This approach is being embraced by communities and organisations throughout the region, and is receiving significant support from the *South Pacific Biodiversity Conservation Programme* (SPBCP), and the *Integrated Conservation and Development Programme* based in Papua New Guinea.

The Strategy recognizes the difficulties of reconciling the objectives of conservation and development. Local resource owners are often faced with the dilemma of choosing between immediate incomes from uses that are unsustainable, or delayed and less tangible benefits in the future through conservation activities. Overcoming this problem is the great challenge to conservation in the South Pacific, and the primary aim of this Strategy.

Past strategies addressed this problem by emphasising environmental education and awareness, assuming that greater understanding and awareness of the values of conservation will result in positive conservation action. However, experience has not proven this assumption correct.



In addressing this problem, the Strategy recognises that awareness and appreciation of the need to conserve natural resources is not enough. On Pacific islands, most resource owning communities exist under trying socio-economic conditions that can drive them to choose short term unsustainable resource use despite a clear understanding of its adverse environmental consequences. For Pacific islanders to forego immediate benefits can mean jeopardizing their immediate existence. Therefore, conservation objectives can be achieved only through an approach that also meets the needs of local resource owners.

The challenge for conservationists and resource managers is to:

- ⇒ find new and better methods of generating benefits for communities while maintaining resource use at sustainable levels and protecting biodiversity; and,
- ⇒ empower communities to plan for, manage and monitor their own resources.

The **focus** of the Strategy is therefore as much on people as on natural resources. Conserving biological resources may require changes in people's consumption patterns. To achieve this, it is necessary that communities see conservation options as providing viable economic alternatives. While these conservation options may not always result in the same high financial returns that could be obtained from short-term exploitation of natural resources, they must at least be able to meet the resource owners' short-term economic needs. In addition, conservation options should not deprive communities of the control they traditionally exercise on their property. Communities must also be equipped with the right skills and information to participate fully in management.

At the national level, supportive institutional arrangements are also needed to transfer information and technology, provide training, mobilise and direct resources, coordinate and integrate activities, facilitate cooperative management, generate and enforce sustainable resource policies, develop appropriate legislative frameworks, and to facilitate participatory planning and implementation.

The Strategy seeks to be simple and brief to maintain focus on the most critically needed actions rather than being a shopping list of possible activities. Each objective has:

- ☑ a brief description of the current situation
- ☑ key actions at the local, national, regional (including subregional), and international levels
- ☑ measures for gauging successful implementation.

The final outcome is a *prioritised agenda for nature conservation action over the next four years*. The region's success in accomplishing this agenda will depend on many factors — the social, economic and geographic situation of each island state; the support for conservation already in place; and the political commitment of regional, national and local leaders to conservation and sustainable development.

Implementation of this Strategy will depend on the efforts of organisations and individuals throughout the region. To accurately reflect these efforts (current and planned), SPREP will survey the region to identify coordinating agencies and key partners prepared to take the lead in implementation of each key action. The results of this implementation survey will be sent as an addendum to the Strategy.



4. *How to Use this Strategy*

This *Action Strategy* is a **tool for planning and evaluating nature conservation work in the South Pacific**. It summarizes the actions that conservation and community experts throughout the South Pacific consider most urgent for conservation of biodiversity in the region over the next four years. However, this Action Strategy will only be effective if it is used.

The 1993 Conference participants stressed the need to monitor progress on the elements of the Strategy regularly. Since the Conference only meets every four years, the Plenary felt that another mechanism needs to be developed to accomplish this. Corporate planners say that the "shelf-life" of a plan is 3-4 months. By this they mean that managers must review their plans and progress at least every 3-4 months. If not, the plan will usually be forgotten, while the manager reacts to numerous daily demands. Typically, a long-term plan or strategy is kept "alive" by developing an annual work programme from it. Then the annual work programme is detailed further in specific tasks to be accomplished and reported on each quarter or 3-month period.

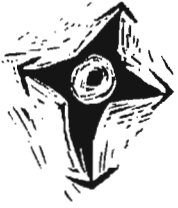
Building on this approach, people in the region should refer to the Strategy when developing priorities for **annual work programmes** and **reviewing annual progress**. It can also be used for project plans and funding proposals. It can be used within one organisation and with partners to identify the activities that each will implement in the coming year. This is meant to help not hinder. Difficulties in completing certain key actions should trigger more regional discussion. Similarly, successes and new ideas should lead to welcome new actions and approaches.

To share information on the overall progress in the region during the four-year term of this Strategy, SPREP will provide a summary of key national and regional accomplishments on the Action Strategy in its quarterly newsletter. The National Environmental Updates called for in Objective 1 should serve the same purpose for the NEMS priorities.

4.1 *Measuring Progress*

To monitor progress more objectively, the Measures of Success sections include a table for recording the current status and future progress on each measure. This format can be used by regional, national and local organizations to provide a quick overview of progress on their selected priorities each year, with text to clarify or highlight certain activities.

If this reporting format proves useful, SPREP will compile the individual progress reports each year to provide everyone with a regional overview of progress (and difficulties encountered) in implementing the Action Strategy. Hopefully, this approach will also help us all evaluate the effectiveness of this Strategy and guide our revision during the *Sixth Conference on Nature Conservation and Protected Areas in the South Pacific Region* in 1998.



5. *Action Strategy Objectives and Key Actions*

5.1 *National Environmental Management Strategies (NEMS)*

Objective 1

To develop National Environmental Management Strategies, or equivalents, for all countries and territories within the region and to begin implementing priority conservation and sustainable resource management actions in at least half the countries and territories.

Current Situation

There is an increasing awareness in the region that environmental management and development are linked and that adverse impacts from development projects can often be mitigated or avoided with advance environmental planning. As of June 1994, fifteen Pacific Island countries had completed or initiated National Environmental Management Strategies (NEMS) or an equivalent planning process (referred to generally as NEMS in this Strategy).

For each country, the NEMS includes practical recommendations to:

- integrate environmental considerations in economic development — including legislation, policies, and environmental impact assessment (EIA);
- strengthen institutional capabilities;
- improve environmental awareness and education;
- manage and protect natural resources and biodiversity; and,
- improve waste management and minimisation measures and pollution control.

Most of these NEMS were developed with broad participation by government agencies, education institutions, non-governmental organizations, the private sector and the community, and they are endorsed by the national government. Often, they were led by a task force comprising the senior government officials and other national leaders. This process laid the foundation for coordinating conservation and development activities and planning to achieve sustainable development (See Annex B for more details). This approach is endorsed in Agenda 21 and will be supported by UNDP's *Capacity 21 Programme of Capacity Building for Sustainable Development in the South Pacific*.

Local & National Key Actions

1. Establish & maintain an active interagency committee (e.g. NEMS Task Team) of senior officials and community representatives to develop NEMS and to coordinate and monitor implementation.
2. Fully integrate NEMS with the national development plan, and combine them as one plan for environmental protection and sustainable development in future planning cycles.
3. Facilitate bilateral and multilateral funding for conservation projects, including those in the NEMS, by working with national aid coordination ministries to include conservation projects in government aid requests.



4. Support training and additional staff for environmental agencies and cooperating agencies/organizations that are needed to implement the NEMS.
5. Introduce environmental considerations at the earliest stages of development, investment and import/export application procedures.
6. Develop an appropriate environmental and conservation legislation framework.
7. Assess major changes and trends in the natural resource base through periodic assessments — such as aerial photography, water measurements (quality and quantity), and marine stock assessments — and through monitoring harvest and export rates.
8. Prepare a biannual *National Environmental Update* to the highest policy-making body and the public which:
 - a. updates the *State of the Environment* report;
 - b. summarizes and evaluate progress on the NEMS implementation; and,
 - c. highlights priorities for the coming two years.
9. Become parties to international and regional conservation conventions of greatest importance to the South Pacific, which are the *Convention on Biodiversity* and the *Apia Convention*. Where appropriate, support, CITES, the *World Heritage Convention*, the *SPREP Convention* and other conservation-related conventions including the *Convention on Migratory Species of Wild Flora and Fauna* and the *International Convention for the Regulation of Whaling*.

Note: In December 1992, the *World Heritage Committee* adopted revised *Operational Guidelines* for both Natural and Cultural sites under the *World Heritage Convention*. Reference to human/community interaction was deleted from the Natural site criteria while the cultural Site Criteria, were amended to accommodate the concept of cultural landscapes, partly to recognise South Pacific concerns that the previous *Operational Guidelines* did not adequately accommodate living cultures such as those of the South Pacific.

Regional and International Key Actions

10. Secure and coordinate regional and international funding and expertise for the development and implementation of the NEMS.
11. Provide technical assistance and training to countries to undertake environmental programs, especially environmental impact assessment and monitoring.
10. Encourage multilateral and bilateral donors to recognize and support NEMS priorities, including the use of EIAs and sustainable resource practices, in their project design and execution.
11. Assist remaining seven territories in preparing NEMS.



Measures of Success: NEMS

	1994	1995	1996	1997	1998	Comments
<p>By the end of 1998, the following would have been produced or achieved:</p> <ul style="list-style-type: none"> ➤ Each country and territory has a NEMS developed with broad participation by government, non-government, community and business organizations. ➤ NEMS priorities are placed among the annual national budget priorities in order to attract bilateral and multilateral aid in each country. ➤ Substantial progress has been made on the environmental priorities identified in the NEMS, with continued participation by public and private agencies & organizations involved in resource management, conservation and development. ➤ Each country and territory has an effective high-level interagency committee (NEMS Task Team or equivalent) that meets regularly and works cooperatively to update and accomplish the nation's environmental and development goals. This committee also presents a National Environmental Status Update to the public and government every two years. ➤ Environmental impact assessment is used prior to all development projects that are likely to significantly or cumulatively affect the environment, and potential impacts are identified and avoided or minimised in the planning phase. ➤ Each country and territory has assessed its forest, water and marine resources at least twice in order to detect major changes and to measure the effectiveness of environmental programs in maintaining the natural resource base. ➤ At least half of the Pacific island countries have signed the Biodiversity Convention and the Apia Convention and some have ratified and begun implementing the terms. 						

Key: 0 = No Progress; 1 = Action(s) Underway; 2 = Completed.



5.2 Funding Mechanisms

Objective 2

To develop and advocate appropriate funding mechanisms for the sustained support of conservation and sustainable resource management activities at the local, national and regional levels.

Current Situation

There is general recognition that achieving conservation and sustainable development goals will require substantial investments initially and in the long-term. Most conservation activities in the region are supported, at least in part, by donor countries and organizations. However, donors are usually enthusiastic about funding new projects and hesitant to commit to the ongoing support needed to build and sustain effective conservation programmes on the ground. Funding agencies need to be encouraged to provide reliable support for long-term conservation goals. At the same time, there is great interest in developing site-specific and national funding mechanisms that can eventually provide financial independence for at least some conservation and sustainable resource management projects and programmes.

There is general consensus that the costs of conservation should be shared by all the communities that benefit from it: local, national and international. Each of these sources should contribute to the long-term support of conservation agencies and programmes in the Pacific. To accomplish this, new funding initiatives and other forms of support must be developed

Local and National Key Actions

1. Establish appropriate in-country and site-specific sources of new revenue dedicated to support conservation and sustainable resource management:
Possibilities include:
 - a. **Nature-based enterprises** — e.g. handicrafts, food products, etc.;
 - b. **Resource Rentals and/or Royalties** — e.g. commercial fishing, logging, mining;
 - c. **User fees** for recreational activities — e.g. sportfishing, diving, nature-based tourism;
 - d. **Environmental bonds** to ensure responsible resource use by development and resource extraction projects; and,
 - e. **Special taxes** for visitors/tourists — e.g. addition to airport tax, hotel room tax, aviation fuel tax.
2. Assist individuals and community groups with planning and starting small scale, sustainable nature-based businesses, possibly including creation of conservation loan programmes.
3. Develop in-country capacity (government and non-government) to identify financial needs, secure funding and manage budgets effectively to ensure accountability required by donors and the public.
4. Develop trust funds that can help ensure the long-term viability of local and national conservation programmes.
5. Develop private support and donations from individuals, businesses and industry groups for implementing national conservation priorities, including local co-management, in-kind services, conservation memberships, cause-related marketing.

6. Prepare a funding plan for the country's top conservation priorities and plan for self-funding core costs from locally and nationally controlled sources within 5-10 years wherever possible. Identify long-term international cost-sharing agreements needed.

Regional and International Key Actions

7. Work with countries to secure support from multilateral and bilateral donors for:
 - a. **implementing national conservation priorities;**
 - b. **establishing trust funds** to ensure long-term security for conservation and sustainable resource management programmes; and,
 - c. giving **first priority** for conservation and sustainable resource management business ventures in economic development aid programmes.
8. Provide **technical and financial assistance to local communities** and resource owners to launch sustainable, nature-based businesses, including help with identifying and designing desirable products, market information, small business training, pursuing new markets, developing effective cooperatives, and securing financing.

9. Provide **technical assistance and materials** to assist countries and territories in establishing **appropriate funding mechanisms** to support conservation programmes.

10. Investigate the **potential for regional contracts** with pharmaceutical, industrial and other biotechnology firms, incorporating appropriate criteria for protection of intellectual property rights.

11. Provide a **critical review of sustainable income generation projects** developed around the world suitable for conservation areas in the Pacific.

12. Compile **sample statistics on the contributions of nature-based businesses** to local and national economies and their contributions to achieving nature conservation / environmental goals for presentation at the *Sixth South Pacific Conference on Nature Conservation and Protected Areas*. (NGOs).





Measures of Success - Funding Mechanisms

By the end of 1998, the following would have been produced or achieved:	1994	1995	1996	1997	1998	Comments
<ul style="list-style-type: none"> ➤ Both government and non-governmental organisations are able to develop, secure and manage substantial funds from existing and new sources. ➤ Individuals and groups seeking to start a nature-based business have access to adequate information, training, finances, technical assistance, and regionwide marketing programmes. ➤ Each country and territory has one or more dedicated sources of support for conservation and sustainable resource management from nature-based enterprises, resource rentals, royalties, user fees, special taxes or other funding mechanisms levied in-country. ➤ At least one conservation area in the region is self-funded, meaning it is generating sufficient revenues to sustain local management and community development activities from dedicated local or national income sources without additional government or donor support. "Dedicated" sources could include income from tourism, sale of products in-country and export, user fees, special taxes, etc. ➤ At least one local, national or regional trust fund has been established and funded to support ongoing conservation programmes. ➤ Each country and territory has a conservation financial plan, including self-funding strategies for appropriate projects. 						

Key: 0 = No Progress; 1 = Action(s) Underway; 2 = Completed.



5.3 Biodiversity Protection

Objective 3

To identify and address the most urgent threats to the region's biodiversity and protect the region's plants, animals and ecosystems for future generations.

Current Situation

Island biological diversity, with its high degree of endemism, is among the most critically threatened in the world. It is estimated that about 75% of the mammals and birds that have become extinct in recent history were island-dwelling species, with more extinctions likely in the future. The greatest threats to the region's biodiversity are deforestation, land degradation for agriculture, habitat loss from poorly planned development, introduced pests, and overharvesting of terrestrial and marine resources. Mining poses serious threats where it occurs and could significantly damage marine and terrestrial resources if it expands without proper safeguards.

Despite great conservation efforts by some island countries, only a small fraction of the region's resources are in officially protected areas (including conservation areas), and many of these are not actively managed or safe from encroachment and degradation.

The expanding needs of growing populations drive many of these destructive activities. The 1989 and 1993 Conferences clearly recognized that the successful protection and management of natural areas will depend on the involvement and active support of local communities. This has led to a new focus on integrating conservation and development to promote biodiversity protection.

However all forms of protected areas have a role in the region, and all would benefit from local community involvement in the design, management and monitoring. In addition, regional conservation programmes for marine turtles, marine mammals and birds have started to focus conservation work at the national and local levels on the endangered and threatened species of the region.

For many reasons, protected area establishment will continue to be slow, and the vast majority of each country's natural resources will remain outside of established protected areas. This gives a special urgency to ensuring that all natural resources are managed sustainably and to focussing research on the crucial question — when is resource use truly sustainable? As the parameters of sustainable development are better understood, environmental agencies and agencies responsible for resource use must work together to incorporate the principles of environmental sustainability into policy, law and practice for all resource use.

Substantial work in support of this objective is being undertaken through the South Pacific Biodiversity Conservation Programme.

Local and National Key Actions

1. Establish at least one model conservation area under community management to demonstrate biodiversity protection, sustainable use of natural resources and community economic development, preferably including terrestrial and marine resources. Jointly begin management and periodic monitoring.



2. Identify immediate, major threats to the endangered, threatened or vulnerable ecosystems and species in the country and implement management, protection and education projects to address or avoid them, including the possible use of sanctuaries, strict reserves, ex-situ conservation and advocating sound laws, regulations, and policies with the relevant government agencies.
3. Integrate population and conservation programmes to promote:
 - a. better understanding of population trends and resource needs
 - b. land use planning at the local level for projected population growth
 - c. eventual reduced population growth and sustainable resource use.
4. Review and modify current laws, regulations and policies that currently allow unsustainable resource use to:
 - a. identify, require and enforce sustainable harvest rates;
 - b. set standards for minimizing indirect impacts; and
 - c. provide support for on-site monitoring, on-site resource management and off-site conservation areas.

Include community representatives in developing this legislation and strive for local enforcement, wherever possible. (**Note:** Legal reviews completed for ten countries.)
5. Develop a prioritized list of introduced plant and animal pests that threaten the country's biodiversity, and work with regional and international agencies to develop and implement effective control and prevention programmes.
6. Identify good indicator species or other measures for monitoring the condition of marine and terrestrial resources in at least one conservation area or area of high ecological value and regularly assess the status of these indicators.

Regional and International Key Actions

7. Building on the *South Pacific Biodiversity Conservation Programme*, work closely with countries to develop a series of conservation areas that demonstrate protection of biodiversity, ecologically sustainable use of natural resources, and community economic development. Include projects that address key threats to the region's biodiversity and offer sustainable alternatives.
8. Develop specific regional strategies and national management plans for endangered threatened or vulnerable ecosystems and species. Use the existing regional and national information base and ecosystem classification to develop criteria, set priorities, and conduct additional surveys to provide information essential to decision-making or implementation.
9. Work closely with resource development agencies and the private sector to design and test sustainable approaches to major resource extraction activities outside of conservation areas, including forestry, fisheries, agriculture, infrastructure development, mining and petroleum extraction, and waste management.
10. Identify potential and established introduced plant and animal pests in the region and work with the countries to develop and implement effective prevention and control programmes, including port-of-entry/exit inspection, quarantine, and public awareness.

11. Provide technical assistance in developing laws, regulations and policies that protect biodiversity, and provide technical and infrastructure support for enforcement, as appropriate.
12. Develop standard, repeatable survey methods for monitoring terrestrial and marine resources of high ecological value; use or adapt existing standards wherever possible. Prepare a manual and in-country training course for local communities and resource managers.

13. Develop methods to strengthen the social, cultural and demographic analyses in environmental impact assessment to detect and address potential impacts on affected populations and their natural resources. Incorporate population considerations into policy discussions and formal and informal training programmes.





Measures of Success - Biodiversity Protection

By the end of 1998, the following would have been produced or achieved:	1994	1995	1996	1997	1998	Comments
⇒ Model community-based conservation areas are underway in most countries and territories, and early results indicate that some of the economic development projects are sustainable.						
⇒ SPREP and the member countries have developed and started implementation of a specific plan (with prioritized target areas and/or management activities) to protect the endangered, threatened and vulnerable ecosystems and species in the region.						
⇒ Sustainable resource extraction techniques are being tested in at least one site in the region for each major commercial resource.						
⇒ At least one project has successfully integrated population planning into a conservation programme, with promise of reducing population pressure on a priority area.						
⇒ A regionwide program to prevent and control the spread of at least the five highest priority plant and animal pest species is underway.						
⇒ A legal and regulatory framework is in place in most countries to identify and protect priority ecosystems and species from overharvesting, pollution, conversion to other uses and other destructive activities.						
⇒ Standard monitoring techniques are used regularly for marine and terrestrial resources that are intensively used and in countries with high marine or terrestrial biodiversity.						

Key: 0 = No Progress; 1 = Action(s) Underway; 2 = Completed.



5.4 *Local Communities and Customs*

Objective 4

To involve communities in cooperative natural resource management that recognizes and strengthens local resource owners' rights and uses environmentally sound customs.

Current Situation

Most of the protected areas in the South Pacific are not effectively managed. These are often protected as national parks and reserves that prohibit sustainable resource use by local populations, and the exclusion of traditional resource owners is generally pointed to as the underlying cause for the lack of management.

More flexible and appropriate concepts embodying landowner involvement and allowing sustainable use of resources are required. Local communities and resource owners should be given priority in establishing sustainable resource-based business enterprises, including ecotourism. The conservation area approach incorporates these principles, and several initiatives in this direction are currently underway in the Federated States of Micronesia (Pohnpei), Solomon Islands and Western Samoa.

The extent of actual community involvement in planning and management is generally inadequate. A constraint to improving this situation is the lack of project planning, business, and management skills among communities and a general failure to adapt the planning process to use customary decision-making methods. The need for greater involvement of communities and resource owners is vital to the success of conservation areas in the immediate and long term.

To make this process meaningful, **all** participants will need to acquire appropriate skills.

Local and National Key Actions

1. Involve local communities in all phases of natural resource and development planning and management by:
 - a. including community representatives in all relevant committees & consultations;
 - b. ensuring, by legislation, their consultation in environmental and social impact assessments of major resource development projects;
 - c. fostering closer relations and regular dialogue with government agencies and NGOs; and,
 - d. providing training to community representatives, resource owners and NGOs.
2. Recognize community resource ownership and encourage communities to manage their own resources by:
 - a. assisting them to develop and implement their own plans through a community consultation processes;
 - b. empowering local communities to control their resources through legislative and policy measures, where needed; and,
 - c. providing economic incentives for conservation, where appropriate.
3. Support local communities in negotiations with donors and developers through:
 - a. access to sound and up-to-date technical and scientific advice and information;
 - b. independent legal advice, resource valuation and financial expertise; and,
 - c. assistance with identifying and addressing the social and cultural impacts of proposed projects.



4. Continue to *recognize and strengthen the special role of women, youth and church groups* in all aspects of resource management and conservation and ensure their representation on the NEMS Task Team and other relevant committees.
5. Adopt or strengthen appropriate policies and or legal instruments that protect indigenous intellectual and cultural property rights.
6. Ensure that all conservation activities (research, resource inventories, management, monitoring, etc) undertaken by expatriate experts include:
 - a. active participation of local counterparts and a requirement for hands-on training;
 - b. integration of local knowledge into the results;
 - c. direct presentation of findings and reports to the communities directly involved or affected; and,
 - d. documentation of **all** findings (preliminary and final), with copies provided to all appropriate agencies and information databases in the country and the region.
7. Identify, document and promote the wider use of customary knowledge and environmentally sound customary practices, including the medicinal uses of fauna and flora. Adapt customary practices or develop new appropriate technologies, where needed.
8. Integrate training programmes and conservation area management planning with local knowledge and practices.

Regional and International Key Actions

9. Require the involvement of local communities and resource owners in biodiversity conservation programmes as a prerequisite for funding by multi-lateral and bilateral donors.
10. Support the development of adequate and effective legal mechanisms for protecting intellectual property rights of local and indigenous people, including traditional resource owners.
11. Develop and support regional programmes for the collection and recording of traditional knowledge and the development of a regional information base on customary resource management.



Measures of Success - Local Communities and Customs

	1994	1995	1996	1997	1998	Comments
By the end of 1998, the following would have been achieved:						
☛ Community representatives participate in the NEMS Task Team and a number of other similar committees.						
☛ At least one conservation area project in each country is managed under a cooperative arrangement involving resource owners.						
☛ Sustainable resource management practices are integrated in the management of at least one conservation area in the region.						
☛ Women, youth and church groups, are involved in some aspects of natural resource management at the national level, including their representation in the NEMS Task Teams and other groups.						
☛ Legislation and policies are in place requiring cooperative management of natural resources and conservation projects, involving local resource owners.						
☛ Policies or legal instruments are in place for protecting intellectual and cultural property rights.						
☛ The public has greater access to information and data on natural resources and biodiversity. Appropriately packaged information is also readily available.						

Key: 0 = No Progress; 1 = Action(s) Underway; 2 = Completed.



5.5 Training and Extension

Objective 5

To strengthen local expertise and technical ability in planning and implementing sustainable natural resource management programmes for marine and terrestrial environments through programmes of training and extension that use local expertise wherever possible.

Current Situation

Pacific Islands do not have sufficient capacity to implement sustainable development. In the area of resource management and biodiversity conservation, most Pacific countries now have small environment and conservation agencies but they generally have few staff, often with very little training and experience. For example, a 1992 estimate placed the number of trained park rangers at 20-25 for the entire region, with only 2 marine conservation officers. NGOs and communities are now expected and encouraged to play an important role in conservation area management, but both lack planning and management skills. Virtually no effort has been made to harness the community's traditional skills and capacity for conservation and sustainable development.

Local and National Key Actions

1. Assess specific training needs of government agencies, NGOs and local communities responsible for managing and monitoring terrestrial and marine environments as a basis for formulating a prioritized training program.
2. Conduct in-country training courses for government agencies, NGOs, community representatives, and resource owners, using local experts as trainers and resource people wherever possible, to strengthen their skills in:
 - a. community-based resource planning, management and monitoring;
 - b. terrestrial and marine conservation operations and techniques;
 - c. proposal and report writing, using formats from major funding agencies; and,
 - d. other skills identified by each country's training needs assessment.
3. Develop special training courses on conservation for extension and social workers who deal directly with human welfare, particularly for communities adjacent to conservation areas and other important ecological areas.
4. Encourage and facilitate the participation of community representatives, NGOs and resource owners in training programmes in-country and abroad, including programmes currently managed by or for government agencies.
5. Strengthen extension services of appropriate government agencies (forestry, fisheries, agriculture and environment) through recruitment of additional staff, training and logistics assistance to ensure effective and reliable technical support for communities.

Regional and International Key Actions

6. Assist with the assessment of country training needs.
7. Provide financial and technical support for priority in-country training identified in the training needs assessment and identified in national actions.
8. Conduct regional training courses on identified priority skills required for the effective implementation of terrestrial and marine conservation programmes.
9. Assess the feasibility of establishing a training centre and/or mobile training units within the region to build natural resources management and biodiversity conservation skills. If feasible, support establishment.





Measures of Success - Training and Extension

By the end of 1998, the following would have been achieved:	1994	1995	1996	1997	1998	Comments
☛ Representatives from relevant government agencies, NGOs, and resource owning communities have been trained in the different aspects of natural resource management and biodiversity conservation in at least half of the countries and territories.						
☛ At least 10 training courses have been conducted on identified priority topics.						
☛ A prioritised assessment of national training needs in sustainable development in general, and biodiversity conservation in particular, is completed for all countries and territories.						

Key: 0 = No Progress; 1 = Action(s) Underway; 2 = Completed.



5.6 *Environmental Awareness, Information Sharing and Partnerships*

Objective 6

To improve environmental awareness and information sharing and to build working partnerships at the local, national, regional and international levels in support of conservation activities.

Current Situation

Throughout the South Pacific, conservation programmes and activities typically involve partnerships between the national environmental agency, SPREP and often an international donor. More and more, non-governmental organisations are joining these efforts, bringing new skills, networks and resources. The 1993 Tonga Conference emphasized the need to invest in and commit to making these partnerships work and to reach out to include resource owners, local communities, businesses and others who can help.

Despite impressive progress in many countries, environmental education and awareness continue to be a high priority in every NEMS, and some countries are described as having a dearth of relevant resource information. People are successfully trying new "grassroots" ways to share environmental information, and the new challenge is to include traditional knowledge and practices in the conservation message.

Local and National Key Actions

1. Implement NEMS priorities to improve environmental awareness and education in a compelling and more effective way, using the arts, theatre, music, media and attractive visual and print materials. Materials should incorporate local customs in resource management and should use local language(s) as much as possible.

2. Involve government, NGOs, businesses, local communities, and technical resource people in planning, implementing and evaluating conservation activities and programmes.
3. Require that resource people and researchers provide results and information to affected local communities and environmental management staff in a useful way. Require copies of all publications, reports, and original data for in-country use.
4. Ensure easy public access to resource data and information necessary to design, implement, monitor and evaluate conservation programmes.
5. Assess national environmental awareness and involvement through periodic surveys or polls.
6. Develop local interpretive skills and establish facilities (if appropriate) in at least one accessible conservation area or area of high ecological value to improve public awareness of the need for conservation and the role of traditional knowledge and customs in resource management.
7. Work with other countries to share experiences and expertise in all aspects of conservation and sustainable development work, including both successes and failures.

Regional and International Key Actions

8. Support information and experience exchange to communicate successes and failures (and develop guidelines) for key aspects of conservation and sustainable resource management (e.g. nature-based enterprises, community awareness community-based resource management and monitoring).



9. Develop and maintain a regional information base with current information on island ecosystems and species for conservation, major threats, and sustainable development opportunities. Establish linkages with existing networks and among island countries to encourage information exchange.
10. Assist with the development of appropriate in-country resource databases to help guide conservation and sustainable development, decision-making and implementation.
11. Conduct a study on the effectiveness of specific educational tools (e.g. written material, posters, T-shirts, slides, videos, etc) for the two key audiences in the Pacific (local villagers and national decision-makers), and develop guidelines for targeting educational efforts for maximum effect.
12. Develop and use a set of consensus principles to build public and private partnerships that provide optimal support and technical assistance to countries and local communities for achieving their conservation priorities.
13. Provide support and technical assistance to the region's:
 - a. network of environmental journalists;
 - b. teachers, schools and education departments for curriculum development; and,
 - c. national and community groups in media & publications.
14. Periodically poll the region to gather data on access to information and services, progress on this Action Strategy, and the effectiveness of other regional activities.
15. Disseminate scientific/technical information and traditional/customary knowledge on conservation and resource management through the publication of meeting reports, topic studies, bibliographies and a register of Pacific resource people.
16. Continue to produce and distribute educational materials on regional environmental issues in an interesting and informative way, where possible in local languages.



Measures of Success - Environmental Awareness and Partnerships

	1994	1995	1996	1997	1998	Comments
By the end of 1998, the following would have been produced or achieved:						
➤ Each country holds at least one popular environmental awareness event each year and has regular features on environmental issues in the media, with a resulting substantial increase in environmental awareness and involvement by the public as measured by surveys.						
➤ Most conservation projects and programmes have a broad-based group of public and private advisors to assist with planning, implementation and monitoring. All proposals for new conservation efforts include evidence that a broad-based advisory group assisted with the project design.						
➤ People with local cultural knowledge are an integral part of all environmental awareness, education, research, resource management and monitoring activities.						
➤ There are good examples of new, more effective ways to provide scientific and technical information for local and national use.						
➤ Essential information for conservation and sustainable resource management is available through appropriate databases, publications or resource people, and this information is used by the governments, non-governmental organisations, businesses and communities in conservation and development planning and implementation.						

Key: 0 = No Progress; 1 = Action(s) Underway; 2 = Completed.



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Annexes

Annex 1: Protected Areas of the South Pacific

Notes for Annex 1

Annex A1

Number of protected areas, total land area, protected land area and percentage land protected from Paine 1993; IUCN categories I-VI included. IUCN 1991 included information on total/protected land areas that differed from Paine 1993 for some areas. No comparable information was available for marine protected areas.

Annex A2

Number and list of protected areas from IUCN 1991 with additions from Farago 1993 and Action Strategy reviewer comments. All IUCN categories (I-VI) are included. Paine 1993 reports 98 protected areas in IUCN categories I-V. This is probably the basis for the figure cited in Farago 1993 and in previous strategies.

IUCN categories of protected areas

- I Scientific Reserve/ Strict Nature Reserve
- II National Park
- III Natural Monument/ Natural Landmark
- IV Managed Nature Reserve/ Wildlife Sanctuary
- V Protected Landscape or Seascape
- VI Resource Reserve

Abbreviations used

Cons	Conservation Reserve
Ecol	Ecological
FR	Forest Reserve
Is	Island(s)
MP	Marine Park
MR	Marine Reserve
NA	Natural Area
NHP	Nat'l Historic Park
NMS	Nat'l Marine Sanctuary
NNL	Nat'l Natural Landmark
NP	National Park
NR	Nature Reserve
NWR	Nat'l Wildlife Refuge
Pk	Park
Prov	Provincial
Rec	Recreational
Res	Reserve
Sanct	Sanctuary
SBR	Special Botanical Res
SFFR	Special Fauna and Flora Reserve
SFR	Special Fauna Reserve
SMR	Special Marine Reserve
SNR	Strict Nature Reserve
Terr	Territorial
WMA	Wildlife Management Area
WR	Wildlife Reserve
WS	Wildlife Sanctuary
WHS	World Heritage Site



Annex A1: Summary of Terrestrial Protected Areas of the South Pacific region

South Pacific States	No. of Protected Areas (See Note 1)	Land Area (sq km)	Protected Land Area (sq km) (see Note 2)	% Land Protected
American Samoa	11	197	48	24.37%
Cook Is	4	233	2	0.86%
Easter Is	1	68	67	98.53%
Federated States of Micronesia	1	702	0	0.00%
Fiji	17	18,330	291	1.59%
French Polynesia	7	3,940	135	3.43%
Guam	11	450	85	18.89%
Kiribati	11	684	587	85.82%
Marshall Is	0	181	0	0.00%
Nauru	0	21	0	0.00%
New Caledonia	52	19,105	7,038	36.84%
Niue	0	259	0	0.00%
North Marianas	4	471	15	3.18%
Palau	23	365	15	4.11%
Papua New Guinea	37	462,840	9,866	2.13%
Pitcairn Is	1	42	0	0.00%
Solomon Is	8	29,790	26	0.09%
Tokelau	0	10	0	0.00%
Tonga	10	699	35	5.01%
Tuvalu	0	25	0	0.00%
U.S. Minor Is (???)	4	658	542	82.37%
Vanuatu	6	14,765	1	0.01%
Wallis-Futuna Is	2	255	0	0.00%
Western Samoa	5	2,840	41	1.44%
Other	2	NA	NA	NA
Total	217	556,930	18,794	3.37%
<i>Hawaii</i>	<i>103</i>	<i>16,760</i>	<i>2,866</i>	<i>17.10%</i>

Annex A2: Established protected areas in the South Pacific

American Samoa (11)

American Samoa National Parks*
Rose Atoll National Wildlife Refuges*
Fagatele Bay National Marine Sanctuaries*
Anunu'u Island National Natural Landmarks
Cape Taputapu NNL
Fogama'a Crater NNL
Leala Shoreline NNL
Matafao Peak NNL
Rainmaker Mountain (Mt. Pioa) NNL
Vaiava Strait NNL

Cook Islands (4)

Aitutaki Trochus Sanct*
Manuae Lagoon Trochus Sanct*
Palmerston Lagoon Trochus Sanct*
Suvarrow Atoll NP

Easter Island (1)

Rapa Nui NP

Federated States of Micronesia (1)

Trochus Sanctuaries - Pohnpei*

Fiji (17)

Colo-i-Suva Forest Park
Draunibota & Labiko Is NR
JH Garrick Memorial Reserve
Lololo Amenity Reserves (AR)
Lomolomo AR
Nadarivatu NR
Namenalala Island NR
Naqarabuluti NR
Nukulau Island and Reef (AR)
Ravilevu NR
Saweni Beach (AR)
Sigatoka Sand Dunes NP and Res
Tavakubu (AR)
Tomaniivi NR
Vunimoli NR
Vuo Island NR
Yadua Taba Island Crested Iguana Reserve



French Polynesia (7)

Atoll de Taiaro (W.A. Robinson) Biosphere
& NR
Eiao Island Nature Reserve
Hatutu Island Nature Reserve
Mohotani
Sable Island (Motu One)
Scilly Atoll (Manuae) Reserve
Vallee de Faaiti Nature Reserve

Guam (10)

Anao Cons. Reserves*
Bolanos (Chalan Palii CR) Cotal
Haputo Ecological Reserve Areas*
Masso River Reservoir Area Natural
Reserves*
Orote Peninsula Ecological Reserve Areas*
Pati Point Natural Areas*
Guam Territorial Seashore Park*
Schroeder
War in the Pacific*
Y-Piga

Kiribati (11)

Birnie Island WS
Cook Islet Closed Area (Kiritimati WS)
Kiritimati WS
Malden Island (Closed Area)
Motu Tabu Islet Closed Area (Kiritimati
WS)
Motu Upua Closed Area (Kiritimati WS)
McKean Island
Ngaontetaake Islet Closed Area (Kiritimati
WS)
Phoenix Island (Rawaki)
Starbuck (Closed Area)
Vostok Island

New Caledonia (52)

Amoa/Tchamba
 Aoucpinies SFR
 Boulouparis-Bourail
 Branch Nord Dumbea et Couvelee
 Col d'Amieu FR
 Chutes de Madeleine SBR
 Foret de Sailles SBR
 Haute Doutio
 Haute Yate SFR
 Koumac
 Kuebini FR
 La Dieppoise SMR
 Lagon Sud Terr Pk (5units)
 L'entange de Koumac SFR
 L'Ile Pam SFR
 L'Ilot Lepredour SFR
 L'Ilot Maitre SFFR
 "Michael Corbasson"
 Mont Do SFFR
 Mont Humboldt SBR
 Mont Mou FR
 Mont Mou SBR
 Mont Panie SBR
 Montagne des Sources NR
 Nord Cote Est
 Ora Peninsula
 Ouenarou FR
 Ouen-Toro Terr Pk
 Païta-Dumbea-Mt Dore
 Pic Ningua SBR
 Ponerihouen
 Pouembout
 Povilla FR
 Riviere Bleue Terr Pk
 Southern SBR (7 units)
 Tangadiou FR
 Tango FR
 Tiponite FR
 Tournante de Marine Faune SMR
 Thy Terr Pk
 "South" of New Caledonia FR
 Yves Merlet SMR

North Marianas (4)

Asuncion Is Preserve
 Guguan Is Preserve
 Maug Is Preserve
 Uracas Island Preserve (aka Farallon de Pajaros)

Palau (3)

Ngerukewid Is
 Trochus Sanctuaries (21)
 Ngerumekaol Grouper Spawning Area

Papua New Guinea (37)

Bagiai (I)* WMA
 Baiyer River S
 Balek (III) WMA
 Baniara Island (II) WMA
 Cape Wom International Memorial Park*
 Crown Island (III) WMA
 Garu (I)* WMA
 Horseshoe Reef MP
 Iomare (I) WMA
 Jimi Valley National Parks
 Kokoda Trail NP
 Lake Lavu (I) WMA
 Long Island (III)
 McAdam NP
 Maza (I)*
 Mt Gahavisuka Park*
 Mt Kaindi*
 Mt Wilhelm NP
 Moitaka WS
 Mojirau (I)*
 Namanatabu Historic Reserves
 Nanuk Island Park*
 Ndrolowa (I)*
 Neiru (I)
 Nuserang (I)*
 Oia-Mada Wa'a (I)
 Paga Hill ScR
 Pirung (I)
 Pokili (I)
 Ranba (I)*
 Sawataetae (I)*
 Siwi Utame (I)

(PNG cont'd next page)

PNG - from previous page

Talele Islands (Bismarck Archipelago) NR
Talele Islands Park*
Tonda (I)*
Varirata
Zo-Oimaga (I)

Pitcairn Is. (1)

Henderson Is WHS (not incl. in Paine 1993)

Solomon Is (8)

Queen Elizabeth NP
Arnavon WS or Arnavon Marine Cons Area
Tulagi Bird Sanct
Kolombangara FR
Dalakalau
Dalakalonga
Mandoleana
Oema Is

Tonga (10)

Eua NP
Fanga'uta and Fanga Kakau Lagoons
Marine Res
Ha'atafu Beach Res
Hakaumama'o Reef Res
Malinoa Is Res
Monuafe Is Res
Mui Hopo Hoponga Res
Pangaimotu Reef Res
Mounu Reef Sanct
Ha'amonga Trilithon Pk

U.S. Minor Islands (4)

Baker Is NWR
Howland Is NWR
Jarvis Is NWR
Johnston Atoll NWR

Vanuatu (6)

Naomebaravu-Malo Res
President Coolidge and Million Dollar Point Res
Whitesands Res
Narong MR*
Aore Rec Pk
Bucaro Aore Rec Pk

Wallis and Futuna (2)

Wallis Toafa FR
Lalolalo Vao Tupu (aka Forbidden Forest)

Western Samoa (5)

O Le Pupu Pu'e NP
Tusitala Historic & NR (3 units)
Palolo Deep Res
Togitogiga Rec Res
Falealupo Forest

Other (2)

Lord Howe Is Group WHS (Australia)
Kermadec Is NR (New Zealand)

* *Protected area identified by Action Strategy review; not listed in IUCN 1991.*





Annex 2: NEMS Country Priorities for Action and Nature Conservation and Protected Areas.

Extract from Wendt, N. 1993. "National Environmental Management Strategies". In Fifth South Pacific Conference on Nature Conservation and Protected Areas. Vol 1. Conference Report. 4-8 October, 1993, Nukualofa, Tonga. Apia. pp27-34.

1. Relationship Between NEMS and Biodiversity Conservation

The *Legislative/Policy/Institution Reviews* undertaken in each of the countries to assist the process of NEMS development have clearly shown that there is a need for comprehensive nature preservation legislation and even where such legislation does exist, there is a need for enforcement. As well, the Reviews highlight the need for strengthened institutional structure with trained staff to oversee protected area and species conservation and for the need for more open participatory mechanisms to involve traditional land-owners in protected area management.

The *Education/Community Awareness Reviews* undertaken in many countries in support of the NEMS process have also shown a dearth of relevant resource material to educate the community both through the formal and non-formal education systems.

During the process of *National Environmental Management Strategy* development, each country has identified:

- (i) Strategies; and
- (ii) *Programme Profiles* (specific projects) which will serve to put the strategy into action.

The Programme Profiles have been incorporated into SPREP's Work Programme for which funds are being actively sought. A brief analysis of the Strategies and Programme Profiles for each of the countries concerned, shows a strong emphasis on biodiversity conservation, especially involving community participation.

Below is a country-by-country breakdown of specific *Strategies* and *Programme Profiles* which clearly shows a large number of specific activities aimed at nature and species protection.

2. Strategies and Programme Profiles from NEMS Related to Nature Conservation and Protected Areas



Cook Islands (*Cabinet-endorsed NEMS*)

Strategy 2.2:

Preserve traditional knowledge management systems

- Upgrade documentation of traditional environmental knowledge and practices.

Strategy 3.2:

Support sustainable use of marine resources

- Development of policies and procedures to minimise over fishing of reefs and lagoons

Strategy 3.4:

Establish and manage protected areas

- Development of tourism-based conservation areas.
- Application of traditional knowledge to resource conservation.



Federated States of Micronesia

(Cabinet-endorsed NEMS)

Strategy 4:

Improve environmental awareness and education

- Development of a "grass-roots" community education programme.
- Documentation and application of traditional knowledge and management systems.

Strategy 5:

Manage and protect natural resources

- Resource Information System development.
- Reef and lagoon resources survey for Chuuk State and the Outer Islands of Yap and Pohnpei States.
- Nan Madol Master Plan.
- Endangered species and habitat action plan.
- Participation in regional and international biodiversity programmes.
- Programme to preserve traditional forest knowledge and raise landowner awareness of forest values.
- Total species marine preserve pilot project.
- Conservation programme for marine turtles.



Kiribati (Draft NEMS)

Strategy 5:

Development and Protection of the Resource Base

- Protection of special habitats and species.
- Conservation and management of mangroves.
- Review and improve conservation arrangements for the Phoenix and Line Islands.

- Establishment of an arboretum of traditional cultural and medicinal plants of Kiribati.
- Training workshops on the conservation and management of reefs and marine living resources in Kiribati.



Marshall Islands (Cabinet-endorsed NEMS)

Strategy 6:

Managing Marine and Coastal Resources for Sustainability

- Developing marine resource conservation regulations.
- Developing marine biodiversity conservation programme.
- Promoting giant clam and trochus mariculture.

Strategy 8:

Protecting special areas and species

- Developing nature conservation legislation.
- Establishing network of protected areas.
- Creating interagency conservation body.
- Developing eco-tourism.

Strategy 9:

Protecting Cultural Values and Practices

- Developing cultural resource management plans.
- Developing cultural resource regulations.
- Establishing historic site register.
- Developing cultural resource education programmes.
- Assessing modern applications of traditional knowledge.
- Documenting cultural resources.
- Establishing network of cultural preservation officers.

◆ Niue (*Draft NEMS*)

Strategy 5:

Strengthening the resource database

- ◆ Ecological surveys of terrestrial vertebrate fauna.
- ◆ Systematic botanical survey.
- ◆ Marine resource survey.
- ◆ Computerised resource database.

Strategy 6:

Protecting areas of high ecological, wilderness and cultural values

- ◆ Development of a conservation area system for Niue.
- ◆ Identification of areas of conservation significance.
- ◆ Development of a model conservation area with full landowner participation.
- ◆ Participation in regional and international biodiversity programmes.
- ◆ Population survey of birds and other species of fauna.
- ◆ Study of costs and benefits of biodiversity conservation in Niue.
- ◆ Establishment of conservation areas on customary lands.

Strategy 8:

Sustainable use and management of land resource

- ◆ Community forestry awareness and traditional knowledge programme.
- ◆ Development of government forest police and awareness programme.
- ◆ Expanded reforestation programme.
- ◆ National tree planting programme.

Strategy 9:

Sustainable use and management of marine resources

- ◆ Impose seasonal sanctions on endangered reef resources.

◆ Palau (*Comprehensive Conservation Strategy*)

- ◆ Development of a National Conservation Law Enforcement Programme.
- ◆ Documentation of natural resource habitat needs and establishment of core Preserve Areas.
- ◆ Support for the Palau Wildland and Forest Management Act.
- ◆ Assistance to States to designate Preserve sites under the Natural Heritage Reserve System Act.
- ◆ Continuation of work to support the concept of Bioserve Planning for specific sensitive areas with The Nature Conservancy (TNC).
- ◆ Development of a management and enforcement framework for existing and planned Reserves (incorporating local involvement in the planning and management of reserve areas).
- ◆ Utilisation of traditional and local knowledge.
- ◆ Baseline studies and research on endangered species and endemic plants.
- ◆ Marine resource stock assessment.
- ◆ Terrestrial resource status assessment.
- ◆ Enforcement support for traditional management systems.

◆ Papua New Guinea (*Strategic Plan*)

Programme 9:

Conservation

Objective 1:

To build effective systems for accumulating, storing and using knowledge of the natural, historical and cultural resources of PNG so as to identify conservation needs.

Objective 2:

To build effective systems for accumulating, sorting and using knowledge of the way natural, historical and cultural resources are used by local communities so as to identify appropriate methods.

Objective 3:

To examine existing conservation methods and experiment with new conservation methods so as to discover those most suitable for Papua New Guinea and its peoples, seeking in particular methods which are grounded in local tradition and/or which foster participation by local communities and landowners in conservation management.

Objective 4:

To create an effective system for identifying conservation opportunities in the field, and to deliver the follow-up actions required to get new areas and/or resources into the conservation system.

Objective 5:

To improve management of the existing conservation areas, strengthen protection of the protected species and increase the Division's capability to undertake all the other conservation roles and responsibilities entrusted to it.

Objective 6:

To build up a strong network of cooperative working relationships with Government agencies at all levels, with NGOs both national and international, with universities, with donor agencies and with any other groups or individuals who can help achieve the Programme objectives.

Objective 7:

To put mechanisms for conservation advocacy in place in order to ensure that conservation options will be considered whenever significant planning or resource management decisions are being made.

Other activities include:

- ♦ Establishment of a Conservation Resource Centre (CRC) to achieve an immediate "capacity boost "
- ♦ Conservation Needs Assessment to assess biological resources of PNG and taking into account factors including biodiversity and threats to conservation, prepare guidelines for identifying priority areas and resources for inclusion in the Conservation System.

**Solomon Islands (Cabinet-endorsed NEMS)****Strategy 4:****Improving environmental awareness and education**

- ♦ Documentation of traditional knowledge and management systems.
- ♦ Application of traditional knowledge and management systems.

Strategy 5:**Strengthening the resource base**

- ♦ Ecological survey of terrestrial vertebrate fauna.
- ♦ Systematic botanical survey.
- ♦ Dugong survey.
- ♦ Reef, estuary and lagoon resources survey.

Strategy 6:**Protecting area of high ecological wilderness and value**

- ♦ Development of a conservation areas system.
- ♦ Participation in regional and international biodiversity programmes.
- ♦ Identification of areas of conservation significance.

- ♦ Development of a model conservation sea with full landowner participation (Komarindi Conservation Area).
- ♦ Nature sites development.
- ♦ Proposed World Heritage Sites: Lake Te Nggano and Marovo Lagoon.
- ♦ Regulation and monitoring of wildlife trade.
- ♦ Population survey of parrot species currently subject to trade.
- ♦ Costs and benefits of conservation of biological diversity in Solomon Islands.

Strategy 9:

Sustainable use of forest resources

- ♦ Customary landowner forestry awareness and traditional knowledge programme.

Strategy 10:

Sustainable use of marine resources

- ♦ Conservation of marine turtles.
- ♦ Crocodile population monitoring.
- ♦ Creation of marine reserves.

Strategy 11:

Coastal environment management

- ♦ Mangrove case study and community education.

Tonga (Cabinet-endorsed Action Strategy)

Strategy 7:

Improve and update basic data on natural resources.

- ♦ Develop a national resource information system (TONGRIS).
- ♦ Natural resources and ecosystems survey.

Strategy 8:

Protect the Kingdom's' biological diversity

- ♦ Strengthen wildlife management capability in the Kingdom.
- ♦ Replanting traditional, medicinal and culturally important plants.

- ♦ Management planning for protection of 'Eua National Park.
- ♦ Preservation of key natural and cultural sites in Vava'u.
- ♦ Royal Memorial Botanic Gardens.
- ♦ Pilot programme for the control of rate and feral cats on selected outer islands.

Vanuatu (National Conservation Strategy)

National Conservation Goal 3.1:

Change the way Vanuatu values natural resources.

National Conservation Goal 3.2:

Improve community understanding of environmental processes.

National Conservation Goal 3.5:

Ensure biological resources are used sustainably.

Western Samoa (Cabinet-endorsed NEMS)

Target Environmental Component 3:

Protection of the sea and marine resource

- ♦ Coral Reef / Mangrove Ecological Monitoring.

Target Environmental Component 7:

Conservation of Biological Diversity

- ♦ Ecological Survey of Midslope and Upland Forests.
- ♦ Conservation and sustainable management of mangroves and environs at Saanapu-Sataoa.
- ♦ Protection and sustainable use of the lowland forests of Aopo-Letui-Sasina. Planning for Protection and sustainable use of the lowland forests and islands of the Aleipata District.
- ♦ Development of a National Biodiversity Garden.
- ♦ Establishment of a Biodiversity Database.
- ♦ Birds survey and conservation.
- ♦ Compilation and publication of a Flora of Samoa.



Annex 3: List of Reviewers

The following people reviewed the draft *1994 Action Strategy for Nature Conservation in the South Pacific Region*.

Drafting Committee

Mr. Joe Reti (Chair), SPREP
Mr. Herson Anson, Pohnpei
Mr. Ernest Bani, Vanuatu
Mr. Moses Biliki, Solomon Islands
Ms. Jaquetta Bradshaw, New Zealand
Foreign Affairs & Trade
Mr. Jacky Bryant, Atuatu te Natura
Ms. Nancy Daschbach, American Samoa
Mr. Paul Dingwall, IUCN
Mr. Bruce Jefferies, UNDP
Mr. Richard Kenchington, GBRMPA
Mr. Gaikovina Kula, Papua New Guinea
Mr. P H C (Bing) Lucas, IUCN
Mr. Bernard Moutou, SPREP
Ms. Audrey Newman, The Nature Conservancy
Mr. Birandra Singh, National Trust for Fiji
Mr. Peter Thomas, The Nature Conservancy
Ms. Yolande Vernaudon, French Polynesia
Mr. Graeme Worboys, NSW National Parks & Wildlife Service

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Mr. Kalaveti Batibasaga, SPACHEE/USP
Mr. Lafcadio Cortesi, Greenpeace
Ms. Nora Devoe, Foundation for the Peoples of the South Pacific
Mr. Peter Hunnan, WWF International
Ms. Sue Maturin, Forest and Bird Protection Society

Ms. Annette Lees, Maruia Society / Conservation International
Ms. Vaasili Moelagi Jackson, Fa'asao Savai'i Society
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Mr. Komeri Onorio, Environmental Impact Assessment Officer
Ms. Gisa Salesa-Uesele, Environmental Education Officer
Mr. Andrew Smith, Coastal Management Officer
Mr. Gary Spiller, Biodiversity Officer (Conservation Areas)
Ms. Neva Wendt, Team Leader / NEMS



Map of Pacific islands Region

AREA SERVED BY THE SOUTH PACIFIC REGIONAL ENVIRONMENT PROGRAMME

