

Developing and Implementing National Biodiversity Strategies & Action Plans

Case studies from the Solomon Islands and Samoa

October 2007

Eleanor Carter



LIST OF ACRONYMS

CBD	Convention on Biological Diversity
COMSEC	Commonwealth Secretariat
COP	Conference of Parties
DEC	Department of Environment & Conservation
DLSE	Department of Lands, Surveys & Environment
GEF	Global Environment Fund
M&E	Monitoring & Evaluation
MEA	Multilateral Environment Agreements
MOU	Memorandum of Understanding
NAPA	National Adaptation Programme of Action
NBF	National Biosafety Framework
NBSAP	National Biodiversity Strategy & Action Plan
NCSA	National Capacity Self-Assessment
NEMS	National Environment Management Strategy
NGO	Non-Governmental Organisation
NIP-POP	National Implementation Plan – Persistent Organic Pollutants
NSDS	National Sustainable Development Strategies (Agenda 21)
SD	Sustainable Development
SPREP	Secretariat for the Pacific Regional Environment Programme
UNDP	United Nations Development Programme
WWF	World Wide Fund for Nature

INTRODUCTION

Planning for the conservation of biodiversity at the national level emerged as a key issue at the Rio Summit in 1992. It was further addressed in the formulation of the Convention on Biological Diversity (CBD), article 6 of which states:

"Each Contracting Party shall, in accordance with its particular conditions and capabilities:

- (a) Develop national strategies, plans or programmes for the conservation and sustainable use of biological diversity or adapt for this purpose existing strategies, plans or programmes which shall reflect, *inter alia*, the measures set out in this Convention relevant to the Contracting Party concerned; and*
- (b) Integrate, as far as possible and as appropriate, the conservation and sustainable use of biological diversity into relevant sectoral or cross-sectoral plans, programmes and policies."*

This Article is mandatory and creates an obligation for signatory nations to develop National Biodiversity Strategies and Actions Plans (NBSAPs).

15 years on from the Rio Summit, 190 nations are now party to the convention¹ and 147 of these have produced NBSAPs².

This report examines the status of NBSAP development and implementation in two case study nations in the South Pacific: Samoa and the Solomon Islands. Between May and October 2007 the Secretariat for the Pacific Regional Environment Programme (SPREP) with support from the Commonwealth Secretariat (COMSEC) undertook a regional review of NBSAPs in 14 member nations, 11 of which have completed NBSAPs, and 3 of which have yet to complete their NBSAPs (see Table 1). A component of this work was the provision of direct support to two focal countries at juxtaposing stages of NBSAP development and implementation:

Samoa -	The NBSAP was completed in 2001 and since this time work has been on-going implementing the various objectives and actions within the strategy.
Solomon Islands -	The NBSAP has yet to be completed. The process for NBSAP development (research, stakeholder consultation etc) has been proactively started on two prior occasions, but has faltered (for reasons discussed in section 2).

Through the provision of support to these member countries – assisting the review of the NBSAP in Samoa, and the development of the NBSAP in the Solomon Islands – it was possible to review the experiences of these two nations at such very different stages in their NBSAP processes, their lessons learned, challenges and obstacles faced and mechanisms developed to address these challenges.

¹ <http://www.cbd.int>

² UNEP/CBD/WG-RI/2/2/Add.1

Table 1

COUNTRY	CBD ratified:	YEAR OF NBSAP COMPLETION
Vanuatu	1993	1999
Fiji	1993	1999
Marshall Islands	1992	2000
Samoa	1993	2001
Cook Islands	1993	2001
Niue	1996	2001
FSM	1994	2002
Palau	Acs 1998	2005
Tonga	Acs 1998	2006 (draft awaiting approval from cabinet)
Kiribati	Acs 1994	2006 (draft awaiting approval from cabinet)
PNG	1993	2006 (in process of being re-drafted)
Nauru	1993	not yet produced
Solomon Islands	1995	not yet produced
Tuvalu	2002	not yet produced

FOCAL COUNTRY ANALYSIS

1. SAMOA

Samoa's NBSAP was produced in 2001, and promoted a range of objectives and actions to be undertaken for biodiversity conservation. The purpose of this preliminary review was to assess the status of implementation of these objectives and actions to date.

This review was carried out in August and September 2007, through collaboration between the Division of Environment & Conservation (DEC), Samoa (of the Department of Lands Surveys and Environment - DLSE).

Given the very limited time frame for this work we present here only a *preliminary* evaluation, with a mind to continue and expand the review process in the coming months.

The criteria followed in this work has been drawn (and adapted) from the '*voluntary guidelines to parties for review of National Biodiversity Strategies and Action Plans, 2006, Decision VIII/8.*'

There are five sections to this review:

- The Process of NBSAP Development
- Overview of the NBSAP
- The Status of NBSAP Implementation to date
- Success Stories, Lessons Learned and further support required
- Next Steps

1.1 The Process of NBSAP Development

This section provides a brief description of the methodology that Samoa followed in developing its NBSAP. It is based upon the results of reviewing NBSAP associated literature (cited where relevant), and from interviews with DEC personnel and former DEC personnel, most especially Faumuina Pati Liu (Acting CEO-Environment) and Tepa Suaesi (former NBSAP Coordinator, Samoa).

1.1.1 Lead Agency

The institution that took the lead in preparing the NBSAP was the Division of Environment & Conservation (DEC), Department of Lands Surveys and Environment (DLSE)

1.1.2 Guidelines followed

There are various guidelines available for NBSAP production. According to DEC personnel, Samoa basically followed the available guiding principles available from the Secretariat of the CBD. However, Samoa also developed the NBSAP in line with the national level guidelines for macro-framework performance budgeting (for DEC) which was, at that time, in the early stages of development in Samoa; and in line with the overall sustainable development planning (NSDS formulation 98-00) in Samoa. Labbate ³ observes that the process of NBSAP preparation also successfully adhered to the established guidelines for quality and participation as required by the Global Environment Fund (GEF).

³ Labbate, G. (2003) Evaluation of the NBSAP project and add-on phase. Government of Samoa

1.1.3 Stakeholder consultations

Various different sectors and stakeholders were involved in the NBSAP development process. (See NBSAP page 86 – edited exert provided here):

A steering committee was composed of one representative from each Government Department or Agency; Corporations; Statute Bodies and relevant NGOS as listed below.

Government Departments: <ul style="list-style-type: none">• Attorney General• Development Bank of Samoa• Department of Lands, Surveys & Environment• Department of Trade, Commerce & Industry• Education Department• Finance Resource Management Service• Health Department• Inland Revenue Department• Ministry of Agriculture, Forests, Fisheries & Meteorology• Ministry of Foreign Affairs• Ministry of Internal Affairs• Ministry of Transport• Ministry of Women's Affairs• Ministry of Youth, Sports and Cultural Affairs• National University of Samoa• Prime Ministers Department• Public Service Commission• Public Works Department• Treasury Department	Corporations: <ul style="list-style-type: none">• Samoa Shipping Cooperation• Samoa Lands Cooperation• Small Business Enterprises Cooperation Statute Bodies: <ul style="list-style-type: none">• Samoa Visitors Bureau• Samoa Water Authority NGOs: <ul style="list-style-type: none">• Faasao Savaii• Women in Business• Young Mens Christian Association• Taulasea Samoa• Samoa Umbrella of Non-governmental Organisations• Samoa Women's Development Committees Organisation• National Council of Women's• Ie Siosiomaga Society
--	---

Members of the Steering Committee were then divided into five 'Technical Groups' and tasked with the objectives of documenting available pertinent information, identifying key issues, and making recommendations on five main areas that went on to form the baseline information for the Strategy and Action Plan.

The Technical Groups were:

- The Conservation Group
- The Biodiversity Review Group
- The Biodiversity Use Group
- The Financial Resources & Mechanisms Group
- The Legal & Policy Frameworks Group

Through this process, wide stakeholder consultations were undertaken. DEC personnel report that the consultations were a two-way process. Samoa is a "give-and-take society", and it was important not to raise expectations and to be realistic with regards to what the government could do, and what was society's role in reaching 'Sustainable Development' (SD) targets and biodiversity conservation goals. (Liu pers comm.) DEC personnel have pointed out that local consultations had already taken place several years earlier, in the production of the National Environmental Management (NEMs) report. This report had been produced post-Rio Summit (1993) and was also used as a principal guiding document for the NBSAP production.

This time around the stakeholder consultations drew upon the findings of the steering committee (described above) and 'key' biodiversity issues that had already been identified in the NEMs. Focusing on the issues already identified as 'key' for Samoa allowed for highly effective consultations, and DEC comment that this NBSAP development process helped their Division move from a top-down institution, to an institution with greater flexibility – being both top-down in certain areas, and bottom-up in others.

Many local stakeholders at the time of NBSAP production were still not familiar with issues of SD and whilst there is considerable traditional knowledge on the subjects surrounding SD it had not been contextualised or presented in a framework such as this before. Therefore the consultations in and of themselves, were extremely useful awareness raising mechanisms.

DEC comment on the importance for local stakeholders to feel the document (both the NEMs and later the NBSAP) 'belonged' to them, and considerable work was undertaken to ensure wide participation in the process (Liu pers comm.).

Some of the stakeholders who were involved in the NBSAP process were later interviewed (during an evaluation of the NBSAP Add-on phase in 2003)⁴ and they commented on their positive experiences of shared information. Most of those interviewed also felt that their main views had effectively been incorporated into the NBSAP document.

These interviews also revealed a high level of satisfaction with the quality of the NBSAP from an "overwhelming majority of stakeholders",⁵ many of whom considered the document 'credible' insofar as the data used is understood as valid and the actions identified are considered to be within the capacities of the Government of Samoa and the public.⁶

1.1.4 Financial & Technical support provided

Approximately \$300,000 USD was used for NBSAP development and production provided through the GEF from 1998 to 2001. A further \$300,000 USD was provided by GEF for 'add-on' activities from 2002 to 2004.

In the larger picture, as table 2 shows, this is however only one component of the overall funding received for biodiversity conservation related programmes in Samoa. Over the last seventeen years (since 1990) estimates suggest approximately \$8 million USD has been committed to biodiversity conservation through a variety of initiatives and programmes (Suaesi & Liu pers comm.).

It is worth noting that in Labbate's evaluation of the add-on phase of the NBSAP project he states "The resources budgeted for the NBSAP were sufficient for the task [and] the deviations from original to executed expenditures are within the normal range observed for this type of project."⁷

Technical support for NBSAP production was provided by two international consultants: Dr. David Butler (a freelance consultant) and Cedric Schuster (from the World Wide fund for Nature - WWF).

⁴ Labbate, G. (2003) Evaluation of the NBSAP project and add-on phase. Government of Samoa

⁵ ibid

⁶ ibid

⁷ Labbate, G., 2003 p.5

Table 2

FUNDER	PROGRAMME	YEAR/S	AMOUNT FUNDED (USD)
GEF	UNDP/SPREP/Govt. of Samoa: MSP Regional 1993-2003: Under the South Pacific Biodiversity Conservation Programme (SPBCP) for the establishment of two Community Conservation Areas - 1) The Sataoa-Sa'anapu Mangrove Forest Conservation Area and 2) The Uafato Coastal Lowland Forest Conservation Area)	1993-2003	\$1,000,000
	UNDP/Govt. of Samoa: Biodiversity Enabling Activity 1998-2001: Formulation of Samoa's Biodiversity Strategy & Action Plan	1998-2001	\$300,000
	UNDP/Govt. of Samoa: Biodiversity Enabling Activity 2002-2004: Additional Projects for Samoa's Biodiversity Strategy & Action Plan	2002-2004	\$300,000
	World Bank/IUCN/Govt. Samoa: MSP National 1999-2004: Establishment of two District Marine Protected Areas in Samoa - 1) Aleipata MPA & 2) Safata MPA	1999-2004	\$1,000,000
	UNDP/Govt. of Samoa: Marine Enabling Activity 2006-2007	2006-2007	\$100,000
Bilateral Donors	SEACOLOGY & US ARA (AIDs Research Alliance)	Establishment of the first Community Conservation Area in Samoa 'The Falealupo Rainforest Reserve'.	1988-89 \$500,000
	Swedish Society for Nature Conservation (SSNC):	SSNC/O le Siosiomaga Society/Village Councils of Salelologa, Tafua, Fa'ala & Aopo: Establishment of Rainforest Reserves in four villages in Savaii	1989-1999 \$1,000,000
	New Zealand Aid for International Development (NZAID)	Technical Advisory Support Services for Samoa's Environment Sector	1990-2000
		National Coastal Lowland Forest Ecological Survey	1990-1991 \$760,000
		National Upland Forest Ecological Survey	1995-1997
	RARE Centre:	RARE Centre/Govt. of Samoa: Conservation of the Manumea Awareness Campaign	1994-1996 \$300,000
	Australia's Regional Natural Heritage Programme	RNHP/Govt. of Samoa: Conservation of the Manumea (Tooth billed pigeon) & Ma'oma'o (Forest honey eater)	2005-2006 \$440,000
Private Businesses in Samoa	ARNHP/CEPF/SPREP/Govt. of Samoa: Rat Eradication on the Islands of Nu'uetele & Nu'ulua of the Aleipata MPA	2006-2007	\$88,000
	JICA	JICA/Govt. of Samoa: Support for National Parks & Reserves Programme	2007-2009 \$300,000
		Sponsorships (funds & in-kind support) of various annual biodiversity awareness raising activities - National Biodiversity Day & National Environment Week- from the 1994 to 2006 - just a conservative estimate for this period of more than ten years	1994-2006 \$50,000
Government's Annual Budgets	Funding for staff and operations for national biodiversity work of the Division of Environment & Conservation from 1990 to date. It started with two Sections (National Parks & Reserves Section & Biodiversity Conservation Section) with four (4) staff. Its currently four Sections (Marine Conservation, Terrestrial Conservation, National Reserves & National Parks) with sixteen (16) staff - just a conservative estimate for this period of more than 17 years	1990 - 2007	\$2,000,000
In-Kind Support of Villages	just a conservation estimate for the last 17 years (1990-2007)	1990-2007	\$100,000
APPROXIMATE TOTAL			\$8,238,000

1.1.5 The principal advantages and limitations of the methodology followed

DEC personnel suggest the following advantages and disadvantages of the methodology followed in NBSAP production:

Advantages

- As the process involved a wide range of stakeholders (including representatives from the private sector, industries, logging and fishing companies) it generated considerable interest and discussion in conservation issues, and this has spurred considerable knock-on events. For example, introducing the manufacturing sector to conservation concerns provoked lengthy discussions during the NBSAP consultations that ultimately led to the 2001 Waste Management Policy (outside of actions promoted in the NBSAP) that prohibits the manufacture or import of plastic bags that are not 50/50 (at least 50% composed of biodegradable products).

- The NBSAP consultations were in and off themselves a very useful awareness raising tool, and a vehicle for sharing information, experiences and unknowns. Issues highlighted in the NBSAP consultations included the 'function of biodiversity' and an introduction to the concept of 'ecosystem services', and such information made important connections between the issue of biodiversity conservation and the daily lives of Samoan's.
- Wide stakeholder inclusion created a sense of 'ownership' around the NBSAP that was very important. At the time of production > 80% of Samoa's land was privately owned through traditional village tenure regimes. Today it is still > 50%. Therefore, the implementation of the NBSAP very much lies in the landowners hands as much as in the governments.

Disadvantages:

- The methodology was very consultative and participatory, requiring considerable man-hours of work from DEC staff. This was very challenging both in terms of numbers of people available, and their capacity to undertake the work. At the time of the NBSAP production there were very few trained personnel in DEC.
- It was difficult to avoid raising expectations in communities directly involved in the consultations. It was important to ensure people did not expect immediate resources and results from the consultations.

1.1.6 Timeline of NBSAP production

(See NBSAP page 11 – edited exert provided here):

The NBSAP was formulated in a two year project (March 1999 – February 2000). The timetable of activities is as shown in Box 1.

1.1.7 Partnerships in NBSAP production

DEC worked with various partners in the development of the NBSAP and continues to work with various partners in the implementation of the NSBAP, including:

- International donors:
 - i.e: GEF, UNDP, SPREP, FAO, JICA, AusAid, NZAid, Ministry of Foreign Affairs & Trade and Department of Conservation New Zealand, and the Secretariat of the CBD
- International / Regional support organisations
 - i.e: SPREP, SPC, Pacific Islands Forum Secretariat
- International NGOs
 - i.e: Conservation international, IUCN
- Local NGOs
 - i.e: MATI, National Council of Women, Women & business, SUNGO, O le Siosiomaga Society Inc, Fa'asao Savaii Inc, Matua i le Oo Environment Trust Inc, SUNGO, Women's Development Committees Organisation Inc, National Council of Churches, etc
- International and local private consultants / consulting companies
 - i.e: Pacific Environment Consultants Ltd, KVA Consultants Ltd, Tanoa Consultants Ltd, IPA Consultants Ltd, David Butler & Associates Ltd, NZ Beca International Consultants Ltd, USP & NUS Consulting Ltd.
- Associated Government Departments
 - i.e: Samoa has an MOU with the Department of Fisheries for collaborative coral reef conservation initiatives, and with the Department of marine wildlife in American Samoa for exchange of ideas and information. Other department partners include:

Minstry of Education, Cultures & Sports; Ministry of Womens, Community & Social Development; Ministry of Public Works & Infrastructures; Ministry of Health; Ministry of Agriculture & Fisheries; Samoa Water Authority; Electric Power Corporation; Samoa Land Corporation; Ministry of Revenue & Customs; Samoa Ports Authority; Samoa Airport Authority; Ministry of Finance & Ministry of Foreign Affairs and Trade).

- Private Sector
 - i.e: Samoa Tel, Yazaki Samoa, Vailima Beer, Ah Liki Wholesales, Chan Mow Company Ltd, Samoa Observer, SBC, Newsline, Manumea Printing, etc.

BOX 1

- March 1998 Project proposal approved by UNDP
- October 1998 Visit from International Consultant to draft Prodoc
- February 1999 BSAP Coordinators Workshop at SPREP attended by Project Manager Regional network of Coordinators/Project Managers established
- March 1999 First meeting of NBSAP Steering Committee
- May 1999 Samoan Biodiversity Consultant assisted in the formation of five Technical Groups (Biodiversity Review, Conservation, Biodiversity Use, Policy and Legal Framework, Financial Mechanisms).
- May-Sept 1999 Phase 1 – Stocktaking and Inventory conducted by Technical Groups
- August 1999 Prodoc approved by UNDP
- September 1999 Second Steering Committee meeting – reviewed draft reports from Technical Groups
- September 1999 Final reports from Technical Groups presented
- Oct '99 to Jan 2000 Technical Group reports reviewed and summarised by Samoan Biodiversity Consultant
- Le Siosiomaga Society, a local NGO, appointed as Project Coordinator.
- Planning for Phase 2 – Stakeholder Consultation
- February 2000 Third Steering Committee meeting
- March-Apr. 2000 Phase 2 – Stakeholder Consultation
 - Nine workshops held in Upolu (for Women, Youth, Church, Schools, Business, NGO's and Conservation Areas, Pulenuu (village representatives), Farmers, Fishers).
 - Seven workshops held in Savaii (as Upolu but not Church and Business)
- April-May 2000 Draft NBSAP produced during visit by International Consultant and Samoan Biodiversity Consultant
- May 2000 Revision of First Draft began and formation of Sub-Committees of the Steering Committee to review main sections of the NBSAPS
- May – October 2000 Review of Draft NBSAPS main sections continue
- July 2000 Local Consultant conducted a Capacity Need Assessment for the Biodiversity Conservation Issues of Samoa
- Sept. – Oct. 2000 International Consultant conducted an Economic Valuation Exercise of Samoa's Biological Resources
- September 2000 Translation Started
- October 2000 National Project Coordinator and Representative of the Steering Committee attended a Regional Financial Mechanism for Implementing NBSAP in Fiji
- Nov. – Dec. 2000 Local Consultant to Revised, Edit and Format for Printing NBSAPS key documents and design an Public Awareness Programme to launch NBSAPS implementation
- November 2000 National Workshop on Economic Valuation of Natural Resources was held at the Pasefika Inn Apia
- December 2000 Finalised and Printed First NBSAP Draft English and Samoan Versions
- Sub-mission to Cabinet of First NBSAP Draft and Public Awareness

Programme:

Jan - Feb 2001	Implemented Public Awareness Programme
Jan 2001	Approval by Cabinet of the NBSAP
Feb 2001	Phase 2 - Launched NBSAP Implementation

1.2 Overview of the NBSAP

TITLE & DATE OF NBSAP	"Samoa's Biodiversity Strategy and Action Plan" - 2001
TITLE & DATE OF ANY UPDATED VERSION OF THE PLAN	n/a – The NBSAP has not been updated since original production.
TITLE'S & DATES OF ANY SUB-NATIONAL BIODIVERSITY STRATEGIES & ACTION PLANS (if applicable)	The National Invasive Alien Species Action Plan (NIASAP) 2005
	The Recovery Plan for Mangroves and Coral Reefs (2007) – 8 villages
	The Coastal infrastructure Assets management strategy
	The Recovery Plan for the Manumea Maomao (2006)

1.2.1 Thematic Areas & Cross-cutting issues covered in the NBSAP

The Samoan NBSAP addresses the following Thematic Areas and Cross-cutting issues (as per those promoted through the Convention on Biological Diversity)⁸

THEMATIC AREAS	Y= Yes N= No n/a = not applicable
Agricultural biodiversity	Y
Dry and sub-humid lands biodiversity	n/a
Forest biodiversity	Y
Inland waters biodiversity	Y
Island biodiversity	Y
Marine and coastal biodiversity	Y
Mountain biodiversity	n/a
CROSS-CUTTING ISSUES	
Access to genetic resources and benefit-sharing	Y
Invasive alien species	Y
Biological diversity and tourism	Y
Climate change and biological diversity	Y
Economics, trade and incentive measures	Y
Ecosystem approach	N
Global Strategy for Plant Conservation	N
Global Taxonomy Initiative	N
Impact assessments	Y
Indicators	N
Liability and redress – Article 14(2)	N
Protected areas	Y
Public education and awareness	Y
Sustainable use of biodiversity	Y
Technology transfer and cooperation	Y
Traditional knowledge, innovations and practices	Y

The major issues not covered (and the reasons they are not covered) are:

ISSUES NOT COVERED	REASON
Ecosystem approach	During the time of NBSAP production, these issues / approaches were still being developed and / or there was a lack of clarity / understanding in their usage
Global Strategy for Plant Conservation	
Global Taxonomy Initiative	
Liability and redress – Article 14(2)	
Indicators	See section on indicators

⁸ <http://www.cbd.int/programmes/default.shtml>

1.2.2 Strategic Planning in the NBSAP

Any strategy – whether it is for an international business corporation, or for a governmental biodiversity conservation plan - is essentially composed of six key elements: These can most easily be described as the '6 Ws' - the 'What, Where, When, Who, Why and How' of strategic planning.⁹

For example: **What** does nation X want to do; **where** will it do it; by **when** should it be done; **who** is going to be responsible for it and be involved in its development; **why** do you want to do it; and finally **how** is it going to be done, and how will nation X know when it has been successful?

The first three of these factors combined effectively provide a 'target' for a strategy.

For example:

"Nation X wants to establish a network of protected areas to cover 15% of the land area in Y province, by 2015."

Here the '**What**' is – to establish a network of protected areas
The '**Where**' is – to cover 15% of the land area in Y province
The '**When**' is – by the year 2015.

Following this, in classic strategy development it is important to state '**Who**' is going to lead the way on any activity, and who else (what other partners) are likely to be involved. Finally, '**Why**' and '**How**' are added in to complete the plan (as discussed below).

In Samoa's NBSAP the following observations can be made:

What

The question of 'what' is to be done is at the heart of any strategy. The overall 'Vision' of Samoa's NBSAP is:

*"Samoa's biological and genetic resources are protected, conserved and sustainably managed so that they will continue to flourish and regenerate, for present and future generations."*¹⁰

The NBSAP is broken down into eight 'Themes'.

Each 'Theme' has an overarching 'strategy goal'. Each Theme then goes on to have a list of 'Objectives', and under each of these objectives specific 'Actions' have then been listed. For an exert of the NBSAP see box 2.

Where

Samoa's NBSAP clearly provides information concerning specific locations of particular envisaged programmes and sites of particular interest.

⁹ See associated report: Carter, E. (2007) National Biodiversity Strategies & Action Plans: Pacific Regional Review. SPREP / COMSEC

¹⁰ NBSAP, p.13

When

This section can be broken into three key issues:

- (i) Guidelines for NBSAP production promote the use of an overarching time frame (ie. the document is valid from year X to year Y). However, the Samoan NBSAP does not offer this time frame.
- (ii) Guidelines also recommend a timeframe for implementation to be set against each objective / action. However, the Samoan NBSAP does not provide this information.
- (iii) Finally guidelines recommend that distinction is made between the varying 'priority levels' of any one objective / action. In Samoa's NBSAP there are some cases where different actions have been given different priority status, and have been separated into generic groups of immediate, medium term and long-term importance.

BOX 2 – Exemplar exert of the Samoan NBSAP

THEME 2: ECOSYSTEM MANAGEMENT	
	Strategy Goal: <i>To increase the percentage of Samoa's protected and conserved areas from the existing 10% of total land area, including coastal areas.</i>
Objective 1 – Research and Monitoring: <i>To promote and encourage research for the identification, documentation and monitoring of Samoa's ecosystems for the implementation of appropriate management programs.</i>	
Action	1.1 Undertake biological surveys of Samoa's freshwater ecosystems.
Action	1.2 Undertake biological surveys of key upland sites not visited in the National Upland Ecological Survey of 1998, e.g. Sili Upland forest, Itu Salega and Gataivai Upland forest.
Action	1.3 Undertake a complete survey of Samoa's inshore biodiversity.
Action	etc etc.....
Objective 2 – Conservation Areas: <i>To enhance the management of existing protected areas and establish new ones to increase coverage of protected areas to 15% [from existing 10%] and achieve a full representation of Samoa's ecosystems</i>	
Action	2.1 Develop and implement management plans for the existing protected areas in Samoa.
Action	2.2 Establish conservation areas in under represented ecosystems e.g. Mangrove areas.
Action	2.3 Establish large conservation areas which include more than one ecosystem, in high priority sites identified in lowland and upland ecological surveys such as Aopo, Sili, Salailua, and Eastern Upolu, utilizing community management approaches.
Action	etc etc.....
Objective 3 – Sustainable Use of Ecosystems: <i>To develop and effectively manage programs that promote the sustainable use of Samoa's ecosystems</i>	
Action	3.1 Develop guidelines for the sustainable use of biodiversity resources through activities such as eco-tourism, non-forest timber products, and natural products.
Action	etc etc.....

Who

This section can be divided into three components:

- (i) Identifying the lead agency responsible for overall NBSAP implementation. This has been identified as DEC.
- (ii) Identifying a lead agency against each activity.
Depending upon the activity listed, different divisions or departments within government may often be better placed to oversee an activities implementation and management. However, Samoa has not identified different lead agencies against activities, and it is assumed DEC will take the lead throughout.

(iii) Identifying the key players / partners / agencies associated with implementing each objective / action against each activity?

As well as describing which government agency / department / institution is to take the lead in any activity, some NBSAPs also provide information on who the key partners and key associated players in any activity are expected to be. Samoa's NBSAP effectively gives this information against each of the actions listed.

Why

This section refers to 'Making the case for the value of biodiversity'. That is; Why is biodiversity conservation important? Why produce the NBSAP?

The CBD promotes the need to improve the understanding of the value of biodiversity, including its role in ecosystem services, and including this information in NBSAPs. The outcome of COP-8 suggests: *"Identifying and assessing the value of biodiversity resources and functions and of the associated ecosystem services can raise awareness, thus creating incentives for the conservation and sustainable use of biodiversity, and can also support the adequate design and calibration of other incentive measures for the conservation and sustainable use of biodiversity."*¹¹

Biodiversity values can be at the cultural, spiritual and aesthetic level (ie. non-marketable value), as well as the economic level (marketable value). Making the case for the value of biodiversity in the NBSAP is important as it can provide important leverage for political and wider support. This is especially relevant in inter-governmental negotiations, between divisions responsible for biodiversity conservation, and those responsible for economic development. Making the case for the 'economic value' of biodiversity is extremely useful in arguing the case for finance ministries and associated divisions to develop appropriate fiscal policies and mechanisms that provide incentives for biodiversity conservation, as well as appropriate regulations and disincentives for environmental over-exploitation and the resultant reduction in biodiversity that underpins vital ecosystem services.

In Samoa's NBSAP both non-marketable and marketable values of biodiversity are effectively outlined, and this is of considerable use in leveraging political support for conservation efforts.

How

The question of 'how' a particular action is going to be undertaken and achieved is usually too complex an issue to outline in full in an overarching strategy. However, the issue of 'how' (or what mechanisms and processes will be used to achieve the desired action) can be addressed by a nation developing (or committing to develop) an associated, detailed plan of implementation against that particular activity.

Samoa has effectively addressed the issue of 'how' against certain components of the NBSAP. For example: Theme 2, Objective 1, Action 1.4 states: *"Develop and implement a long term monitoring programme for Samoa's native ecosystems including invasive species"*. In addressing how to do this Samoa has gone on to develop various more detailed programmes, including the monitoring programme outlined in the associated 'National Invasive Alien Species Implementation Action Plan (NIASAP) of 2005'.

The question of 'how' is also relevant when addressing how a nation will know whether or not it has been successful in its actions, this is where 'indicators' prove extremely useful (discussed further in section 1.2.3).

¹¹ VIII/9.UNEP/CBD/COP/8/31, p. 235; See decisions IV/10 A and VI/15, annex I, paragraph 22.

1.2.3 National Targets & Indicators in the NBSAP

The setting of targets and indicators are very useful tools in monitoring and evaluating both the implementation of NBSAPs and the success of activities undertaken in biodiversity conservation.

A TARGET can be defined as: 'The desired outcome/results to be achieved within a specific timeframe. These should be measurable and achievable'¹²

An INDICATOR tells you: 'How you know when your action has been successfully implemented'

Targets

Under the definition of targets provided above the 'strategy goals' given under each of the themes in the Samoan NBSAP could potentially be seen as 'targets'.

These strategy goals are:

<i>Theme 1:</i> <i>Strategy Goal/ target?:</i>	<i>Mainstreaming Biodiversity</i> <i>The Conservation and sustainable use of biodiversity, which is vital to the development of Samoa, is integrated into national, sectoral and cross-sectoral plans, policies and programmes.</i>
<i>Theme 2:</i> <i>Strategy Goal:</i>	<i>Ecosystem Management</i> <i>To increase the percentage of Samoa's protected and conserved areas from the existing 10% of total land area, including coastal areas.</i>
<i>Theme 3:</i> <i>Strategy Goal:</i>	<i>Species Management</i> <i>To promote the conservation of Samoa's native and other important species and provide mechanisms for their sustainable use.</i>
<i>Theme 4:</i> <i>Strategy Goal:</i>	<i>Community</i> <i>Empowering and encouraging traditional communities to protect, conserve and sustainably use and manage our biodiversity.</i>
<i>Theme 5:</i> <i>Strategy Goal:</i>	<i>Access & Benefit Sharing from use of Genetic Resources</i> <i>Samoa's genetic resources are accessible for utilization and benefits derived are equitably shared amongst the stakeholders.</i>
<i>Theme 6:</i> <i>Strategy Goal:</i>	<i>Biosecurity</i> <i>To protect Samoa's native biodiversity from impacts of alien invasive species, through effective border control, effective quarantine and eradication programmes.</i>
<i>Theme 7:</i> <i>Strategy Goal:</i>	<i>Agrobiodiversity</i> <i>The conservation and sustainable use of agrobiodiversity contributes to national development and the preservation of traditional knowledge and practices.</i>
<i>Theme 8:</i> <i>Strategy Goal:</i>	<i>Financial Resources and Mechanisms</i> <i>To secure long-term financial sustainability of all conservation and biodiversity related programmes by way of access to funding mechanisms from local and international sources.</i>

However, these strategy goals – or 'targets' - are not particularly measurable (with the exception of the strategy goal in theme 2), and for the most part they are all-encompassing desirable outcomes for an (undefined) future time. These are *situational targets* that fail to give specific information on the extent (level) to which the desired outcome is expected.

¹² Island Biodiversity Programme of Work (IBPoW) 'D- Working definitions'

More measurable targets are those that indicate a 'level' of desired outcome using a measurable parameter for reference (i.e. years, percentages or the like). In this context there are only two *measurable targets* in the Samoan NBSAP (text)¹³. These are:

- Theme 2 (Ecosystem Management) Strategy goal "*To increase the percentage of Samoa's protected and conserved areas from the existing 10% of total land area, including coastal areas*" (as described above)
- Theme 2 (Ecosystem Management), Objective 2 (Conservation Areas): "*To enhance the management of existing protected areas and establish new ones to increase coverage of protected areas to 15% [from existing 10%] and achieve a full representation of Samoa's ecosystems.*"

Indicators

The Samoan NBSAP is set out as described in the previous section. Within this plan some of the themes and some of the objectives have Monitoring Goals described under the actionable text.

These provide, to some extent, indicators of success of the action plan. However, not all of the themes, objectives and actions have been given monitoring goals. Those that have are outlined in Table 3.

Note: Both these targets and indicators are not consistent with the framework for monitoring implementation of the Convention and achievement of the 2010 target, as these were not yet formalised at the time of Samoa's NBSAP production.

In addition to these monitoring goals (indicators) that are set against particular themes or objectives within the action plan (as outlined in table 3), an NBSAP Implementation Matrix was also developed in section 4 of the NBSAP (separate to the action plan) that attempts to outline:

- Intended outcomes
- Indicators
- Means of Measurement, and
- Assumptions

Unfortunately – and very importantly - the 'Strategic Objectives' and 'Intended Outcomes' in this add-on matrix **do not correspond to the themes, objectives and actions outlined in the action plan** (only scant reference is made to the relevant themes). This makes the implementation matrix extremely confusing for purposes of action plan implementation, monitoring and evaluation of the various objectives and actions in the heart of the NBSAP.

Therefore, in this review it is not being considered as an active component of the NBSAP.

¹³ There are further 'desired outcomes' (situational targets) described in the NBSAP implementation matrix within the NBSAP. However, as this matrix fails to cross-match the overall themes, objectives and actions in the strategy document it is discounted in this review.

Table 3

THEMES, OBJECTIVES AND ACTIONS DESCRIBED IN THE NBSAP	INDICATOR/S (Monitoring Goals) where given
THEME 1: MAINSTREAMING BIODIVERSITY	
Objective 1 – Policy: <i>To integrate concepts of conservation and sustainable use of biodiversity into all relevant sectoral policies, programmes and plans</i>	Conservation and sustainable use concepts have been integrated and used in policies, plans and programmes of all the government ministries
Objective 2 – Multi-sectoral Collaboration: <i>To improve and strengthen Multi-sectoral collaboration in promoting conservation and sustainable use of biodiversity in Samoa</i>	Multi-sectoral team, including government agencies, statutory bodies, NGOs, communities and private sector has been set up and activities developed to promote collaboration on all biodiversity related activities.
THEME 2: ECOSYSTEM MANAGEMENT	
Objective 2 – Conservation Areas: <i>To enhance the management of existing protected areas and establish new ones to increase coverage of protected areas to 15% [from existing 10%] and achieve a full representation of Samoa's ecosystems</i>	Total land area under conservation or sustainable management framework.
Objective 3 – Sustainable Use of Ecosystems: <i>To develop and effectively manage programs that promote the sustainable use of Samoa's ecosystems</i>	Number of sustainable use guidelines and management plans developed for different ecosystems in Samoa.
Objective 4 – Capacity Building: <i>To develop and enhance local capacity to ensure the sustainable management of Samoa's ecosystem.</i>	Number of biodiversity research projects and associated training undertaken by Samoans.
Objective 5 – Public Awareness and Education: <i>To increase public awareness and understanding on the importance of Samoa's ecosystems to ensure their sustainable management.</i>	Proportion of Samoa's population with good understanding of the importance of the conservation of biodiversity.
THEME 3: SPECIES MANAGEMENT	
Objective 1 – Conservation of Species: <i>To enhance the status of native and other important species in Samoa through effective conservation programmes</i>	Number of programmes to conserve and sustainably manage Samoa's threatened native species.
Objective 2 – Research & Monitoring: <i>To promote and encourage research for the identification, documentation and monitoring of species and the implementation of appropriate conservation and management programmes.</i>	Number of research, surveys and monitoring programmes in place.
Objective 3 – Sustainable Use and management of Species: <i>To ensure the sustainable use and management of species for social and economic development</i>	Number of sustainable use and management plans in place for species
Objective 4 – Public Awareness and Education: <i>To enhance knowledge and understanding of the public on the conservation, sustainable use and management of species.</i>	Proportion of population with commitment to conserve and sustainably manage native species.
THEME 4: COMMUNITY	
Objective 1 – Traditional Knowledge, Practices and Innovation: <i>Preserve traditional knowledge and practices of Samoa that are important for the protection, conservation and sustainable use of biodiversity.</i>	Number of programmes undertaken to preserve traditional knowledge, practices and innovations.
Objective 2 – Empowering Communities: <i>Empowering communities to conserve and sustainably manage biodiversity under customary resource tenure</i>	Number of villages with conservation areas of who have incorporated sustainable use guidelines into village decision-making processes.
THEME 5: ACCESS & BENEFIT SHARING FROM USE OF GENETIC RESOURCES	
Strategy Goal: <i>Samoa's genetic resources are accessible for utilization and benefits derived are equitable shared amongst the stakeholders.</i>	Regimes are developed to facilitate access and benefit sharing from the use of genetic resources. Benefits arise and are shared.
THEME 8: FINANCIAL RESOURCES & MECHANISMS	
Objective 1 – Financial Plans: <i>To develop long term financial plans for undertaking conservation programmes</i>	Long term financial plan for financing biodiversity work developed
Objective 3 – Economic Valuation: <i>To undertake an economic valuation of Samoa's biodiversity</i>	Report on the economic values of Samoa's biodiversity.
Objective 4 – Information Systems: <i>To establish information systems of all potential donor assistance</i>	Number of donors on the national biodiversity database
Objective 5 – Income Generating Activities: <i>To identify and promote sustainable income generating activities for the community</i>	Number of income generating started in conjunction with conservation and sustainable use initiatives
Objective 6 – Partnership: <i>To strengthen the partnership with the private sector, NGOs and local communities</i>	Number of partnerships for conservation between private sector, Government , NGOs and local communities.
Objective 7 – Accounting System: <i>To establish an accounting system for recording revenues and expenditures for biodiversity related activities</i>	Number of agencies and projects with accounting systems to record revenues and expenditures for biodiversity related activities

1.3 The Status of NBSAP Implementation to date

Information presented here is drawn from interviews with key DEC personnel. However, this section also includes a range of opinions and recommendations of the SPREP consultant to this review process (author).

1.3.1 Monitoring of the NBSAP

Ideally any review of an NBSAP would entail assessing the achievements or completion of any actions promoted in the NBSAP against the targets and indicators for accomplishment given in the NBSAP. However, as discussed in the previous section there are lacking and confused sets of indicators in the Samoan NBSAP, and the monitoring & evaluation section is weak.

An example of classic (hypothetical) targets and indicators against actions is shown here:

THEMES / OBJECTIVES / ACTIONS	TARGET	INDICATOR
THEME 1: Achieving A,B and C		
Objective 1 – Ensure 'A' is addressed through factors 'X' and 'Y'	A' is successfully established by year 'N', and improves operations by 'M' % per year	A' is fully operational and meeting targets
Objective 1 – Ensure 'B' is addressed through factors 'X' and 'Y'	Etc etc..	etc etc...
etc etc..	Etc etc..	etc etc...

Without such prescriptive planning there are considerable challenges to monitoring and evaluating the effectiveness of any action plan.

In 2003 the NBSAP development process was assessed, and the following are exerts from the subsequent report that was produced ¹⁴:

"The monitoring section is the weakest part of the document of the NBSAP document."¹⁵ "At the simplest level, the problem is that indicators are missing. About half of the NBSAP's objectives lack an indicator of success. More specifically, none of the NBSAP's 'Themes' has a complete set of indicators for their stated objectives and Theme #7, 'Biodiversity', has not received a single one."¹⁶

"At the deeper level, the problem is one of describing indicators in a way that clearly specifies what is to be measured [targets], how, when and what constitutes failure or success. The indicators present in the NBSAP often fail in one or more of these characteristics."¹⁷

"The next update/revision of the NBSAP should include a thorough revision of the monitoring strategy."¹⁸ and "Should some savings on other budget lines be possible, the printing of a second edition of the NBSAP with a revised monitoring section might want to be explored."¹⁹

¹⁴ Labbate, G. (2003) Evaluation of the NBSAP project and add-on phase. Government of Samoa

¹⁵ ibid, p.5

¹⁶ ibid, p.15

¹⁷ ibid, p.15

¹⁸ ibid, p.15

¹⁹ ibid, p.24

Given these problems with monitoring & evaluation of the NBSAP, a monitoring workshop was held in 2004 to work towards developing 'an effective monitoring programme that would produce a set of objectively and verifiable indicators for the NBSAP together with a feasible monitoring plan that includes responsibilities for data collection and analysis' ²⁰.

Twenty-three participants attended the workshop representing 6 government organisations, 4 NGOs and 1 inter-governmental organisation (see table 4).

Table 4

<i>Governmental Organisations</i>
Ministry of Education, Sports & Culture
Ministry of Agriculture
Ministry of Natural Resources & Environment
Attorney General
Ministry of Women Community & Social Development
Ministry of Health
<i>NGOs</i>
Women in Business
Matua i le Oo Environment Trust
Womens Development Committees
Taulasea Samoa
Samoa's Umbrella for Non-government Organisations
National University of Samoa
<i>Inter-governmental Organisation</i>
United Nations Development Programme

The workshop used questionnaires to gather information from the participating institutions regarding their own roles in implementing the NBSAP the results of which were then set against the 'Themes' from the NBSAP. This resulted in institutions then identifying their priority actions for 2005-2010 (providing a range of possible 'targets' to draw upon). These are summarised in Table 5.

Whilst this was an extremely useful process for focusing priority activities and brainstorming possible targets, these revised 'targets' have yet to be endorsed or added into an updated NBSAP, or M&E framework. Additionally whilst a follow-up workshop was recommended along with annual monitoring meetings, these have yet to come to fruition.

²⁰ MNRE (2004) Samoa's Biodiversity Strategy: Report of the first Monitoring Workshop, April 2004

Table 5

Identified Priority Implementation Gaps for 2005-2010.		
Strategy Thematic Area	Priority Implementation Gaps for the Next Short to Medium Term (2005-2010)	Leading Stakeholders
1. Mainstreaming Biodiversity	1.1 Increase prioritising biodiversity in the Sustainable Development Strategy	MNRE, MOA, MESC, MWCSD
	1.2 Endorsed and implement biodiversity policy.	MNRE, MOA, MESC, MWCSD
	2.1 Improve the multi-sectoral body that oversee the NBSAP implementation.	MNRE, MOA, MESC, MWCSD
	2.2 Establish a multi-sectoral data of experts for biodiversity research.	MNRE, MOA, MESC, MWCSD
	2.3 Increase stakeholders knowledge of MEAs on biodiversity conservation.	MNRE, MOA, MESC, MWCSD
	3.3 Integration of of NBSAP provisions into relevant legislations of line ministries.	MNRE, MOA, MWSCD, MWTI
	3.5 Review of wildlife status and enforcing Wild Animals Ordinance 1993.	MNRE, MOA, MWSCD, MWTI
	3.8 Finalise and enact bioprospecting regulations.	MNRE, MOA, MWSCD, MWTI
	3.9 Amend the Village Fono Act 1996 for local enforcement of land use by-laws.	MNRE, MOA, MWSCD, MWTI
	4.1 Incorporate needs of priority ecosystems needs into EIA regulations.	MNRE, MOA, MWSCD, MWTI
	5.2 Complete national seminars on biodiversity policies not implemented.	MNRE, MOA, MESC, MWCSD, NGOS
	5.3 Produce and disseminate awareness materials on biodiversity legislations.	MNRE, MOA, MESC, MWCSD
	5.4 Include key stakeholders in the planning of NBSAP media awareness.	ALL KEY STAKEHOLDERS
	5.7 Provide more training for some of the key community sectors.	MNRE, MOA, MESC, MWCSD
	5.8 Immediately make and carry out EIA training for local communities.	MNRE, MOA, MESC, MWCSD, NGOS
	1.5 Consult with NUS and MESC on programs of studies for students.	NUS, MESC, MNRE
2. Ecosystem Management	1.6 Initiate legislations first for access and benefit-sharing.	MNRE, MOA, MWCSD, AG
	1.8 Initiate a project for genetic identification of Samoa's biological resources.	NUS, MESC, MNRE, MOA
	1.9 Establish monitoring system for climate change impacts on biodiversity.	NUS, MESC, MNRE, MOA, MWCSD
	3.1 Develop Guidelines for sustainable use of biological resources.	ALL KEY STAKEHOLDERS
	3.1 Develop a pigeon sustainable harvest plan.	MNRE, MOA, NUS NGOS, MWCSD
3. Species Management	2.2 Complete documentation of Samoa's flora and fauna (2yrs).	MNRE, MOA, NUS, USP, NGOS, PRS, VCOS
	2.4 Survey status of seabird population (3yrs).	MNRE, MOA, NGOS, NUS, USP
	2.6 Establish a database of environment friendly technologies.	MNRE, MOA, MFTI, MESC, PRS, NGOS
	1.6 Set up an aquarium/zoo for conservation of species.	MNRE, MOA, NUS, USP, MOF, MWCSD, NGOS, VCOS
	1.1 Develop a national register to document traditional knowledge and practices (2yrs).	MNRE, MWCSD, NGOS, VCOS, MESC
4. Community	1.2 Develop sui generis legislation to protect traditional knowledge and practices (2yrs).	MNRE, MWCSD, NGOS, VCOS, AG
	1.3 Develop monitoring of biodiversity by local communities (2yrs).	MNRE, MOA, MWCSD, NGOS, VCOS
	1.4 Develop and integration of science and traditions in biodiversity conservation (2yrs).	MNRE, MOA, MWCSD, NGOS, VCOS
	1.1 Finalise and enact a bioprospecting regulations.	MNRE, MOA, MFA, TIL, NGOS
5. Access & Benefit-sharing	1.2 Develop procedures for enforcing a bioprospecting regulations.	MNRE, MOA, MFA, TIL, NGOS
	1.3 Establish a national bioprospecting coordinating body.	MNRE, MOA, MFA, TIL, NGOS
	2.1 Raise public awareness of the bioprospecting regulations.	MNRE, MOA, MFA, TIL, NGOS
	1.4 Develop benefit-sharing mechanisms for holders of traditional knowledge.	MNRE, MOA, MFA, MESC, TIL, NGOS
	1.5 Develop mechanisms for accessing traditional knowledge & genetic resources.	MNRE, MOA, MFA, TIL, NGOS
	1.6 Restore Samoa's endemic collections held in other countries.	MNRE, MOA, MFA, TIL, NGOS

Identified Priority Implementation Gaps for 2005-2010.		
Strategy Thematic Area	Priority Implementation Gaps for the Next Short to Medium Term (2005-2010)	Leading Stakeholders
6. Biosecurity	2.4 Implement the PACPOL program for protecting marine biodiversity (2yrs).	MNRE, MOA, NUS, USP, NGOS
	3.2 Strengthen national scientific research of introduced species (2yrs).	MNRE, MOA, NUS, USP, NGOS
	4.1 Train locals on screening introduce species (1yrs).	MNRE, MOA, MWCSD, NGOS
7. Agro-biodiversity	1.1 Promote sustainable use of agrobiodiversity (3yrs).	MNRE, MOA, MWCSD, NGOS
	1.2 Eliminate unsustainable agrobiodiversity use (2yrs).	MNRE, MOA, MWCSD, NGOS
	1.3 Establish incentives to encourage conservation of agrobiodiversity (1yrs).	MNRE, MOA, MWCSD, NGOS
	2.3 Conduct of surveys of agrobiodiversity resources (1½ yrs).	MNRE, MOA, MWCSD, NGOS
	2.4 Establish herbaria to preserve specimens of native species (3yrs).	MNRE, MOA, MWCSD, NGOS
	3.2 Develop food production programs which enhance agrobiodiversity (3yrs).	MOA, MWCSD, NGOS
8. Financial Mechanism	9.1 Disseminate widely information on funding opportunities for biodiversity work (1yr).	MNRE, MOA, MOF, NGOS
	1.1 Develop long term plan for financing biodiversity work (1yr).	MNRE, MOA, MOF, STA, MFAT
	1.2 Develop mechanisms for increasing financial resources from funding foundations and aid donors (2yrs).	MNRE, MOA, MOF, STA, MFAT, MLTI
	3.1 Conduct studies on applying user fees to national parks and reserves to raise supplement funding for work in these areas (1yr).	MNRE, MOA, MOF, STA, MFAT, MLTI
	3.3 Develop a Conservation Trust Fund from user fees, taxes, fines and other revenues determine in the economic valuation of conservation areas (2yrs).	MNRE, MOA, MOF, MFAT, MLTI, NGOS
	3.4 Developed an integration of economic valuation of biodiversity into land and coastal use planning (2yrs).	MNRE, MOA, MOF, MLTI
	7.1 Set up a network for recording revenue and expenditure on biodiversity work (2yrs).	MNRE, MOA, MOF, MLTI
	7.3 Establish a system of national green accounting in Samoa (2½yrs).	MNRE, MOA, MOF, MLTI

1.3.2 Status of implementation

Given the problems with the lack of agreed targets and indicators, and lack of M&E process in the NBSAP, for the sake of this review a spreadsheet was developed to try and evaluate the progress of activities in Samoa against the themes, objectives and actions given in the NBSAP.

Key questions addressed in this analysis were:

Section One:

- i) What are the 'Themes', 'Objectives' and specific 'Actions' described in your NBSAP?
- ii) What (if any) indicators have been set against each of these themes, objectives and actions respectively? (The answers here were drawn from the monitoring goals as outlined in section 1.2.3)
- iii) Where indicators have been given, have any of them yet been successfully met / has the associated action been achieved?

Section Two:

- iv) MAINSTREAMING ONE: In what way have your themes, objectives and actions (respectively) been reflected in associated strategies and plans in Samoa?
 - This question is meant to draw out what associated national level plans reflect the objectives and actions of the NBSAP. For example: The Strategy for the Development of Samoa 2005-2007 reflects various NBSAP actions (such as the maintenance and improvement of reserves & national parks, the identification of possible additional sites, together with awareness raising on waste management, chemical awareness, climate change and ozone protection). And the MAF Corporate

Plan 2005-2008 and the Tourism Development Plan 2002-2006 both emphasize environmental sustainability.

- v) MAINSTREAMING TWO: In what way have your themes, objectives and actions (respectively) been reflected in approved governmental policies for Samoa?
 - For example: Theme 2, Objective 3, Action 3.1 states: "*Develop guidelines for the sustainable use of biodiversity resources through activities such as eco-tourism, non-forest timber products, and natural products.*" A policy that has since been developed and directly addresses this action is 'The Sustainable Management of Forest Resources Policy - 2007' (currently awaiting approval from cabinet).
- vi) MAINSTREAMING THREE: In what way have your themes, objectives and actions (respectively) been reflected in relevant legislation in Samoa?
 - For example: Theme 1, Objective 3, Action 3.8 states: "*Finalise, enact and enforce Environment (Bioprospecting) Regulations.*" In response to this the Bioprospecting regulations have been drafted.
- vii) Where relevant, what is the 'on-the-ground' status of the actions promoted in the NBSAP (what results and outcomes have there been at any particular site or on any particular issue as per the actions listed in the NBSAP)?
 - For example: Theme 2, Objective 2, Action 2.1 states: "*Develop and implement management plans for the existing protected areas in Samoa.*" In response to this management plans have now been developed for Aleipata and Safata MPAs.

Section Three:

- viii) Who is the lead agency working on each of these themes, objectives and actions respectively?
- ix) Who are the associated key players (organisations, other departments, villages, individuals as appropriate) working on each of these themes, objectives and actions respectively?

Section Four:

- x) What have been the key challenges and obstacles to implementing the actions promoted in the NBSAP?

In the time period available for this work, the inputting of information into this spreadsheet was initiated.

This incomplete spreadsheet is shown in annex 1.

However, the DEC are now in the process of working further on this spreadsheet and information compilation is expected to be completed by early 2008.

It is hoped that this process will not only allow DEC to get a handle on the current status of NBSAP implementation, but will also encourage and inspire the consideration of appropriate targets for future NBSAP revisions, as well as highlight possible appropriate indicators to include in M&E in the future.

1.3.3 Reporting / information sharing mechanisms

Various reporting mechanisms are in place with regard to the sharing of information on biodiversity conservation in Samoa.

Domestic reporting

Within the Government of Samoa are reporting requirements from all departments to parliament annually. 'Divisions' (such as the Division for Environment & Conservation - DEC) feed their reports in the overall 'Departmental' reports (Department of Lands Surveys and Environment - DLSE). These reports highlight biodiversity conservation activities undertaken using both treasury funds and any donor related funds, however they

do not necessarily refer to the specific actions and objectives in the NBSAP. They do however highlight the achievements made, successes and failures of projects and associated impacts, and they provide a useful resource for monitoring the NBSAP. Once these reports have been approved they are accessible in the public domain (available from <http://www.mnre.gov.ws/index.htm>).

International reporting

Samoa reports on the status of implementation of the CBD through four yearly National reports. These reports are very generic in nature, covering all aspects of the convention. Considerable criticism has been levelled at the layout and requirements of these reports that is beyond the scope of this review to discuss further. However, the fact that they do not synchronise with or allow for any reference of achievements of a nation against their NBSAP actions promoted, is an unfortunate oversight that reduces the value of these national CBD reports considerably, and diminishes the status of the NBSAP as an underpinning document for biodiversity conservation planning at the national level.

To date Samoa has submitted three national reports, the most recent being in 2006.

1.4 Success Stories, Lessons Learned and Further Support Required

1.4.1 Successes & Lessons Learned

Labbate (2003) observed that the capacities of the MNRE (staff) were strengthened by the development of the NBSAP. Specifically, all staff interviewed felt that their knowledge and experience had benefited greatly from participating in such wide stakeholder consultation processes during the development of the NBSAP.²¹

At ground level successes in biodiversity conservation can be seen. For example, approximately 12% of Samoa's terrestrial land surface and approximately 5% of its marine EEZ have been allocated as Protected Areas (National Parks, National Reserves, Protected Water-catchments and Community Conservation Areas [CCAs], Forest Reserves, MPAs, & Village Fisheries Reserves). Additionally there has been a continuing increase in grassroot biodiversity conservation initiatives - from about four (4) villages in the early '90s to currently more than hundred (100) villages involved in CCA activities – and forest & marine reserve development.

However, DEC personnel observe that "the NBSAP is not an adequate framework to holistically assess [the range of] successes in biodiversity work" achieved so far in Samoa. It rather serves as "a guide to planners of biodiversity initiatives".

Assessing impacts and successes holistically for biodiversity conservation and sustainable development in Samoa relies additionally on the implementation and evaluations of "other key conceptual environment frameworks", such as the National Sustainable Development Strategy (NSDS), the National Action Plan for Adaptation to Climate Change (NAPA), the National Action Programme for Sustainable Land Management (NAP), the Coastal Infrastructure Assets Management Strategy and the like. (Suaesi, pers comm.)

²¹ Labbate, G. (2003) Evaluation of the NBSAP project and add-on phase. Government of Samoa

1.4.2 Identifying the needs for further support

Dec personnel have highlighted the following three areas as key to address, and in need of support in the future continued implementation of the NBSAP.

- Capacity building (both human and institutional), and support in implementation plan development (setting of priorities, focusing funding opportunities, planning)
- Financial and Technical Support
- Support for developing mechanisms for making and strengthening partnerships with wider stakeholders in the implementation of the NBSAP (ie. Communities, private sector, NGOs)

1.5 Next Steps

Following the above review process, the following recommendations were made through discussion with DEC:

NEXT STEPS	BY WHOM?	BY WHEN?
To complete the draft review spreadsheet	DEC	End December 07
Building on the experiences of this review, to conduct a workshop to brainstorm targets, indicators and monitoring mechanisms (taking into account, and gaining endorsement where possible, on those targets emerging from the 2004 workshop)	DEC & partner institutions / divisions / departments and stakeholders	February 2008
To update the spreadsheet with a 'targets' column against each theme / objective / action, and to input the targets that result from the review workshop	DEC	March 2008
Based on these revised targets and indicators, to produce a monitoring & evaluation protocol (identifying responsible agency and communication needs) that establishes a process for annual (or bi-annual) review of implementation of the NBSAP. Such a protocol should consider the below point:	DEC	May 2008
To establish a straight-forward stakeholder reporting process (in collaboration with associated departments, divisions, NGOs and wider partners) for reporting on activities related to the NBSAP actions at least every four years, ideally prior to the CBD National Report submissions (as this compilation of information will assist considerably with completion of this CBD reporting requirement and will enable DEC to maintain an overview of NBSAP implementation progress). Such reports can be adapted from the questions posited in this review and distributed in questionnaire format.	DEC	June 2008
To consider a future re-print of the NBSAP with the existing 'implementation matrix' removed and replaced with the new M&E protocol (with appropriate references to the associated reporting requirements).	DEC	June 2008

2. SOLOMON ISLANDS

SPREP was approached in early 2007 by the Environment & Conservation Division (ECD) of the Solomon Islands Ministry of Forests, Environment & Conservation (MFEC) with a request to provide support in the development of the Solomon Islands NBSAP. The lack of an NBSAP in Solomon Islands was highlighted as a critical issue to address throughout the recent National Capacity Self Assessment (NCSA) review process, and is a key activity listed in the ECDs own 2007 Programme of work.

Concurrently the NCSA UNCBD thematic assessment recommended 'on-the-job' training for ECD personnel where possible / appropriate²², and encouraged the use of technical support from regional organizations.²³

Therefore in response to this request SPREP facilitated consultant services to ECD to support the development of the Solomon Islands NBSAP, in particular to:

- Assist in the design & development of the NBSAP work-plan & budgeting within ECD
- Provide training and support to the newly recruited NBSAP coordinator (Jozef Hurutarau) in the mechanisms and processes for NBSAP development & production, including a review of the various guidelines and subsequent planning and design of a 3-step process for NBSAP development (gap analysis, consultations and production)
- Assist in the fundraising for the NBSAP
- Support the establishment of the Solomon Islands NBSAP committee and facilitate initial meetings

2.1 IN BRIEF: The NBSAP story in Solomon Islands

There have been two previous attempts to initiate and develop the Solomon Islands NBSAP. Both ultimately stalled in large part due to the lack of guidance in NBSAP development process. Early attempts to develop the NBSAP made efforts to ensure full stakeholder collaboration by delegating the preparatory work to a range of government departments (Forestry, Fisheries, Environment, Meteorology, Agriculture etc). Each of these departments was tasked with identifying their priorities in relation to biodiversity conservation and were encourage to work with their own relevant wider constituencies, provincial and sector stakeholders to brainstorm inputs and develop objectives and actions. This was an ambitious undertaking within a governmental institutional construct already facing considerable challenges in communication and collaboration, and the wide dissemination of funds to all these various groups, and different approaches taken by these various groups, ultimately failed to reach consensus for the way forward in NBSAP development and production.

Additionally there were concerns over the appropriate use of some of the funds provided. Due to this the funds initially provided for NBSAP development by the Global Environment Fund (GEF) through UNEP (as the implementing agency) ultimately had to be returned, and the NBSAP development process halted.

2.2 NBSAP development in 2007

In early 2007 the ECD recognized the need to revive the NBSAP process and they ensured that NBSAP development and production received paramount attention in their departmental work-planning. SPREP agreed to provide consultant support to the process and the following activities took place:

²² Thomas, J. (2006) *Solomon Islands National Capacity Self Assessment: UNCBD thematic assessment*. UNDP - GEF. p.71

²³ ibid. p. 54

- a) In early 2007 the ECD recruited an 'NBSAP coordinator' onto its staff team, for dedicated work to the NBSAP development.
- b) An initial work-plan was developed and a budget formulated for NBSAP development, covering all key aspects of preparation, committee meetings, stakeholder and provincial consultation, report production publishing and distribution. The budget came to ~ \$32,000 USD.
- c) As the GEF funds were no longer available for this work, funds had to be sought independently. Between ECD and SPREP, the following funds were found and secured.

<i>Funds from</i>	<i>Amount USD</i>	<i>Amount SI \$</i>
Commonwealth Secretariat, UK	\$1,634.00	\$11,440.00
The Nature Conservancy (TNC) Solomon Islands	\$10,000.00	\$70,000.00
World Wide Fund for nature (WWF), Solomon Islands	\$10,000.00	\$70,000.00
NCSA (UNDP) support	\$2,400.00	\$16,800.00
SPREP	\$8,000.00	\$56,000.00
<i>TOTAL</i>	<i>\$32,034.00</i>	<i>\$224,240.00</i>

- d) An NBSAP committee was established in the Solomon Islands with representatives from associated government departments, NGOs and academic institutions.

<i>Organisations represented on the Solomon Islands NBSAP committee</i>
Attorney Generals Office
Department of Agriculture and Livestock (DAL)
Environment & Conservation Division
Environmental Health Division, Ministry of Health
Forestry Division, Ministry of Forestry, Environment & Conservation
Meteorological Service (SIMS)
Ministry of Mines & Energy
Ministry of National Planning & Coordination
National Capacity Self Assessment (NCSA) Team
National Commission for UNESCO
NGO - Conservation International (CI)
NGO - Environment Concern Action Network of the Solomon Islands (ECANSI)
NGO - Oxfam
NGO - The Nature Conservancy (TNC)
NGO - World Wide Fund for Nature (WWF)
Solomon Islands College of Higher Education (SICHE)
SPREP / COMSEC
UNDP

- e) Various available guidelines for NBSAP development were reviewed (see box 3) and an initial process for NBSAP production was agreed at committee level (see box 4). This was followed up by the development of a three-step process that was presented to the committee for discussion. The three step process is intended to be led by a consultant, with support and input from the NBSAP coordinator within ECD, and local consultant support provided by CI. The (draft) process that was put forward was the following:

Step 1 – Gap Analysis

Here the various policies and legislation already existing in Solomon Islands would be reviewed, along with all existing associated strategies & plans that have relations to biodiversity conservation issues. A listing of all these documents has already been compiled by ECD, and they would be reviewed with the aim to answer the following questions:

- i) What are the goals and commitments already existing for biodiversity conservation in Solomon Islands Policy?
- ii) What are the goals and commitments already existing for biodiversity conservation in Solomon Islands Legislation?
- iii) Are the key 'Cross-Cutting issues' (outlined within the CBD) already addressed anywhere in Solomon Islands policy or legislation?
- iv) What information (research undertaken by Government, partner organisations / NGOs etc) is already available concerning the key areas of biodiversity concern in the Solomon Islands?
- v) Based on previous research, and considering existing projects (both government run and those being undertaken by partners / NGOs etc) where are the existing 'needs' (ie: have particular priority sites already been identified for protected areas? Have existing challenges in agricultural biodiversity conservation already been identified?)
- vi) Based on the above findings, what key 'Theme's' for discussion do you feel could be taken to wider stakeholder and provincial consultation?

BOX 3

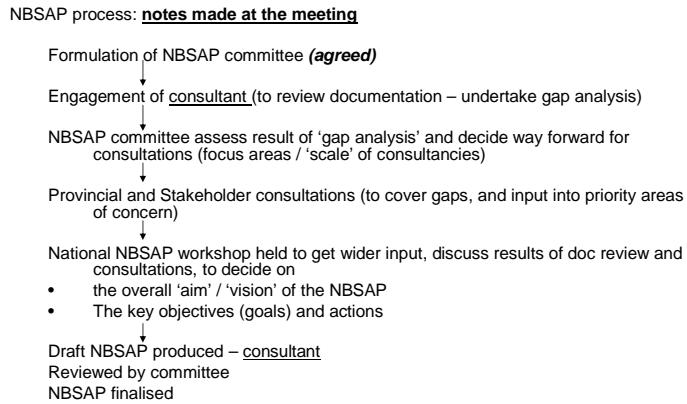
NBSAP Guidelines reviewed and taken into consideration when planning NBSAP process in the Solomon Islands

- National Biodiversity Planning: Guidelines based on Early Experiences around the world (WRI/UNEP/IUCN, 1995)
- A Guide for Countries Preparing National Biodiversity Strategies and Action Plans (UNDP/BPSP, 1999)
- A Guide to Developing a Biodiversity Strategy from a Sustainable Development Perspective (IEPF/UNDP/UNEP, 2000)
- A Guide to the Convention on Biological Diversity (IUCN, 1998)
- Economics and the Convention on Biological Diversity (IUCN, 2000)
- Interim Assessment of Biodiversity Enabling Activities: National Biodiversity Strategies and Action Plans (GEF)
- National Biodiversity Strategy and Action Planning : BSAP Preparation Materials - Compiled materials for the BSAP preparation process (FFI)
- Revised Guidelines for Additional Funding of Biodiversity Enabling Activities (GEF 2000)

BOX 4



NATIONAL BIODIVERSITY STRATEGY & ACTION PLAN. Environment and Conservation Division Solomon Islands.



Step 2 - Consultations

Here the provincial and stakeholder consultations would take place. These will likely be done in collaboration with the forthcoming NAPA and NAP²⁴ consultations (to avoid over-saturation of consultations with the same stakeholder groups). Additionally the provincial consultations are

²⁴ National Adaptation Programme of Action (NAPA) under the UNFCCC; and National Action Plan (NAP) under the UNCCD.

expected to be led by relevant organizations already active in each province (associated NGO's and departments with personnel across other provinces). Feedback from these consultations would be collated and presented to the NBSAP Committee.

Step 3 – Production of the draft NBSAP document.

Drawing on the information from Step 1 and Step 2, the NBSAP committee will lead a national workshop to develop the key themes, objectives and actions for the NBSAP. The consultant, local consultant support and NBSAP coordinator in ECD will then draft a preliminary NBSAP document for review. An exemplar outlay of an NBSAP was presented to the NBSAP committee during its second meeting, giving guidance on factors to consider and sections to include in the final document. This outlay focuses on the six underlying principles of strategy development – the '6 Ws' - answering the questions of: What, Where, When, Who, Why and How.

The Solomon Islands are well placed to take advantage of the considerable lessons learned by other nations (including Samoa). Many of these lessons have been built into this 3 step process, such as: the need for clear strategic planning (covering the 6 Ws), the importance of targets and indicators, and the necessity of wide and effective stakeholder consultation to ensure the NBSAP is 'owned' at the national level.

2.3 Status of the Solomon Islands NBSAP process at Oct 2007

At the time of writing, consultant selection had been agreed, procurement was nearing completion and 'Step 1' (described above) was underway. 'Step 2' was in the planning phase (along with relevant personnel involved in the NAPA and NAP consultations).

2.4 Key challenges and obstacles to NBSAP development, and experiences in overcoming these obstacles

The key challenges and obstacles to NBSAP development in Solomon Islands observed and identified through collaboration with ECD were / are the following:

- i) Lack of personnel in the Environment & Conservation Division responsible for both developing and implementing the NBSAP:
This is a familiar constraint in many Pacific island nations, as outlined in the numerous NCSA findings across the region. In ECD there are only three full time members of staff, each with a considerable range of tasks to manage. Enormous burdens are placed on these staff by the multiple MEA requirements ²⁵ and numerous travel requirements result in the frequent absence of the Acting Director.

Overcoming this obstacle: Commitment has been made by the Principal Secretary of MFEC to employ a further thirteen staff in the ECD. This commitment was made in early 2007, and by Oct 07 some posts had been advertised.

- ii) Available capacity in ECD and associated departments:
As also highlighted in the NCSA documentation, there is an on-going need for training of personnel across a range of governmental sectors associated with biodiversity conservation. Unfortunately most staff simply do not have the available time to undertake training opportunities when they do arise, and some of those staff that have received additional training and education opportunities go one to leave the civil service to work for more lucrative assignments with NGOs and associated organizations

²⁵ See associated report: Carter, E. (2007) National Biodiversity Strategies & Action Plans: Pacific Regional Review. SPREP / COMSEC

(creating a 'brain-drain' from critical sectors of the government). This results in a continuing need for technical support provision to these sectors and poses a serious challenge to the sustainability of processes in these departments.

Overcoming this obstacle: An NCSA action plan, drawn from the results of the NCSA stocktake reports, thematic assessments and cross-cutting analysis) is currently being drafted, specifying the key capacity areas to address and departmental HR plans to address these in the next five years.

iii) Fundraising and accessing funds:

This was a challenge in the case of the Solomon Islands as funds from the GEF enabling activities had been withdrawn. Additionally, whilst independent fundraising was successful, and commitments made from various organizations, to date not all of the funds agreed have yet arrived with ECD.

iv) Ensuring wide stakeholder and provincial consultation is undertaken to adequately reflect 'national level' concerns in the national strategy:

This has been a challenge for many Pacific island nations in the developments of their NBSAPs. Undertaking the provincial and stakeholder consultations for the NBSAP in collaboration with the NAPA and NAP consultations might pose delays to the NBSAP process; but undertaking separate consultations with the same set of stakeholders may result in consultation saturation and limited participation by reluctant and over-stretched stakeholder groups.

v) Lack of / accessibility to background information

A large proportion of the biodiversity conservation and research related work in the Solomon Islands has been undertaken by NGOs and academic institutions. Much of this information has been expropriated or not submitted to the ECD. Therefore a key task in the NBSAP development process is the repatriation and / or gathering of this critical background information.

Overcoming this obstacle: ECD has made a formal request to the NGOs and academic institutions currently active in the Solomon Islands to submit their findings / reports / conservation work-plans and associated literature. To date some of this information has been received and more continues to arrive.

vi) Inter-governmental / departmental collaboration / communication

There is a lack of communication both within ECD and between ECD and associated departments regarding the on-going work of the NBSAP development process. This is especially important to address when examining the impacts of NBSAP on other sectors and the synchronicity of NBSAP with existing strategies / plans / policies and legislation.

Overcoming this obstacle: The concerns over this constraint led to the development of 'Step 1' in the NBSAP development process (gap analysis) and is being further addressed through the wide departmental participation in the NBSAP committee.

vii) Multiple strategy development and external pressures for MEA focus work.

There are a wide range of strategies and plans being promoted for environmental protection (MEAs relating to climate change, desertification, world heritage management, pollution, SD etc). Each of these has considerable reporting and planning requirements that conspire to consume considerable time of the limited personnel available in government departments charged with implementing biodiversity conservation actions on the ground. These MEAs are promoted and supported by external agencies and donors often offering considerable (attractive) sums of money to

participating government agencies, and these multiple strategy developments favour differing priorities and differing agendas depending on the collaborating organization or donor at any given time. Therefore considerable pressures are being levied at government departments to undertake either conflicting or duplicative assignments relevant to one or another of the numerous 'agreed strategies' in-vogue at any given time.²⁶

viii) Delays to finding and procuring an appropriate consultant

Finally a key constraint to the NBSAP development process to date has been the procurement of an appropriate consultant.

Overcoming this obstacle: After much consultation and communication a consultant has been sourced and plans to start work in the beginning of 2008.

2.5 Key opportunities in NBSAP development

The Solomon Islands is well placed to take advantage of a range of opportunities in the development of their NBSAP. These include:

- i) Reviewing the lessons learned by other nations and taking on board the resultant recommended processes and mechanisms for NBSAP development.
- ii) Developing the NBSAP to ensure internal reporting systems are established within the plan.
- iii) Undertaking the gap analysis to assess and ensure synchronicity with existing plans, policies and legislation.
- iv) Ensuring Monitoring & Evaluation (M&E) is built into the NBSAP, with associated targets and indicators.
- v) Designing the M&E process to be in line with, and in time with, the four yearly CBD reporting process.
- vi) Outlining the protocol for reporting on activities for partner organizations (NGOs, private sector etc) within the NBSAP itself (through, for example, promotion of MOUs with fixed reporting systems; requirements for proposed projects to meet the NBSAP objectives etc).

²⁶ See associated report: Carter, E. (2007) National Biodiversity Strategies & Action Plans: Pacific Regional Review. SPREP / COMSEC

LESSONS LEARNED FROM THESE TWO NATIONS

From the Samoan review and the Solomon Islands development process various lessons can be learned that may be of benefit to wider nations going through similar procedures:

- 1) For those nations still without NBSAPs (Tuvalu & Nauru) it is important to examine the experiences of Samoa outlined in this review, and ensure that not only are the 6 Ws adequately represented in the NBSAP, but also that appropriate M&E protocols are included in the NBSAP (with associated targets and indicators).
- 2) The very inclusive and participatory approach adopted by Samoa in the development of its NBSAP is a very useful template for other nations to follow to ensure full stakeholder inclusion in the development of the strategy and a sense of ownership of the NBSAP. Additionally the very process of such participatory development is an enormously useful tool in awareness raising of biodiversity concerns and issues of SD.
- 3) Given the overwhelming MEA strategy development and reporting requirements that nations face in the Pacific region the NBSAP M&E process presents an opportunity for streamlining biodiversity related reporting. Systems can be established within the M&E protocol that enable reviews to be undertaken on a four-yearly cycle that coincide with the CBD reporting requirements, and systems can be established within the NBSAP to develop better information gathering from partner organizations (NGOs, private sector etc) such as a requirement for MOUs to be agreed with government that outline the reporting needed by the government to assess the status of implementation of the NBSAP over time.
- 4) The NBSAP development process also presents an opportunity for governments to review their existing policies, plans and legislation and appropriately assess the gaps to address, possible conflict areas to attend to and existing systems to strengthen / support.
- 5) Of critical importance is not only the synchronicity of existing policies and plans, but the future synchronicity of plans under development, especially those related to the MEAs and various conventions (such as the National Sustainable Development Strategies [NSDS], National Adaptation Programmes of Action [NAPA], National Implementation Plans for Persistent Organic Pollutants [NIP-POP], National Action Plans for desertification [NAP], Biosafety protocols and the like). A strong and well developed NBSAP will provide the bedrock information for inclusion of biodiversity concerns in these associated strategies and plans, and recognition of the NBSAP as the basis for biodiversity conservation planning in any nation is vital for this mainstreaming cross-sectorally.

NOTE FROM THE AUTHOR

Considering the very limited timeframe available for this work - that was undertaken concurrently with a 14 nation regional review of NBSAPs in the Pacific - there are inevitable omissions and oversights in this report. Certain key areas have not been tackled, such as: the issues of 'political will' in the nations reviewed; the key stumbling blocks to NBSAP mainstreaming cross-sectorally from higher level pressures for 'development as rated-by-revenue'; the failings of reporting systems having any 'ground-truthing' (for example the establishment of a protected area can not be described as a successfully achieved biodiversity conservation goal where that protected area is not supported legislatively, is lacking regulations and does not have enforcement of procedures on the ground); and the production of associated strategies reflecting NBSAP goals do not in themselves determine implementation of biodiversity conservation. However, it is hoped that this report is a starting point for further work.

Acknowledgements

Thanks goes to Joe Horokou and Jozef Hurutara of the Environment & Conservation Division (ECD), Ministry of Forests, Environment & Conservation, Solomon Islands for enabling my involvement in the development of the Solomon Islands NBSAP. Thanks also to Faumuina Pati Liu and his team at the Department of Environment and Conservation (DEC), Ministry of Natural Resources & Environment (MNRE), Samoa, for all their work in the limited time we had available to launch into this NBSAP review. Tepa Suaesi kindly also gave his time in providing background information on the Samoan NBSAP process and Frank Wickham was extremely helpful in early communications and background preparations for the Solomon Islands work. Thanks also goes to Dom Benzaken, Lui Bell, Caroline Vieux and Stuart Chape at SPREP, for their programme contributions to the Solomon Islands NBSAP development process; and Julius Kaberere at COMSEC for facilitating the funds to support this work. Finally enormous thanks to Kate Brown-Vitolio, Ana Tira and the IE team for all their advice and support during the term of this contract.

FURTHER REFERENCES

Samoa related reports

The Pacific Adaptation to Climate Change (PACC) report
The National Coastal Infrastructure Management Strategy

Powell, G.B. (2004) Review of natural resources and environmental related legislation – Phases 1 and 2. Samoa. *IWP-Pacific Technical Report (International Waters Project) no. 10*

Hay, J.E & Sueasi, T. (2006) Samoa - Country Environmental Analysis: Mainstreaming Environmental Considerations in Economic and Development Planning Processes. Final Report September, 2006. ADB [TA: 6204-REG]

Barbados Programme of Action (BPOA) National Assessment Report, Samoa. 2003
GEF Country Portfolio Evaluation: Samoa (1992-2007). *Prepared by the GEF Evaluation Office*.

The National Capacity Self-Assessment Project (NCSA) National Capacity Needs, Constraints and Priorities for the Implementation of the United Nations Convention on Biological Diversity (UN-CBD) *Thematic Assessment*.

The National Adaptation Programme of Action, 2005

The National Capacity Self-Assessment Project (NCSA) Cross-cutting Report, Samoa
Strategy for the Development of Samoa, 2005-2007 *“enhancing people’s choices”*

Proceedings of the Pacific Regional Consultation on Water in Small Island Countries – Country Briefing Papers

Pacific Islands Renewable Energy Project: Pacific Regional Energy Assessment (2004) Samoa National Report: A climate change partnership of GEF, UNDP, SPREP and the Pacific Islands. Volume 11

Samoa’s National Implementation Plan for Persistent Organic Pollutants. December 2004
Samoa – Assessment Report, World Summit on Sustainable Development

Wider references

Tortell, P. (2007) IN DRAFT: Review of the Action Strategy for Nature Conservation in the Pacific Region, 2003-2007: *Report of the Roundtable to the 8th Regional Conference on Protected Areas and Nature Conservation*.

Tabunakawai, K. (2002) *NBSAP review*. Roundtable for Nature Conservation. Facilitator Paul Chatterton. Notes from Workshop.

SPREP (2006) Report back on countries priorities for the next twelve months. *Notes from workshop*.

SPREP (2006) NBSAP working group, preliminary findings. *Notes from workshop*.

Thomson, L.A.J. (2006) *Review of National Biodiversity Strategy and Action Plans for Fiji and Niue –With reference to treatment of forest biodiversity, Especially forest genetic resources.* SPRIG 2 Milestone 59.

Thomson, L.A.J. (2006) *Review of National Biodiversity Strategy and Action Plans for Samoa and FSM –With reference to treatment of forest biodiversity, Especially forest genetic resources.* SPRIG 2 Milestone 75.

NBSAP WG (2005) *Report of the NBSAP Working Group Meeting, A洛au, PNG.* July 2005.

SPREP (2004) *Report of the Pacific Islands Roundtable for Nature Conservation Management Group Meeting.* Samoa April 27th – 29th 2004

Schuster, C. & Reti, J. (2001) PIC NBSAP preparation checklist. WWF/SPREP

CONTACTS

<p>Secretariat of the Pacific Regional Environment Programme (SPREP) PO BOX 240 Apia, Samoa Ph: (+685) 21929 Fax: (+685) 20231 E: kateb@sprep.org</p>	<p>The Commonwealth Secretariat Marlborough House, Pall Mall, London SW1Y 5HX, UK Tel: +44 (0)20 7747 6500 Fax: +44 (0)20 7930 0827 www.thecommonwealth.org</p>
<p>Division of Environment & Conservation (DEC), Ministry of Natural Resources and Environment, Apia, Samoa Ph: (+ 685) 31 197 /31 198 Fax: (+ 685) 25 869/23 176 E: pati.liu@mnre.gov.ws</p>	<p>Environment & Conservation Division (ECD) Ministry of Forests, Environment & Conservation , Solomon Islands P.O.Box G24, Honiara, Solomon Islands Ph: (677) 24215 E: jhurutarau@gmail.com</p>
<p>Eleanor Carter Environment & Development (E&D) Consulting Email: carter.ed.consulting@gmail.com</p>	

ANNEX 1

THEMES, OBJECTIVES AND ACTIONS DESCRIBED IN THE NBSAP	INDICATOR/S (Monitoring Goals & indicators, where given) #	HAVE THE INDICATORS FOR SUCCESS YET BEEN ACHIEVED? (Y/NO)	REFLECTION OF OBJ / ACTION/S IN ASSOCIATED STRATEGIES / PLANS (MAINSTREAMING 1) *	PRODUCTION OF RELEVANT POLICY (MAINSTREAMING 2)	PRODUCTION OF RELEVANT LEGISLATION (MAINSTREAMING 3)	RESULTS / OUTCOME/S (ON-THE-GROUND STATUS OF IMPLEMENTATION)	LEAD AGENCY	KEY PLAYERS	CHALLENGES / OBSTACLES to particular objectives / actions
THEME 1: MAINSTREAMING BIODIVERSITY									
<i>Strategy Goal: The Conservation and sustainable use of biodiversity, which is vital to the development of Samoa, is integrated into national, sectoral and cross-sectoral plans, policies and programmes.</i>									
Objective 1 – Policy: To Integrate concepts of conservation and sustainable use of biodiversity into all relevant sectoral policies, programmes and plans	Conservation and sustainable use concepts have been integrated into policies in policies, plans and programmes of all the government ministries								
			(1) The Strategy for the Development of Samoa 2005-2007 reflects NBSAP issues on maintenance and improvement of ecosystems & related sites, the identification of possible additional sites, together with awareness raising on waste management, chemical awareness, climate change and ozone protection (though there is no direct reference to the NBSAP or the word 'biodiversity'). (2) The MAF Corporate Plan 2005-2008 (3) The Tourism Development Plan 2005-2008 and (4) The Environmental Sustainability . (4) A 2004 Country Environmental Analysis undertaken by Hay & Suseasi (to identify areas for assistance programmes to be supported by the Asian Development Bank) (5) A 2006 Policy on Mainstreaming Environmental Conservation in Economic and Development Planning Processes . It identified priority areas in policy, institutional and legislative mechanisms, as well as programmes and projects that will help to mainstream environmental considerations into economic development planning.						
1.1 To include the NBSAP issues in the next national plan along with CBD principles such as the precautionary principle, and issues such as financing biodiversity, ensuring that biodiversity considerations is effectively incorporated in governments developmental policies									
1.2 Provide Policy Advice with regards to amendments of the existing policies and development of new policies, reflecting NEMS framework.				The Sustainable Management of Biodiversity Policy (2007) has been developed and (at the time of writing) is awaiting approval from cabinet					
Objective 2 – Multi-sectoral Collaboration: To Improve and strengthen Multi-sectoral collaboration in promoting conservation and sustainable use of biodiversity in Samoa	Multi-sectoral team, including government agencies, statutory bodies, NGOs, communities and private sector has been set up and activities developed to promote collaboration on all biodiversity related activities.								
2.1 Enhance and strengthen the existing NBSAP multi-sectoral team consisting of Government Agencies, NGOs, Private Sector and Community Groups to advise on the sustainable management of Samoa's biological and genetic resources, and contribute to Samoa's participation at international and regional environmental consultations			The NCSA Thematic Assessment for Biodiversity examined the strengths and weaknesses of the biodiversity sector and currently utilized to meet her obligations and commitments under the CBD. It identified the key gaps in Systematic capacity, Institutional capacity and individual capacity. It also highlighted recommended priority actions.				Samoa is involved in Climate Change and CITES programmes, and in the management of migratory stocks of tuna and other commercial migratory fish.		
2.2 Establish a multi-sectoral team of scientists and experts to conduct biological studies and undertake monitoring programmes on biodiversity									
2.3 Establish and maintain regular consultations and communication links between all stakeholders on international and regional treaties for the conservation and sustainable use of biodiversity							Samoa is a member of various regional networks: PAPGREN (SPC), PBI, IWP (SPREP), SOPAC, PFS, PGRC, Roundtable for nature conservation, SIDS, CMS, Mauritius strategy, Pacific ABS project, PIREP, INPOW (CBD), SBSTTAs & Adhoc groups (CBD), The Regional Inv		
Objective 3 – Legislation: To ensure that appropriate legislation is developed and effectively enforced to manage Samoa's biodiversity									
3.1 Amend the Lands, Survey and Environment Act 1989 to incorporate NBSAP's recommendations									
3.2 Develop, adopt and enforce EIA legislation to minimise the adverse impacts of developments on the environment.									
3.3 Ensure the integration of objectives and actions of NBSAP into legislative amendments being undertaken by relevant departments, to ensure consistency across all sectors concerned.			A Review of natural resources and environmental related legislation was undertaken in 2004 by Powell (IWP no.10) providing a comprehensive review of existing legislation covering environmental and natural resources (marine and terrestrial) and other legislation which has a bearing on such resources.	A National Deforestation Policy is under development.	(1) The Wild Animals Regulations (1993) is in place. (2) The Fisheries Regulations (1995) are in place. (3) Review of natural resources and environmental related legislation –Phases 1 and 2 was undertaken by Graham Bruce Powell (SPREP 2004).	There are trade bans on particular species, including: black coral, turtle shell, turtles, bats and native mammals. The Wild Animals Regulations 1993 provide for protection to more native birds. The Fisheries Regulations 1995 stipulate protection for turtles and Giant Clams.			
3.4 Integrate the protection of species from the impact of oil spill and marine pollution into the appropriate legislation.			With regard to Persistent Organic Pollutants (POPs) Samoa has produced a National Implementation Plan (NIP) to address their management (2004)		The Maritime Zones Act (1999) is in place with the potential to be updated to incorporate this action				

	THEMES, OBJECTIVES AND ACTIONS DESCRIBED IN THE NBSAP	INDICATOR/S (Monitoring Goals & indicators, where given) #	HAVE THE INDICATORS FOR SUCCESS YET BEEN ACHIEVED? (Y/N)	REFLECTION OF OBJ / ACTION/S IN ASSOCIATED STRATEGIES / PLANS (MAINSTREAMING 1) *	PRODUCTION OF RELEVANT POLICY (MAINSTREAMING 2)	PRODUCTION OF RELEVANT LEGISLATION (MAINSTREAMING 3)	RESULTS / OUTCOME/S (ON-THE-GROUND STATUS OF IMPLEMENTATION)	LEAD AGENCY	KEY PLAYERS	CHALLENGES / OBSTACLES to particular objectives / actions
	3.5 Review the status of wildlife identified and make appropriate monitoring and enforcement amendments to the Wild Animals Ordinance 1993.									
	3.6 Develop appropriate legislation on biosecurity to include risk management on genetically modified organisms, invasive alien species, and effective border control.			(1) A National Invasive Alien Species Implementation Action Plan (NIASAP) has been drafted (2005). (2) The National Biosafety framework was developed in 2004-2005		Legislation associated with invasive species and biosecurity exists (though is out of date in many cases) but has the potential for supplementary updating / amending. These include: Animals ordinance (1960) , Cocoa disease ordinance (1961) , Ants and Insects Order (1961) , Plant Act (1964) , Pest soils regulations (1990) Samoa Quarantine Order (1920) Land for quarantining purposes Ordinances (1921/24), Animal diseases prevention regulations (1968) , Eradication of African Snails Regulations (1996) , Plants and Soils Import and Export Control Regulations (1951) , Plants and Soils cleaning regulations (1999) , Bee and bee products prohibition order (1999)	(1) The NIASAP (2005) identifies the need to undertake a preliminary assessment of the potential environmental, economic and social impacts and 'values' of invasive alien species in Samoa. (2) The National Biosafety framework (2004-2005) includes policies and procedures for assessing the risks of proposed introductions of GMOs and LMOs. There is also a copyright Act and legislation on traditional knowledge rights in the late 1990s, which covers patents on products of intellectual extraction, such as plant and animal hybrids, GMOs and LMOs.			
	3.7 Develop appropriate sui generis legislation for the protection of traditional knowledge and equitable benefit sharing, which are important for the conservation and sustainable use of biodiversity.			The National access & benefit sharing strategy was a key part of an action plan developed in 2003			The National access & benefit sharing strategy (2003) establishes an access & benefit sharing framework that aims to protect traditional knowledge.			
	3.8 Finalise, enact and enforce Environment (Bioprospecting) Regulations.						Bioprospecting regulations were drafted 2000-01			
	3.9 Amend the Village Fono Act and set up relevant by-laws to decentralise the enforcement of some of the biodiversity destruction offences but based on the assessment of appropriate authority.									
Objective 4 – Environment Impact Assessments: To ensure that EIAs are conducted for all development projects to minimise any adverse Impacts on Samoa's biodiversity.										
	4.1 To develop relevant EIA policies.					EIA regulations drafted in 1998	EIA regulations now incorporated / referred to in the Planning and Urban Management Act 2004 - areas for further development projects and possible impacts on biodiversity are taken into account. Also, the Tourism Development Plan identifies the need for effective implementation of the EIA legislation and the environmental code of ethics, and encourages operators to undertake environmental reviews of their businesses.			
	4.2 Undertake ecological surveys and assessments as an integral part of EIA procedures.									
	4.3 Integrate the assessment of development impacts on biodiversity as part of the code of practice for natural resource extraction.									
	4.4 Integrate economic valuation into EIA as an integral part.									
	4.5 Regularly review and update existing EIA procedures.						MNREM Corporate Services are currently reviewing EIA and SIA guidelines to consider incorporating stronger biodiversity related considerations.			
Objective 5 – Capacity Building: To develop and enhance local capacity to ensure the effective implementation and enforcement of policies and legislation for the conservation and sustainable use of Samoa's biodiversity										
	5.1 Develop a national clearinghouse mechanism based on the CBD-CM for disseminating and sharing of information on biodiversity work.									
	5.2 To conduct national seminars involving all key stakeholders on policies and plans relating to conservation and sustainable management of biodiversity.									
	5.3 Develop public awareness materials on all legislations relating to biodiversity use for disseminating to the people.									
	5.4 Implement and co-ordinate media programmes to raise awareness.									
	5.5 Promote and encourage access to and the use of materials available at the various departments.									
	5.6 Encourage the use of Participatory Rural Appraisals approach in awareness and educational programmes.						The development of a database and website (www.mnre.gov.ws/biodiversity) related to training has taken place and MNREM has established a specific capacity building section working on this area. (Note: Website not working - July 07)			
	5.7 Develop training programmes for: (i) All personnel involved in the formulation and implementation of conservation related policies and legislation (ii) Communities for enforcement of policies and legislation. (iii) Inclusion of biodiversity and regulations in educational curriculum.						MNREM in collaboration with the Ministry of Education (MESC) is developing strategies and resources for environment and conservation curricula at all school levels.			
	5.8 Develop capacity building training for local communities on the principles and benefits of EIA, so they can apply EIA on developments at their local communities.									
THEME 2: ECOSYSTEM MANAGEMENT										

	THEMES, OBJECTIVES AND ACTIONS DESCRIBED IN THE NBSAP	INDICATOR/S (Monitoring Goals & indicators, where given) #	HAVE THE INDICATORS FOR SUCCESS YET BEEN ACHIEVED? (Y/N)	REFLECTION OF OBJ / ACTION/S IN ASSOCIATED STRATEGIES / PLANS (MAINSTREAMING 1) *	PRODUCTION OF RELEVANT POLICY (MAINSTREAMING 2)	PRODUCTION OF RELEVANT LEGISLATION (MAINSTREAMING 3)	RESULTS / OUTCOME/S (ON-THE-GROUND STATUS OF IMPLEMENTATION)	LEAD AGENCY	KEY PLAYERS	CHALLENGES / OBSTACLES to particular objectives / actions
	<i>Strategy Goal: To increase the percentage of Samoa's protected and conserved areas from the existing 10% of total land area, including coastal areas.</i>									
	<i>Objective 1 – Research and Monitoring: To promote and encourage research for the identification, documentation and monitoring of Samoa's ecosystems for the implementation of appropriate management programs.</i>									
	1.1 Undertake biological surveys of Samoa's freshwater ecosystems.									
	1.2 Undertake biological surveys of key upland sites not visited in the National Upland Ecological Survey of 1998, e.g. Sili Upland forest, Itu Salega and Gataival Upland forest.						A lowland survey was conducted and 5 priority sites were identified. A detailed upland survey was conducted 2003-2004 and resulted in the establishment of the Samoa Forest Resources Information System (SAMFRIS), in which the different types of forests were characterized according to ecological types and regeneration status			
	1.3 Undertake a complete survey of Samoa's inshore biodiversity.						Samoa, in participation with the GCRMN is periodically monitoring coral bleaching and reef fish abundance.			
	1.4 Develop and implement a long term monitoring programme for Samoa's native ecosystems including invasive species.			A National Invasive Alien Species Implementation Action Plan (NIASAP) has been drafted (2005).			Monitoring programmes are in place for marine turtle nesting sites, flying foxes and some harvested species eg: inshore fish and invertebrates. Satellite imagery is also used for periodic assessment of the extent of different habitats and land uses.			
	1.5 Develop a list of priority research topics and monitoring techniques to be used by students and staff of natural resource sectors.									
	1.6 Develop a code of conduct for biodiversity and bioprospecting research in Samoa.				The Government has a policy for managing applications for research on plants and animals of Samoa (1999).		There is a copyright Act and established intellectual property rights in the late 1990s, which covers patents on products of intellectual extraction, such as plant and animal hybrids, GMOs and LMOs.			
	1.7 Publish and make available to the public research reports.									
	1.8 Develop a programme for the identification of genetic resources from Samoa's biological resources.			Addressed in the MAF Corporate Plan 2005-2008			(1) The MAF Corporate Plan contains a task "to encourage the conservation of agricultural genetic resources". Genetic resources relating to agricultural crops are kept in gene banks both overseas (see 7.2.3) and within MAF. (2) The Forestry Division is also participating in the germplasm collection project with SPREP.			
	1.9 Develop and implement a programme for monitoring the impacts of biodiversity from Climate change.			(1) This programme is being addressed in section 8 of the National Adaptation Programme of Action (NAPA) profiles. (2) Additionally a 'Coastal Infrastructure Assets management strategy' has been developed. (3) The impacts of climate change on biodiversity have been referenced in the Pacific Adaptation to Climate Change: Report of in-country consultations.			(1) A tide gauge is operating in Samoa as part of the SPSELMP project (Australia). (2) The Coastal Infrastructure Assets management strategy guides district and village land management plans for enhancing resilience, adaptation and sustainability of coastal resources in the face of threats from human development and climate change.			
	<i>Objective 2 – Conservation Areas: To enhance the management of existing protected areas and establish new ones to increase coverage of protected areas to 15% [from existing 10%] and achieve a full representation of Samoa's ecosystems</i>	Total land area under conservation or sustainable management framework.								
	2.1 Develop and implement management plans for the existing protected areas in Samoa.			(1) The NCSA Thematic Assessment for Biodiversity highlighted 'Management of Protected Areas' as one of its recommended priority actions. (2) NCSA Thematic Assessment for 'Enhancing Management Capacity for National Parks and National Reserves of Samoa' (2007-2010)			Aleipata and Safata MPAs have management plans established and agreed.			
	2.2 Establish conservation areas in under represented ecosystems e.g. Mangrove areas.						New terrestrial National parks established: Lake Lanuao National Park (201ha on the ridge of Upolu island) and the Samoa National Park (5,974ha on the eastern uplands of Savai'i). In marine areas, 62 communities through Samoa have 'set-asides' within their lagoons (developed through the Samoa Fisheries Project). The Aleipata and Safata MPAs are established, and the Safata MPA management plan is in place for marine conservation and a priority to address (a proposal is underway with Japan to address this issue). The five mile reef (To'atauga) is being managed for coral conservation. Finally programmes are ongoing within the Divisions of Fisheries, Forestry, and Environment & Conservation (notably the latter that include the establishment of more conservation areas).			
	2.3 Establish large conservation areas which include more than one ecosystem, in high priority sites identified in lowland and upland ecological surveys such as Aopo, Sili, Salailua, and Eastern Upolu utilising community management approaches.						(1) The National parks and Reserves Act (1974) is in place providing for the establishment of state protected protected areas. (2) A Village Fono Act (1990) is in place enabling authority over an area to be devolved to the community	In Savai'i a 72,000ha MSP has been established.		
	2.4 Encourage the development of a marine protected areas representative system built upon the existing programmes.						IUCN is supporting the development of Aleipata MPA and Safata district MPA			

	THEMES, OBJECTIVES AND ACTIONS DESCRIBED IN THE NBSAP	INDICATOR/S (Monitoring Goals & indicators, where given) #	HAVE THE INDICATORS FOR SUCCESS YET BEEN ACHIEVED? (Y/N)	REFLECTION OF OBJ / ACTION/S IN ASSOCIATED STRATEGIES / PLANS (MAINSTREAMING 1) *	PRODUCTION OF RELEVANT POLICY (MAINSTREAMING 2)	PRODUCTION OF RELEVANT LEGISLATION (MAINSTREAMING 3)	RESULTS / OUTCOME/S (ON-THE-GROUND STATUS OF IMPLEMENTATION)	LEAD AGENCY	KEY PLAYERS	CHALLENGES / OBSTACLES to particular objectives / actions
	2.5 Develop appropriate information systems such as GIS to store and share information of ecosystems and protected areas.						Satellite imagery is also used for periodic assessment of the extent of different habitats and land uses. The SAMFRIS developed in 2004-2005 has the latest information on the status of Samoa's forest resources.			
	2.6 Extend the watershed programme to all the priority areas and the smaller village-based water-catchment areas.					The watershed protection and management regulations (1992) are in place	The IWP worked with 2 villages, Lepa and Apolima, to improve their management of water catchment areas. A national rural water supply project is also underway in Samoa.			
	2.7 Develop and implement programmes for the restoration of degraded ecosystems such as the Vaioloka rubbish dump, mangrove area and watershed areas.					The watershed protection and management regulations (1992) are in place	Two offshore islands in Aleipata district are being restored.			
	2.8 Promote the conservation of biodiversity in traditional sites and site attractions.									
Objective 3 – Sustainable Use of Ecosystems: <i>To develop and effectively manage programs that promote the sustainable use of Samoa's ecosystems</i>	Number of sustainable use guidelines and management plans developed for different ecosystems in Samoa									
	3.1 Develop guidelines for the sustainable use of biodiversity resources through activities such as eco-tourism, non-forest timber products, and natural products.				The Sustainable Management of Forest Resources Policy (2007) has been developed and (at the time of writing) is awaiting approval from cabinet		GEF/ANDP project is working with priority forest sites on Savai'i.			
	3.2 Undertake economic valuation of ecosystem services for terrestrial, aquatic and marine area use.									
	3.3 Identify sustainable management options for the cultivation of land.									
	3.4 Identify options to allow all marine biodiversity to be managed sustainably					Fisheries Act regulations (Fisheries Act amended 2002) are in place.	(1) Fisheries Act regulations guide inshore and deep sea fishing rules (allowable catch sizes of inshore fish and shall fish), licensing of deep sea fishing vessels, regulations for banning dangerous fishing (eg. dynamite, poison etc) (2) A conservation NGO Mata-le-o Environmental Trust Inc. (METI) is involved in coral gardening and monitoring.			
	3.5 Develop and promote integrated management approaches for all lands under customary tenure.									
	3.6 Develop and implement integrated coastal management programmes.						(1) In marine areas, 62 communities through Samoa have 'set-asides' within their lagoons (determined by the Coastal Infrastructure Project). (2) The Coastal Infrastructure Assets management strategy guides district and village land management plans for enhancing resilience, adaptation and sustainability of coastal resources in the face of threats from human development and climate change.			
	3.7 Implement the programme to complete phase out commercial logging operations in native forests.			A code of logging practice was developed in 2004	The Sustainable Management of Forest Resources Policy (2007) has been developed and (at the time of writing) is awaiting approval from cabinet					
Objective 4 – Capacity Building: <i>To develop and enhance local capacity to ensure the sustainable management of Samoa's ecosystem</i>	Number of biodiversity research projects and associated training undertaken by Samoans.									
	4.1 Develop and implement local capacity building programmes on biological surveys, monitoring techniques and ecosystem management.									
	4.2 Establish a multi-sectoral group of national/local experts to coordinate and undertake biological surveys and monitoring programmes.									
	4.3 Provide and implement national/local training on community-based conservation management approaches.					A Village Fono Act (1990) is in place enabling authority over an area to be devolved to the community				
	4.4 Develop and implement appropriate training for communities on sustainable income-generating activities.									
	4.5 Establish a management committee of key agencies to assess and review appropriate approaches for improving the management of conservation areas.									
Objective 5 – Public Awareness and Education: <i>To increase public awareness and understanding on the importance of Samoa's ecosystems to ensure their sustainable management.</i>	Proportion of Samoa's population with good understanding of the importance of the conservation of biodiversity.									
	5.1 Coordinates a programme between relevant agencies to utilize information on Samoa's biodiversity for use and integration into school curriculum, youth and rural development programmes.						MNREM in collaboration with the Ministry of Education (MOE) is developing strategies and resources for environment and conservation curricula at all school levels.			
	5.2 Develop and implement public awareness and educational programme on the importance and management of ecosystems.						The Government is committed to CEPFA. There are annual 'conservation days' for biodiversity, water, lands and marine. Annual Environment week is also commemorated, as are the Internationally and regionally relevant environmental days.			
	5.3 Develop national public awareness campaigns based on the Sea Turtle and Manumea programmes as flagship species for ecosystems.									

	THEMES, OBJECTIVES AND ACTIONS DESCRIBED IN THE NBSAP	INDICATOR/S (Monitoring Goals & indicators, where given) #	HAVE THE INDICATORS FOR SUCCESS YET BEEN ACHIEVED? (Y/N)	REFLECTION OF OBJ / ACTION/S IN ASSOCIATED STRATEGIES / PLANS (MAINSTREAMING 1) *	PRODUCTION OF RELEVANT POLICY (MAINSTREAMING 2)	PRODUCTION OF RELEVANT LEGISLATION (MAINSTREAMING 3)	RESULTS / OUTCOME/S (ON-THE-GROUND STATUS OF IMPLEMENTATION)	LEAD AGENCY	KEY PLAYERS	CHALLENGES / OBSTACLES to particular objectives / actions	
	5.4 Establish networking information sharing on the importance of Samoa's ecosystem through educational programmes.										
	5.5 Disseminate information on importance of Samoa's ecosystem through local media.										
	5.6 Develop a core set of public awareness materials and displays on conservation for public display, promotional tours, and distribution to the local communities.						Collaboration with private sector partners has resulted in the monthly production of 'Green Page' newsletter. There are also regular newspaper columns, radio programmes and TV adverts developed, and billboards utilised.				
	THEME 3: SPECIES MANAGEMENT										
	<i>Strategy Goal: To promote the conservation of Samoa's native and other important species and provide mechanisms for their sustainable use.</i>										
	Objective 1 – Conservation of Species: To enhance the status of native and other important species in Samoa through effective conservation programmes	Number of programmes to conserve and sustainably manage Samoa's threatened native species.									
	1.1 Establish and maintain a complete threatened species list for Samoa and provide regular updates to appropriate regional and international organisation directories.						The sheath tailed bat is close to extinction. The Samoan wildhen / moorhen is no longer seen. The Friendly ground dove is critically threatened.				
	1.2 Develop and implement recovery programmes for all endangered species.			The NCSA Thematic Assessment for biodiversity highlighted 'Management of Species & Habitats of High Global Value' as one of its recommended priority actions.							
	1.3 Fully develop Botanical Gardens to house collections of Samoa's native plant species.						Discussion is underway to start the propagation of rare native plants.				
	1.4 Assess options for Samoa's participation in international and regional efforts to protect migratory species.						Discussion is underway to establish a bird captive breeding facility (especially for rare species i.e. the friendly ground dove) in partnership with an overseas zoo (to be situated in Vailima Botanic Gardens).				
	1.5 Explore the feasibility of establishing captive breeding/spawning programmes as a security from natural occurrences and alien/invasive introductions.										
	1.6 Review the list of threatened species to determine those appropriate for recovery programmes including propagation.										
	1.7 Develop and implement a programme for the conservation of threatened species.										
	1.8 Develop and assess the feasibility of setting up an aquarium/zoo for conservation of species.										
	Objective 2 – Research & Monitoring: To promote and encourage research for the identification, documentation and monitoring of species and the implementation of appropriate conservation and management programmes.	Number of research, surveys and monitoring programmes in place.									
	2.1 Establish and undertake monitoring programmes for threatened species to assess the status of those that may be included or taken off the Wild Animals Ordinance.						MNRBM to undertake: a re-survey of nesting hawksbill turtles, a survey of the toothbilled pigeon; a survey of Mao and a survey of the friendly ground dove.				
	2.2 Undertake a research programme to complete the collection and identification of Samoa's fauna and flora.										
	2.3 Develop a project to search for the Punaie.										
	2.4 Carry out a survey to determine the status of Samoa's seabird population.										
	2.5 Establish a herbarium for Samoa.										
	2.6 Establish a database for the technical, financial and marketing assistance for all environmentally friendly technologies and developments (such as organic farming).										
	2.7 Develop a monitoring programme to monitor the adverse impact of coral bleaching and other invasive species infestation in Samoa.			A National Invasive Alien Species Implementation Action Plan (NIASAP) has been drafted (2005).			Samoa, in participation with the GCRMN is periodically monitoring coral bleaching and reef fishes.				
	2.8 Evaluate and assess the effectiveness of patai species campaign approaches to assist with the development of new conservation programmes.										
	Objective 3 – Sustainable Use and management of Species: To ensure the sustainable use and management of species for social and economic development	Number of sustainable use and management plans in place for species									
	3.1 Develop a management plan for the sustainable harvesting of lopa as a pilot study for culturally important species.										
	3.2 Build on existing programmes and extend them to cover other areas for the sustainable harvest of indigenous forest timber and non-timber trees.										
	3.3 Support the extension of the indigenous forest regeneration and rehabilitation programmes.										
	3.4 Develop programmes for the sustainable harvest of inshore/offshore fisheries.			(1) The NCSA Thematic Assessment for Biodiversity highlighted 'Inland Freshwater Biodiversity' as one of its recommended priority actions. (2) The Tuna Management and Development Plan was launched in 2005			(1) Fisheries Act regulations (Fisheries Act amended 2002) are in place. (2) The Maritime Zones Act (1999) is in place with the potential to be updated to incorporate this action	(1) The Tuna Management and Development Plan aims to develop the tuna industry sustainably. (2) The five mile reef (To'atuga) is being managed for coral conservation.			
	3.5 Develop and encourage sustainable aquaculture/freshwater and marine culture.						Fisheries Act regulations (Fisheries Act amended 2002) are in place.				
	3.6 Develop programmes for sustainable harvesting of ornamental plants.										
	3.7 Develop nurseries and botanical plots by local communities for growing medicinal plants.										

	THEMES, OBJECTIVES AND ACTIONS DESCRIBED IN THE NBSAP	INDICATOR/S (Monitoring Goals & indicators, where given) #	HAVE THE INDICATORS FOR SUCCESS YET BEEN ACHIEVED? (Y/N)	REFLECTION OF OBJ / ACTION/S IN ASSOCIATED STRATEGIES / PLANS (MAINSTREAMING 1) *	PRODUCTION OF RELEVANT POLICY (MAINSTREAMING 2)	PRODUCTION OF RELEVANT LEGISLATION (MAINSTREAMING 3)	RESULTS / OUTCOME/S (ON-THE-GROUND STATUS OF IMPLEMENTATION)	LEAD AGENCY	KEY PLAYERS	CHALLENGES / OBSTACLES to particular objectives / actions
	3.8 Identify significant species important for the ecotourism industry and develop programmes that promote their sustainable use (e.g. game fishing, whale watching, bird watching, medicinal tours, mangrove tours, tropical agriculture tours)						Training programmes for tourism operators are run through a tourism support fund. This is also working on the upgrading of tourism attractions.			
	3.9 Establish environmental certification (green products) for natural resource extraction within the private sector for products that are produced according to sustainable standards (e.g. forest stewardship certification, marine stewardship council and tropical fisheries).						The Tuna Management and Development Plan contains measures to manage yields through licensing and management controls.			
	3.10 Provide technical, financial and marketing assistance and support for all environmentally friendly development (such as organic farming).									
Objective 4 – Public Awareness and Education: To enhance knowledge and understanding of the public on the conservation, sustainable use and management of species	4.1 Develop public awareness campaigns to increase appreciation of functions and benefits of biodiversity by Samoans utilising the previous campaign approaches.	Proportion of population with commitment to conserve and sustainably manage native species.								
	4.2 Develop public awareness programmes for all stakeholder groups on sustainable use management of native and other important species.									
	4.3 Integrate information on the sustainable use and management of native and other important species into school curriculum at all levels.						MOREM in collaboration with the Ministry of Education (MESC) is developing strategies and resources for environment and conservation curricula at all school levels			
Objective 5 – Capacity Building: To enhance and strengthen the capacity of all Samoans to ensure the sustainable use, management and conservation of native and other important species	5.1 Develop and implement local capacity building programmes on biological surveys, monitoring techniques and species management.									
	5.2 Establish a multi-sectoral group of national/local experts to coordinate and undertake species conservation, biological surveys and monitoring programmes.									
	5.3 Provide and implement national/local training on community-based species conservation management approaches.						A Village Fono Act (1990) is in place enabling authority over an area to be devolved to the community			
	5.4 Develop and implement appropriate training for communities to promote the sustainable use of species as a possible income generating activities.									
	5.5 Establish a Conservation Management committee to assess and review appropriate and effective approaches for the conservation and management of species.									
THEME 4: COMMUNITY										
Objective 1 – Traditional Knowledge, Practices and Innovation: Preserve traditional knowledge and practices of Samoa that are important for the protection, conservation and sustainable use of biodiversity.	1.1 Conduct research and develop a national register to document and preserve traditional knowledge, practices and innovation important for the conservation of biodiversity.	Number of programmes undertaken to preserve traditional knowledge, practices and innovations.								
	1.2 Develop sui generis legislation to protect traditional Samoan knowledge, practices and innovation, and to provide benefit sharing mechanisms for appropriate knowledge holders.						A National access & benefit sharing strategy is a key part of an action plan developed in 2003 to establish an access & benefit sharing framework that aims to protect traditional knowledge			
	1.3 Develop appropriate legislation that promotes the decentralization of management and enforcement of Environmental regulations to village and local communities.									
	1.4 Integrating modern science and technology with traditional knowledge, practices and innovation to promote the conservation and sustainable use of biodiversity.									
Objective 2 – Empowering Communities: Empowering communities to conserve and sustainably manage biodiversity under customary resource tenure	2.1 Review and improve the implementation of appropriate approaches for village and district community programmes for the conservation and the sustainable use of biodiversity.	Number of villages with conservation areas of who have incorporated sustainable use guidelines into village decision-making processes.					A Village Fono Act (1990) is in place enabling authority over an area to be devolved to the community			
	2.2 Integrate activities that promote the conservation and sustainable use of biodiversity into relevant agencies' outreach programmes.						Community based fisheries reserves and MPAs have been established. Community forest programmes (for sustainable use) have been established. The government provides support to the society as a primary sector in the development of a community conservation area, ecotourism, World Heritage sites, community forests and reforestation projects; and the management of invasive species, through education, public awareness, information dissemination, and providing expertise, advice and training where it is requested.			

	THEMES, OBJECTIVES AND ACTIONS DESCRIBED IN THE NBSAP	INDICATOR/S (Monitoring Goals & indicators, where given) #	HAVE THE INDICATORS FOR SUCCESS YET BEEN ACHIEVED? (Y/N)	REFLECTION OF OBJ / ACTION/S IN ASSOCIATED STRATEGIES / PLANS (MAINSTREAMING 1) *	PRODUCTION OF RELEVANT POLICY (MAINSTREAMING 2)	PRODUCTION OF RELEVANT LEGISLATION (MAINSTREAMING 3)	RESULTS / OUTCOME/S (ON-THE-GROUND STATUS OF IMPLEMENTATION)	LEAD AGENCY	KEY PLAYERS	CHALLENGES / OBSTACLES to particular objectives / actions
	2.3 Encourage the full participation of all the different target groups in villages through the co-ordination and implementation of conservation and sustainable use programmes.									
	2.4 Establish an award/incentive scheme for environmentally friendly villages that promote conservation and the sustainable use of biodiversity.									
	2.5 Promote inter-village/district exchange programmes for the dissemination of information and sharing of experience on the conservation and sustainable management or use of biodiversity.									
	Objective 3 – Public Awareness and Education: To promote, encourage and strengthen awareness and understanding of local communities on the importance of protecting, conserving and ensuring the sustainability of any use of biodiversity, through appropriate awareness campaigns and educational programmes.									
	3.1 Promote and conduct public awareness campaigns for village councils and relevant target groups on the functions and benefits of conserving and the sustainable use of biodiversity.									
	3.2 Promote and conduct public awareness campaigns and programmes through media, workshops/seminars and information materials for communities to enable them to make appropriate decisions on the use of their natural heritage.						Education, media and public awareness were undertaken under all themes in the NBSAP. Programmes continue to be developed on invasive species, biosafety issues, access and benefit sharing and species ecosystem management.			
	3.3 Integrate information on traditional knowledge that is important for the conservation and sustainable use of biodiversity into the education curriculum.						MNREM in collaboration with the Ministry of Education (MESC) is developing strategies and resources for environment and conservation curricula at all school levels			
	Objective 4 – Capacity Building: To build the capacity of traditional communities in the coordination and implementation of conservation and appropriate biodiversity programmes.									
	4.1 Provide capacity building training for traditional communities in undertaking community-based biological studies and monitoring programmes.									
	4.2 Provide training for villages on their legal rights and appropriate procedures for reporting environmental offences.									
	4.3 Provide training programmes for traditional communities on the development and management of conservation programmes.									
	THEME 5: ACCESS & BENEFIT SHARING FROM USE OF GENETIC RESOURCES									
	Strategy Goal: Samoa's genetic resources are accessible for utilization and benefits derived are equitable shared amongst the stakeholders.	Regimes are developed to facilitate access and benefit sharing from the use of genetic resources. Benefits arise and are shared.								
	Objective 1 – Access to & Equitable Sharing of Benefits of Genetic Resources: To establish appropriate national measures to effectively access genetic resources and carry out fair and equitable sharing of benefits from the use of these resources.						Draft bioprospecting regulations have been produced, 1999.			
	1.1 Finalise and enact the Environment (Bioprospecting) Regulations.									
	1.2 Develop procedures to ensure that the Environment (Bioprospecting) Regulations are effectively enforced and monitored.									
	1.3 To explore the need of establishing a National Bioprospecting Coordinating Body.			The NCSA Thematic Assessment for Biodiversity highlighted 'Access and Benefit Sharing & Protection of Traditional Biological Knowledge' as one of its recommended priority actions.						
	1.4 Develop benefit sharing mechanisms for holders of knowledge and owners of resources utilised in bioprospecting.									
	1.5 Develop mechanisms for access to traditional knowledge and genetic resources.			The NCSA Thematic Assessment for Biodiversity highlighted 'Access and Benefit Sharing & Protection of Traditional Biological Knowledge' as one of its recommended priority actions.			A capacity needs assessment on access and benefit sharing and the protection of traditional knowledge and innovation was carried out (Unwin Consulting, 2003) identifying the need for a public awareness and education plan for stakeholders.			
	1.6 Explore opportunities to restore Samoa's endemic biodiversity, held in collections outside of Samoa. Identify outside ex-situ collections holding Samoa's biological and genetic resources, and develop agreements for the restoration and repatriation of ownership rights.									
	Objective 2 – Public Awareness and Education: To raise awareness and understanding of all Samoans on Access and Benefit sharing from the use of genetic resources.									
	2.1 Develop and implement public awareness campaigns on Environment (Bioprospecting) Regulations.			Mechanisms for the participation of local communities is outlined in the draft bioprospecting regulations						

	THEMES, OBJECTIVES AND ACTIONS DESCRIBED IN THE NBSAP	INDICATOR/S (Monitoring Goals & indicators, where given) #	HAVE THE INDICATORS FOR SUCCESS YET BEEN ACHIEVED? (Y/N)	REFLECTION OF OBJ / ACTION/S IN ASSOCIATED STRATEGIES / PLANS (MAINSTREAMING 1) *	PRODUCTION OF RELEVANT POLICY (MAINSTREAMING 2)	PRODUCTION OF RELEVANT LEGISLATION (MAINSTREAMING 3)	RESULTS / OUTCOME/S (ON-THE-GROUND STATUS OF IMPLEMENTATION)	LEAD AGENCY	KEY PLAYERS	CHALLENGES / OBSTACLES to particular objectives / actions	
	2.2 Conduct national Seminars involving all key stakeholders on Access and Benefit Sharing programmes on the use of Genetic Resources.						A capacity needs assessment on access and benefit sharing and the protection of traditional knowledge , practices and innovation was carried out (Urwin Consulting, 2003) identifying the need for a public awareness and education plan for stakeholders.				
	2.3 Co-ordinate and implement Media programmes to raise awareness.										
	THEME 6: BIOSECURITY										
	<i>Strategy Goal: To protect Samoa's native biodiversity from impacts of alien invasive species, through effective border control, effective quarantine and eradication programmes.</i>					An Animals Ordinance (amended 1989) has been in place to control importation of animals and animal products					
	<i>Objective 1 – Policy & Legislation: To develop appropriate policies and legislation to ensure the effective management of biosecurity</i>										
	1.1 Establish a co-ordination committee on the protection of indigenous biodiversity from alien introduction.			The NCSA Thematic Assessment for Biodiversity highlighted 'Management of Invasive Species' as one of its recommended priority actions.			A National Invasive Alien Species (IAS) Steering Committee has been established representing over 30 agencies with a role in preventing or reducing the impacts of IAS				
	1.2 Develop policy and actions for the management of biosafety issues.			(1) A National Invasive Alien Species Management Action Plan (NIAAP) has been drafted (2005). (2) The NCSA Thematic Assessment for Biodiversity highlighted Bio-safety as one of its recommended priority actions.			The NIASAP identifies the need to undertake a preliminary assessment of the potential environmental, economic and social impacts and 'values' of invasive alien species in Samoa. Four case studies have been singled out: Pacific rats, yellow crazy ants, Merremia vine and mynah birds				
	1.3 Review and make appropriate amendments on screening process for alien species introduction to include assessment of Impacts on native biodiversity.										
	<i>Objective 2 – Control & Eradication: To identify and develop appropriate programmes to ensure effective control and eradication of pest outbreaks.</i>										
	2.1 Strengthen facilities and procedures for border control and quarantine services.						A quarantine improvement project was undertaken from 2001 to upgrade quarantine facilities at all entry points. Some 'on-the-spot' fines are being introduced for people bringing prohibited goods into the country.				
	2.2 Developing programmes for the eradication and control of priority invasive species: African land snail, mint weed, Kosters curse, night blooming cestrum, cane toad, rattan, and others.					(1) An Animals Ordinance (amended 1989) has been in place to control importation of animals and animal products. (2) The Eradication of African Snails Regulations (1996) are in place.					
	2.3 Develop a programme for the eradication of rodents from small islands which can be used for the conservation of rare species such as the tuimao.						Programmes are planned for the eradication of Pacific rats from two offshore islands. MAF crops division also undertaking programmes to control African land snails and rhino beetle. Additional control projects include the control of crazy ants on offshore islands, and trials for the control of <i>Messerschmidia</i> vine and the mynah bird species. Community based fisheries projects are also working on the control of Crown of Thorns.				
	2.4 Implement the PaPPO programme to protect native marine										
	<i>Objective 3 – Research & Monitoring: To carry out systematic and scientific research based on regular monitoring of the biosecurity management system</i>										
	3.1 Review pest species amongst trading partners and develop response procedures for eradication.						Samoa is working with SPREP on the regional invasive species programme which aims to foster collaboration between trading partners. Regular liaison is maintained between quarantine services and their NZ and Aus counterparts.				
	3.2 Strengthen national research stations to be able to undertake appropriate scientific research and testing on introduced species.										
	3.3 Review and update the list of invasive species in Samoa.						MAF crop division is monitoring fruit flies'				
	3.4 Assess the risks on native biodiversity from recent species										
	<i>Objective 4 – Capacity Building: To strengthen capacity of local staff through the implementation of relevant training programmes to ensure effective border control and quarantine services.</i>										
	4.1 Provide training and capacity building for local staff on screening of any new species introduction										
	4.2 Undertake capacity building training for Quarantine staff on border control and quarantine services						The quarantine improvement project included upgrading of facilities, updating of risk assessment procedures and enhance the inspection of surveillance systems. The quarantine service has one section devoted to import risk analysis and has received training and support in this area.				
	<i>Objective 5 – Public Awareness and Education: To enhance knowledge and understanding of the public on the importance of protecting and conserving our biodiversity from the impacts of alien species</i>										

	THEMES, OBJECTIVES AND ACTIONS DESCRIBED IN THE NBSAP	INDICATOR/S (Monitoring Goals & indicators, where given) #	HAVE THE INDICATORS FOR SUCCESS YET BEEN ACHIEVED? (Y/N)	REFLECTION OF OBJ / ACTION/S IN ASSOCIATED STRATEGIES / PLANS (MAINSTREAMING 1) *	PRODUCTION OF RELEVANT POLICY (MAINSTREAMING 2)	PRODUCTION OF RELEVANT LEGISLATION (MAINSTREAMING 3)	RESULTS / OUTCOME/S (ON-THE-GROUND STATUS OF IMPLEMENTATION)	LEAD AGENCY	KEY PLAYERS	CHALLENGES / OBSTACLES to particular objectives / actions
	5.1 Develop and implement a national public awareness programmes for invasive species to prevent illegal introductions and control.									
	THEME 7: AGRO-BIODIVERSITY									
	<i>Strategy Goal: The conservation and sustainable use of agrobiodiversity contributes to national development and the preservation of traditional knowledge and practices.</i>									
	<i>Objective 1 – Conservation and Sustainable Use of Agro-biodiversity: To ensure the effective implementation of appropriate conservation measures for the sustainable use of agrobiodiversity</i>									
	1.1 Promote methodologies for sustainable use of Agrobiodiversity.			The NCSA Thematic Assessment for Biodiversity highlighted 'Agro-biodiversity' as one of its recommended priority actions.			Samoa participates in two important regional projects: SPRIIC & PGRC			
	1.2 Eliminate unsustainable Agrobiodiversity use.									
	1.3 Establish incentives which encourage conservation and sustainable use of Agrobiodiversity.									
	1.4 Promote environmentally sound agricultural practices such as farming systems, Agroforestry and organic farming.			The MAF corporate plan 05-08 contains a task to 'encourage the conservation of agricultural genetic resources'.			Integrated farming practices and agro-biodiversity plantations established in the late 1990s. Introduction of coconut oil production in 2004 as an alternative to diesel fuel.			
	1.5 Place greater emphasis on the importance and establishment of genetic resources.									
	1.6 Expand in-situ ex-situ conservation and sustainable activities, protected areas, aquaculture/mariculture.									
	1.7 Develop new and enhance existing programmes for the preservation of traditional species/varieties/breed from extinction.									
	<i>Objective 2 – Research & Development: To conduct relevant research critical to the development of agrobiodiversity</i>									
	2.1 Develop programmes for the protection of native/useful species and varieties from the impact of alien and invasive species.									
	2.2 Assess the impacts of new bio-technologies (genetic expressions, living or Genetically Modified Organisms and Genetically Engineered Organisms) on Agrobiodiversity.			The National framework on biosafety was developed in 2005			The National framework on biosafety includes policy, legal, administrative, and technical instruments that ensure an adequate level of protection for the safe transfer, handling and use of LMOs and GMOs - resulting from modern technology, considering risks to both biodiversity and human health.			
	2.3 Conduct inventories and promote surveys of existing agrobiodiversity resources.						Agricultural crop genetic resources have been sent to PGRI, Fiji and NRD, Samoa. MAF maintains gene banks and tissue cultures for rata and piupiu. The MAF Livestock department is also importing stock from different sources to increase diversity in cattle and pigs, and introduce sheep varieties from Fiji. The Forestry division is also participating in a germplasm collection project within SPREP.			
	2.4 Establish herds to preserve the native species.									
	2.5 Develop new and expand existing markets for local species/varieties and diversity rich products.									
	2.6 Document and publish research findings.									
	2.7 Develop and implement Code of Conduct/Code of Ethics for carrying out research.									
	2.9 Develop and implement research and development training programmes for all relevant institutions involved in Agrobiodiversity programmes.									
	<i>Objective 3 – Food & Health Security: To fully enhance and strengthen the critical importance of food and health security through the use of sustainable agrobiodiversity practices</i>									
	3.1 Encourage sustainable breeding practices.									
	3.2 Develop and implement Agrobiodiversity programmes that not only increase food productivity but also restore and enhance agrobiodiversity.						Reintroduction programmes are underway to re-establish the giant clam as a food source.			
	3.3 Develop new and existing programmes that promote the production of local food.									
	3.4 To increase and improve inspection criteria on the quality of both locally produced and imported food.									
	<i>Objective 4 – Public Awareness and Education: To raise awareness and understanding of agrobiodiversity through both formal and informal educational programmes</i>									
	4.1 Undertake national awareness programmes through all media, workshops, seminars and utilising the involvement and commitment of communities, on the sustainable use of Agrobiodiversity.						Through development of the National Biosafety framework 2005 considerable multi-stakeholder consultations took place and awareness was raised through education and media activities.			
	<i>Objective 5 – Capacity Building: To strengthen human and institutional capacity to ensure the effective implementation of agrobiodiversity programmes</i>									
	5.1 Undertake systematic training to enhance understanding and awareness and also to strengthen public involvement and commitment on Agrobiodiversity practices.									

	THEMES, OBJECTIVES AND ACTIONS DESCRIBED IN THE NBSAP	INDICATOR/S (Monitoring Goals & indicators, where given) #	HAVE THE INDICATORS FOR SUCCESS YET BEEN ACHIEVED? (Y/N)	REFLECTION OF OBJ / ACTION/S IN ASSOCIATED STRATEGIES / PLANS (MAINSTREAMING 1) *	PRODUCTION OF RELEVANT POLICY (MAINSTREAMING 2)	PRODUCTION OF RELEVANT LEGISLATION (MAINSTREAMING 3)	RESULTS / OUTCOME/S (ON-THE-GROUND STATUS OF IMPLEMENTATION)	LEAD AGENCY	KEY PLAYERS	CHALLENGES / OBSTACLES to particular objectives / actions
	5.2 Increase collaboration and coordination of the institutions directly involved in Agrobiodiversity programmes.									
	5.3 Integrate traditional and modern practices to further improve the Agrobiodiversity of Samoa.									
	THEME 8: FINANCIAL RESOURCES & MECHANISMS									
	<i>Strategy Goal: To secure long-term financial sustainability of all conservation and biodiversity related programmes by way of access to funding mechanisms from local and international sources.</i>									
	Objective 1 – Financial Plans: To develop long term financial plans for undertaking conservation programmes	Long term financial plan for financing biodiversity work developed								
	1.1 Develop a long-term financial plan for undertaking conservation programmes in Samoa.						There are effective aid coordination mechanisms in place administered by Aid management and Coordination, ministry of Finance, to ensure there is effective management of resources, and to avoid duplication of activities. There is close collaboration between the Ministry and donor parties over funding by sectors.			
	1.2 Establish a programme for increasing financial assistance for conservation through foundations and other aid donors.						Current projects include 'Water Sector Plan' (EU funded), Renewable Energy Programme (ADB funded), GEF-Samo small grants programme, Infrastructure Assets management project (WB funded).			
	1.3 Coordinate an annual or biannual donors meeting to present biodiversity priorities for funding.									
	Objective 2 – Conservation Trust Fund: To establish a conservation trust fund, the implementation of the NBSAP and relevant biodiversity work									
	2.1 Identify funding sources for the establishment of a Conservation Trust Fund to provide long term financial sustainability for the implementation of NBSAP and relevant biodiversity related work.									
	2.2 Establish a Conservation Trust Fund and provide Guidelines and set Criteria for its use.									
	2.3 Explore the feasibility of establishing conservation taxes and permits from the use of Samoa's biodiversity.									
	2.4 Develop guidelines for establishing community-based conservation trust funds.						<i>✓</i> Village Fono Act (1990) is in place enabling authority over an area to be devolved to the community			
	Objective 3 – Economic Valuation: To undertake an economic valuation of Samoa's biodiversity	Report on the economic values of Samoa's biodiversity								
	3.1 Conduct a study on the introduction of user fees for national parks and reserves, to implement government funding for work in these reserved areas.									
	3.2 Institute environmental economic valuation methodologies for assessing the full economic value of biodiversity.									
	3.3 All user fees, taxes, fines and other revenues determined in the economic valuation should be deposited in the Conservation Trust Fund.									
	3.4 Integrate biodiversity valuation as an integral part of land use and coastal use planning.									
	Objective 4 – Information Systems: To establish information systems of all potential donor assistance	Number of donors on the national biodiversity database								
	4.1 Establish and regularly update a database of all potential donor assistance programs.									
	4.2 Develop a mechanism to determine different funding sources channelled to NGO's for implementation of Biodiversity related programs.									
	4.3 Maintain and strengthen existing networks with donor agencies.									
	Objective 5 – Income Generating Activities: To Identify and promote sustainable income generating activities for the community	Number of income generating started in conjunction with conservation and sustainable use initiatives								
	5.1 Identify and develop appropriate programs to promote sustainable income generating activities at the community level.									
	5.2 Establish a network with public and private sectors including donor agencies.									
	5.3 Support Income Generating Activities.									
	5.4 Conduct feasibility studies for newly proposed Income Generating Activities.									
	5.5 Establish and update a database to record all Income Generating Activities implemented locally.									
	Objective 6 – Partnership: To strengthen the partnership with the private sector, NGOs and local communities	Number of partnerships for conservation between private sector, Government, NGOs and local communities.								
	6.1 Develop and implement programs to strengthen the partnership with the private sector, NGO's and local community in implementing Biodiversity related programs.						The Government has approved a policy granting tax relief to private businesses that contribute to charitable and conservation work in Samoa.			

THEMES, OBJECTIVES AND ACTIONS DESCRIBED IN THE NBSAP	INDICATOR/S (Monitoring Goals & indicators, where given) #	HAVE THE INDICATORS FOR SUCCESS YET BEEN ACHIEVED? (Y/N)	REFLECTION OF OBJ / ACTION/S IN ASSOCIATED STRATEGIES / PLANS (MAINSTREAMING 1) *	PRODUCTION OF RELEVANT POLICY (MAINSTREAMING 2)	PRODUCTION OF RELEVANT LEGISLATION (MAINSTREAMING 3)	RESULTS / OUTCOME/S (ON-THE-GROUND STATUS OF IMPLEMENTATION)	LEAD AGENCY	KEY PLAYERS	CHALLENGES / OBSTACLES to particular objectives / actions
6.2 Establish a special award for an environmentally friendly company to be integrated in the Exporter of the Year Award programme									
6.3 Establish an award program for environmentally friendly community development.									
Objective 7 – Accounting System: To establish an accounting system for recording revenues and expenditures for biodiversity related activities	Number of agencies and projects with accounting systems to record revenues and expenditures for biodiversity related activities								
7.1 Set up a network with relevant Biodiversity agencies for recording revenues and expenditures for Biodiversity related activities						The research and policy division of finance, including the Aid Coordination Division, have representatives in almost all committees addressing environmental issues.			
7.2 Produce Quarterly Progress Reports (including financial statements) for each Biodiversity project.									
7.3 Establish mechanisms for the establishment of national green accounting in Samoa.									
Objective 8 – Capacity Building: To strengthen the local capacity in the coordination and implementation of biodiversity and conservation projects									
8.1 Identify existing capacity development needs in addressing biodiversity and conservation related programs						Capacity needs were identified during the NCSA project, at individual, institutional and systematic levels.			
8.2 Secure financial assistance to develop and implement capacity development programs.						Scholarships play a key role in addressing HRD needs.			
8.3 Develop capacity building programs to improve financial management planning and implementation of Biodiversity and Conservation projects.						Participation in environment related courses supported for personnel by government.			
Objective 9 – Public Awareness: To raise public awareness of existing and potential financial resources									
9.1 Publish and disseminate as widely as possible information on funding mechanisms									

* taken from the NBSAP main text, not the implementation matrix (see report for full explanation)

Highlighted Yellow Columns: ACHIEVEMENTS (against suggested indicators where relevant / possible)