

MINISTRY OF NATURAL RESOURCES & ENVIRONMENT

POLICY STATEMENT ON BIOLOGICAL DIVERSITY

Name of policy

National policy on the conservation of biological diversity (or biodiversity)

Purpose

To provide the framework for the conservation, sustainable use and management of Samoa's terrestrial and marine biodiversity including the protection of endemic and native species and the control of invasive species.

Introduction

Samoa's natural heritage has maintained and improved both the social and economic wellbeing of its people through generations. Biodiversity is present in all facets of Samoan life, from providing the resources needed for food and shelter, medicinal plants to care for the health of the nation and more importantly supporting the faaSamoa (Samoan way). Over generations this relationship was premised on the understanding that the Samoans would utilise these resources in a sustainable manner. With appropriate measures being taken improved village-based resource management and protection efforts will help bring about sustainability in the long-term.

Nevertheless with the change from subsistence to a commercial economy and from village-based to government-driven management the 'culture of care' the Samoans once had for their environment is rapidly eroding. The inevitable changes in people's lifestyles due to growing exposure to globalisation as well as increased population competing for limited remaining resources have imposed greater demands on a fragile environment with finite natural resources.

Furthermore the impacts of climate change on small island developing states, like Samoa, with the associated devastating consequences of frequent tropical cyclones with increased severity, droughts and flooding make the protection of island biological resources even more difficult. To address the existing problems facing Samoa's biodiversity a merging of new approaches with traditional techniques is needed along with closer collaboration among national, regional and international stakeholders.

This policy supports the Strategy for the Development of Samoa 2005-2007 focusing on improved economic and social welfare for all the people of Samoa. It promotes the creation of the enabling environment for sustainable development and requires the management of biodiversity and genetic resources to be integrated into social-economic planning in order to minimise the adverse impacts of development on the environment. It also demands the strong participation of local communities in the planning and implementation of relevant actions for the sustainable management of national biodiversity resources.

Vision

Samoa's biodiversity resources are protected, conserved and sustainably managed so they will continue to flourish and regenerate to support better livelihoods for all stakeholders at the present time and in the future.

There are two main components of Samoa's biological diversity. One is the terrestrial biodiversity comprising all organisms with land-based habitats including freshwater resources as well as all types and forms of plants which provide habitats for birds. Terrestrial biodiversity provides traditional medicines and products and supports a wide diversity of plants and animal species. It also serves as a major attraction for wilderness and nature adventure as well as eco-tourism. The diversity of different types of organisms and animals all contribute in different roles and functions to maintaining balanced ecosystems.

The other is the marine biodiversity which supports a diversity of marine species and ecosystems such as coral reefs, seagrasses and mangroves. These ecosystems offer natural protection against storm surges and coastal flooding. Marine resources have been critical to the Samoan way of life, providing a major source of protein for people as well as family cash incomes. Marine protected areas have been established to improve the status of degraded areas for the benefit of coastal communities. Fisheries, particularly inshore, play a vital role in the economy of Samoa and contributing significantly to the health and nutrition of its people.

Issues, constraints and opportunities

Issues

- Over harvesting and overexploitation of terrestrial and marine resources.
- Clearance of forest for agriculture development
- Impact of unsustainable development practice
- Unsustainable use of natural resources
- Impact of climate change and sea level rise
- Impact of invasive species
- Destructive fishing and land use practices
- Land tenure (ownership and usage rights)
- Development versus conservation (balance between the two), and
- Lack or limited public awareness and education on sustainable development.

Constraints

- Lack of qualified skilled personnel
- Sustainability of human resources development
- Limited community and public support or participation
- Lack of research and scientific studies
- Lack of financial resources
- Impacts of climate change
- Land degradation due to poor land use practice, and
- Balance between meeting Samoa's development needs and the capacity of its natural resources to sustain now and in the future.

Opportunities

- Access to the use of biological resources
- Enhance rural livelihoods through better use of terrestrial and marine resources
- Provide ongoing ecosystem benefits and services
- Support life for mankind
- Provide scientific and research opportunities
- Increased awareness on the values of biodiversity and genetic resources
- Strengthened stakeholder capacity for sustainable management
- Improved quality of data for planning and decision making.

- Income generating activities from access to and benefit sharing of biodiversity and genetic resources, and
- Protection of national biodiversity for the benefit of future generations

Implementing agency

Ministry of Natural Resources and Environment (MNRE)

Roles of the key stakeholders

Ministry of Agriculture and Fisheries (MAF) - collaborates with the MNRE to implement some of the strategies in this policy in particularly the management of invasive species. The MAF Quarantine Division is responsible for controlling the border at the first point of entry to ensure the protection of Samoa from the introduction of unwanted species. Some of the strategies identified in the policy will be implemented by the MAF Fisheries Division in collaboration with the MNRE. These include the rehabilitation programs and activities for degraded ecosystems as well as monitoring and assessing the status of marine protected habitats.

Ministry of Women, Community & Social Development – assists MNRE through its Internal Affairs services to follow the proper channel of line of communication when implementing some of the strategies in this policy where community support is needed. Some of the projects that involve the community participation will need the full support from the village councils and the different levels of the community.

Ministry of Education, Sports & Culture - promotes public awareness through education curriculum, the MNRE will create public awareness materials to help with presentations on values and importance of protecting and conserving terrestrial and marine biodiversity and supporting sustainable use of natural resources.

Samoa Tourism Authority - assists the conservation and sustainable use of biological resources to ensure long term availability to support eco-tourism and improve Samoa's environment as a source of tourist destination for economical benefits.

The National University of Samoa – collaborates with MNRE through promoting biological research nationally and to engage research students in conducting scientific research studies and monitoring.

University of the South Pacific – collaborates with the MNRE in biological research to promote conservation and sustainable management and use of biological diversity.

Samoa Umbrella for Non Governmental Organisation – works closely with MNRE to promote conservation and sustainable use of terrestrial and marine biological resources.

Other national government institutions – the following support to implementation of the policy to strengthen the enabling environment for the sustainable management of terrestrial and marine biodiversity:

- Ministry of Foreign Affairs & Trade
- Ministry of Commerce, Industry & Labour
- Office of the Attorney General
- Ministry for Revenue – Department of Customs
- Ministry of Works, Transport & Infrastructure
- Samoa Water Authority
- Research and Development Institute of Samoa

Goals and principles

This policy aims to benefit all citizens of Samoa in perpetuity from the sustainable management of natural resources and the environment. Implementation of the policy will enable local people to engage in the protection and conservation of biological diversity in

order to get benefit directly and indirectly from the sustainable use of terrestrial and marine biodiversity, and promote equitable sharing of the benefits arising out of the utilization of genetic resources.

This policy is guided by the following principles:

Samoa's sovereign right - Samoa has sovereign rights over her biological diversity and resources.

Good governance and leadership - the Government of Samoa takes the leading role to ensure the protection, conservation and sustainable management of our biodiversity, through effective governance and leadership and in full consultation with all stakeholders.

Precautionary principle - in order to protect Samoa's biodiversity an appropriate and effective application of precautionary principle should be widely applied in all areas and at all levels of environmental decision making for conservation and sustainable development. The precautionary principle states that those proposing any development/activity have to prove that it would not cause serious or irreversible impacts and the lack of scientific certainty shall not be used as reason to allow it.

Collective responsibility - all residents and visitors have an individual and collective responsibility to protect, conserve and sustainably utilize our biodiversity and its resources, for the benefit of present and future generations.

Traditional knowledge, practices and innovations - Samoan traditional knowledge, innovations and sustainable practices which are important for the protection and conservation of biodiversity, should be fully recognized, preserved and maintained.

Public awareness and capacity building - public awareness, education and the strengthening of local capacity are essential for the protection, conservation and sustainable use of biodiversity.

Va tapuia - this is the faaSamoa concept of covenant or relationship between people and their environment, which originates from the idea of feagaiga (relationship between brother and sister). It has been widely acknowledged within and incorporated into the quest for conserving Samoa's environment.

Key objectives and strategies

1. Public awareness and education

Objectives	Strategies
<ul style="list-style-type: none"> ○ Promote public awareness, education and understanding of the nature of Samoa's biodiversity and the threats to its long-term integrity ○ Inform all stakeholders on the provisions of national policies and legislations 	<ul style="list-style-type: none"> ➤ Strengthen stakeholder understanding and public awareness through educational and awareness raising programmes such as seminars, workshops and training courses and encourage community participation in public awareness programmes. ➤ Increase media campaigns through television, websites, radio, and newspapers, documentaries, school quizzes/competition, video presentations to increase public awareness and education ➤ Promote national awareness events such as the National Biodiversity Awareness Day ➤ Provide educational and awareness raising aids/kits and materials to support school curricula ➤ Focus on special target groups such as women, youth and students ➤ Develop and implement awareness programmes to make the general public fully aware of various

	<p>policies and legislation in place on biodiversity</p> <ul style="list-style-type: none"> ➤ Review the National Biodiversity Strategy and Action Plan in line with current policies and practice ➤ Enforce the Environmental Impact Assessment Regulations to minimise the adverse impacts of developments on biodiversity and the environment
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2. Capacity building

Objectives	Strategies
<ul style="list-style-type: none"> ○ Improve/upgrade technical and scientific skills of staff ○ Collect, analyse and disseminate information ○ Conduct stakeholder training on sustainable development skills ○ Implement community-based projects to pilot conservation options and management ○ Promote transfer of skills and technology to support sustainable development 	<ul style="list-style-type: none"> ➤ Conduct training programmes for community on principles of and good practice for the sustainable use of biodiversity and genetic resources ➤ Conduct MNRE staff training ➤ Assess current capacity to identify urgent capacity building needs and priorities ➤ Compile inventories of marine and terrestrial biological resources ➤ Upgrade and manage databases for storing, analysis and dissemination of biodiversity and genetic resource information to all stakeholders ➤ Review the state of the environment reports and environmental statistics and make available to the public and stakeholders ➤ Carry out pilot projects to acquire necessary skills and experience on biodiversity management ➤ Collect and document information on traditional knowledge and practices on biodiversity use, e.g. medicinal and food use ➤ Engage qualified personnel to analyse information and conduct studies and research on biodiversity ➤ Strengthen consultative and collaborative linkages between the MNRE and stakeholders on the sustainable management of biological resources ➤ Ensure that research conducted in Samoa would have copies available to the MNRE ➤ Develop monitoring and assessment systems ➤ Secure resources for biodiversity conservation projects ➤ Strengthen the legislation to facilitate biodiversity research and development

3. Conservation of biological diversity and genetic resources

Objectives	Strategies
<ul style="list-style-type: none"> ○ Encourage community participation in the 	<ul style="list-style-type: none"> ➤ Protect critical biodiversity resources and habitats ➤ Rehabilitate degraded ecosystems by engaging

<p>conservation of biodiversity</p> <ul style="list-style-type: none"> ○ Develop global partnerships to support national conservation efforts ○ Strengthen environmental planning to reduce the adverse impacts of development on the environment ○ Control pests and invasive species to reduce their adverse impacts on the native biodiversity ○ Monitor the introduction of genetically modified organisms to minimise any harmful effects on native biodiversity ○ Undertake research to monitor the state of biodiversity and where required implement recovery plans for species sustainability 	<p>community support</p> <ul style="list-style-type: none"> ➤ Promote community participation in and support for the establishment of sanctuaries, national reserves, protected areas and community conservation areas ➤ Establish agreements between government and communities over the protection of biodiversity and genetic resources ➤ Strengthen legislative provisions on the protection and conservation of biodiversity ➤ Enforce compliance with the sustainable management of biodiversity and genetic resources ➤ Provide relevant data for planning and informed decision-making ➤ Adopt standards aimed at mitigating potential threats to biodiversity ➤ Develop management plans to guide activities on biological resources ➤ Conduct environmental impact assessments and biological surveys of development activities affecting biodiversity ➤ Carry out economic valuation of biodiversity and genetic resources to support management efforts ➤ Develop and strengthen international and regional networks through transfer of skills and technology ➤ Strengthen the implementation of the Convention on Biological Diversity ➤ Explore linkages to other international conventions and protocols namely: <ul style="list-style-type: none"> - Ramsar Convention on Wetlands of International Importance, especially as Waterfowl Habitat, - Bonn Convention on the Conservation of Migratory Species of Wild Animals - Convention on International Trade in Endangered Species of Wild Fauna and Flora - Convention for the Protection of the World Cultural and Natural Heritage ➤ Develop linkages with regional conventions and arrangements namely: <ul style="list-style-type: none"> - Convention for the -Protection of the Natural Resources and Environment of the South Pacific Region - Regional agreement on the protection of migratory species ➤ Secure and maintain donor support for project implementation ➤ Ensure the security of native biodiversity by addressing the potential and established impacts of alien invasive species
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	<ul style="list-style-type: none"> ➤ Finalise the National Invasive Species Action Plan to facilitate and coordinate invasive species programmes ➤ Develop programmes for the prevention, eradication and control of invasive species e.g. <i>merrimia peltata</i> and rat ➤ Develop research programs to continue gathering baseline information on the status of marine invasive species ➤ Strengthen collaboration with the Quarantine Division of MAF to enforce border control/security services to prevent the entry of species that are harmful or potentially harmful to the environment ➤ Coordinate periodical monitoring assessments of invasive species and non target species. Establish bio-security systems to protect endemic species and native resources ➤ Enforce compliance with legislation to control the importation of plants, animals and genetic resources ➤ Develop recovery plans and implement activities for the protection and conservation of Samoa's biodiversity and threatened species ➤ Undertake biological surveys of Samoa's freshwater resources ➤ Develop long term programs for monitoring of species recovery e.g. Maomao & Manumea ➤ Develop programme for monitoring the impacts on biodiversity from climate change ➤ Establish and undertake monitoring programmes for threatened species and work collaborative with IUCN to produce Samoa's Redlist of threatened species to document for international recognition ➤ Develop programs to determine the status of Samoa's seabird population/colony
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4. Sustainable use of biological resources

Objectives	Strategies
<ul style="list-style-type: none"> ○ Protect traditional knowledge and practice in biological resources ○ Develop appropriate business opportunities in the environment sector e.g. eco-tourism and leisure ○ Undertake research in genetic resources for economic 	<ul style="list-style-type: none"> ➤ Encourage active community participation in biodiversity programmes regarding access to genetic resources and benefit-sharing ➤ Identify and promote investment in the utilisation of biodiversity and genetic resources ➤ Establish mechanisms for equitable access to and benefit-sharing of genetic resources ➤ Establish new national parks and reserves, protected areas and community conservation areas

<p>development</p> <ul style="list-style-type: none"> ○ Promote access to and benefit sharing of biodiversity and genetic resources 	<p>to protect biodiversity</p> <ul style="list-style-type: none"> ➤ Conduct research and develop a national register to document and preserve traditional knowledge, practices and innovation important for the conservation of biodiversity ➤ Develop sui generic legislation to protect Samoan traditional knowledge, practices and innovation and to provide benefit sharing mechanisms for appropriate knowledge holders ➤ Encourage integration of modern science and technology with traditional knowledge, practices and innovation to promote the conservation and sustainable use of biodiversity ➤ Document and preserve traditional knowledge, customs and practices relevant to the protection, conservation and sustainable use of biodiversity ➤ Identify and develop appropriate initiatives to promote sustainable income generating activities. (e.g. handicrafts, ecotourism, non timber forest products, food, medicinal use, nurseries, whale/dolphin watching) ➤ Establish a stakeholder network including donor agencies to support income generating activities
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Implementation

Following approval of the policy by the Cabinet Development Committee the MNRE will coordinate its implementation in line with the government priorities and available resources. Some of the strategies are expected to take a number of years to be fully implemented. The government will seek donor assistance through the implementing agency, MNRE where appropriate to assist with the implementation of the policy. The MNRE will monitor the policy implementation and it will be reviewed every five years.

Definitions

biological diversity (biodiversity) – the variability among living organisms from all sources including *inter alia*, terrestrial, marine and other aquatic ecosystems and the ecological complexes of which they are part; this includes diversity within species, between species and of ecosystems.

bioprospecting - the search among biological organisms for commercially valuable compounds, substances or genetic material.

sustainable development means promoting development at a rate and in such a way as to ensure that the quality of the environment and the supply of resources is maintained and, wherever practicable, enhanced to meet the needs of the present generation without compromising the needs of future generations.

border control - the enforcement of policies and actions to prevent the accidental or illegal introduction of unwanted organisms across national borders. Border control also includes re-import of pest control, certification, inspection and surveillance and emergency responses.

ex-situ conservation - conservation of components of biological diversity outside their natural habitats.

in-situ conservation - conservation of ecosystem and natural habitats, the maintenance and recovery of viable populations of species in their natural surroundings.

invasive species - an animal or plant that can adversely affect indigenous species and ecosystems by altering genetic variation within species, or affecting the survival of species, or the quality or sustainability of natural communities. In Samoa, invasive animal and plant species are almost always species that have been introduced to the country (an exception is *merremia*, a native plant that has become invasive outside its normal habitats due to forest canopy disturbance).

Related national policies

National policy on forestry and sustainable development (2007)

National water resource strategy 2007-2017 (2007)

National biosafety framework (2004)

National biodiversity strategy and action plan (2001)

National water resource policy (2001)

National landuse planning policy (2001)

National environment and development management strategies (1993)

References

Government of Samoa. (2006). Samoa's 3rd report to the Convention of Biological Diversity. MNRE.

Government of Samoa. (2005). Strategy for the development of Samoa 2005–2007. Ministry of Finance.

Government of Samoa. (2001). Faatoetoe le muli o le ola: National Biodiversity Strategy and Action Plan. Department of Lands, Surveys & Environment

Government of Samoa. (1998). Samoa's 2nd report to the Convention of Biological Diversity. Department of Lands, Surveys & Environment.

Government of Samoa. (1993). Samoa's 1st report to the Convention of Biological Diversity. Department of Lands, Surveys & Environment.

Isikuki Punivalu & Associates. (2007). State of the environment report (draft). MNRE.

Park, G., Hay, R. & Whistler. (1992). The conservation of biological diversity in the coastal lowlands of Western Samoa, Department of Conservation, New Zealand.

Roger, S. 2007. Policy on forestry for sustainable development. MNRE.

Schuster, C. Whistler, A. & Siuli, T. (1997). The Conservation of biological diversity in upland ecosystems of Samoa. Department of Lands, Surveys & Environment.

SPREP. (2000). Convention on Biological Diversity: An information package for Pacific island countries.

Taule'alo, T.I. (1993). State of the environment report. SPREP

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31 August 2007