

Third National Report on the Implementation of the UNCCD

COMBATING LAND DEGRADATION



NIUE
NIUE



***Third National Report
on the Implementation
of the UNCCD within
Niue***

Compiled by Felicia A Nemaia

***Niue's Third National Report on the
Implementation in compliance with
the United Nations Convention to
Combat Desertification***

2006



TABLE OF CONTENTS

| | |
|--|-----------|
| (i) Country Profile _____ | 6 |
| <i>Geography</i> _____ | 6 |
| <i>Climate</i> _____ | 6 |
| <i>Environmental context</i> _____ | 7 |
| <i>Socio-economic context</i> _____ | 7 |
| (ii) Executive Summary _____ | 10 |
| (iii) Strategies and Priorities Established within the Framework of Sustainable Development Plans and /or Policies _____ | 14 |
| National Plans and Strategies Available in Other Social and Economic Areas _____ | 14 |
| National Plans or Strategies in the Field of Combating Desertification Developed Prior to the UNCCD NAP _____ | 15 |
| (iv) Institutional Measures taken to Implement the Convention, Including Legislative and Institutional Frameworks or Arrangements, Linkages and Synergies with Other Environmental Conventions and, as Appropriate, with National Development Strategies _____ | 16 |
| NAPs as Part of the National Economic and Social Development and Environmental Protection Plans _____ | 16 |
| Linkage Achieved with Subregional and Regional Action Programmes _____ | 18 |
| (SRAPs and RAPs) _____ | 18 |
| Established and Functional National Coordination Body _____ | 19 |
| Institutional Framework for Coherent and Functional Desertification Control _____ | 19 |
| Coherent and Functional Legal and Regulatory Framework _____ | 20 |
| (v) Participatory Process in Support of Preparation and Implementation of Action Programmes, Particularly Processes Involving Civil Society, Non Governmental Organisations and Community Based Organisations _____ | 22 |
| Effective Participation of Actors in Defining National Priorities _____ | 22 |
| Effective Support from International Partners for Cooperation _____ | 24 |
| (vi) Measures Taken or Planned within the Framework of National Action Programmes, Including Measures to Improve the Economic Environment, to Conserve Natural Resources and Promote Sustainable Use, to Rehabilitate Degraded Land, to Enhance Knowledge on Desertification, and to Monitor and Assess Desertification and Drought _____ | 25 |
| Adequate Diagnosis of Past Experience _____ | 25 |
| Established Technical Programmes and Functional Integrated Projects to Combat Desertification _____ | 25 |
| Effectiveness of Measures in Local Capacity Building _____ | 26 |



| | |
|--|------------------|
| <i>(viii) Financial Allocations from National Budgets in Support of Implementation as well as Financial Assistance and Technical Cooperation including their Inflows. Processes to Identify their Requirements, Areas of Funding and Setting Priorities</i> | <i>27</i> |
| Adopted Financial Mechanisms _____ | 27 |
| NAP Financing _____ | 27 |
| Technical Cooperation _____ | 27 |
| <i>(ix) Review of Benchmarks and Indicators Utilized to Measure Progress and an Assessment Thereof</i> | <i>28</i> |
| Operational Mechanisms for Monitoring and Evaluation _____ | 28 |
| <i>List of Appendices</i> | |
| Annex i Logical Framework for Sustainable Land Management in Niue _____ | 30 |
| Annex ii Detailed Framework for Sustainable Land Management in Niue _____ | 33 |



LIST OF ACRONYMS USED IN THIS REPORT

| | |
|-------|---|
| ACP | African Caribbean and Pacific |
| BSAP | Biodiversity Strategy and Action P |
| CBD | Convention on Biological Diversity |
| CHM | Clearing House Mechanism |
| CO | Country Office |
| DAFF | Department of Agriculture, Forestry and Fisheries |
| DJLS | Department of Justice, Lands and Survey |
| DSAP | Development of Sustainable Agricultural Practices |
| DOE | Department of Environment |
| EEZ | Economic Exclusive Zone |
| EIA | Environment Impact Assessment |
| EPDSU | Economic, Planning, Development and Statistics Unit |
| EU | European Union |
| FAO | Food and Agriculture Organization of the United Nations |
| GEF | Global Environment Facility |
| GDP | Gross Domestic Product |
| GIS | Geographic Information Systems |
| GoN | Government of Niue |
| GPS | Global Positioning System |
| GSU | Global Support Unit |
| HDI | Human Development Index |
| HIES | Household Income and Expenditure Survey |
| LDC | Least Developed Countries |
| LIS | Land Information Systems |
| LMRUP | Land and Marine Resource Unit Plan |
| M&E | Monitoring and Evaluation |
| MCPO | Multicountry Programme |
| MDG | Millennium Development Goals |
| NAP | National Action Plan/Programme |
| NBSAP | National Biodiversity Strategy and Action Plan |
| NCB | National Coordinating Body |
| NCSA | National Capacity Needs Self Assessment |
| NCSD | National Council for Sustainable Development |
| NEMS | National Environmental Management Strategy |
| NGO | Non Government Organisation |
| NIOFA | Niue Island Organic Farmers Association |
| NIPs | National Implementation Plan |
| NZAID | New Zealand International Aid and Development Agency |
| PIC | Pacific Island Countries |
| POPs | Persistent Organic Pollutants |
| PWD | Public Works Department |



| | |
|--------|--|
| SIDS | Small Island Developing States |
| SOE | State of the Environment |
| SOPAC | South Pacific Applied Geosciences Commission |
| SPC | Secretariat of the Pacific Community |
| SPOT | Satellite Earth Observation System |
| SPREP | Secretariat of the Pacific Regional Environmental Programme |
| UNCCD | United Nations Convention to Combat Desertification |
| UNDP | United Nations Development Programme |
| UNESCO | United Nations Educational, Scientific and Cultural Organization |
| UNFCCC | United Nations Framework Convention for Climate Change |
| WEAP | Water Evaluation and Planning System Model |
| WSSD | World Summit on Sustainable Development |



(i) Country Profile

Geography: Niue is part of Polynesia and is situated in the Southwest Pacific Ocean at latitude 19° south and 169° west. Niue lies approximately 480 km east of Tonga, 930 km west of Rarotonga, Cook Islands, 660 km south east of Samoa and 2,400 km north east of Auckland, New Zealand.

The land area of Niue amasses to 259km², with an Exclusive Economic Zone (EEZ) of 39,000km² of the South Pacific Ocean



Niue is the world's largest single raised coral atoll, which emerged in stages out of the ocean. The centre of the island comprises of a hollow, thought to be the remnants of a lagoon as a result of being raised up out of the ocean in stages. The parent rock is coral limestone. Its landscape is rough comprising of jagged coral rocks, boulders and many crevices and holes. The coastline is also rugged and rocky, featuring steep cliffs, caves, chasms and blow holes.

There is no inland running water on Niue such as streams or rivers. Rainfall filters through the thin topsoil layer, down the cracks/cavities in the base rock. A permanent fresh water table is located approximately 60m below the rim of the central plateau. The freshwater lens below the island is the main source of water and is tapped for domestic and agricultural purposes via a number of atesian bores.

Climate: Niue lies on the edge of the southern tropical cyclone belt and in the zone of the southeast trade winds, and is subject to strong gale force winds, noticeably through the months of April to October. It also is prone to the devastating effects of cyclones. Significant damaging cyclones have occurred on average once every 10 years, the most recent being, cyclone Heta, 5 January 2004, classed as a Category 5 on the Saffir-Simpson Scale

There are two distinct seasons, a hot wet season from November to March, characterized by high temperatures and humidity, which coincides with the cyclone season. The cooler dry season is from April to October; characterized by warm sunny days, cool nights and strong breezes.

Annual average temperature does not fluctuate greatly throughout the year, largely due to the influence of the sea on a small island. However at the height of the wet season mean daily maximum temperature is 30°C (Jan/Feb) with a mean daily minimum of 23°C. In the dry season (Jul/Aug) the mean daily maximum is 26°C and a mean daily minimum of 19°C.



Average annual rainfall is approximately 2,070 mm with a significant proportion of the rainfall concentrated in the wet season (Jan-Mar) in the form of torrential downpours; the drier months are in July-August.

Environmental context: Niue's geographic isolation has resulted in a naturally limited occurring flora and fauna. This has also worked to its advantage with a relatively limited number of introduced species to Niue, until recently.

Niuean's have a long tradition in the utilization of the indigenous forest and although their traditional lifestyle has been altered, the forest still constitutes an important resource for the household; areas are used for hunting, gathering of fern vegetables, gathering poles for shelters, firewood and leaves for cooking and the collection of medicinal plants; and forms a fundamental part of Niue's ecotourism development.

Niue has recently tapped into the commercial benefit of one of the dominant fallow pioneer species, *Morinda citrifolia*, (noni) whereby the juice of the fruit is reputed to having beneficial immunological properties for overall health.



Due to the landform and soil conditions agricultural opportunities are limited to approximately 60% of the land in Niue, even if managed in a sustainable manner. A further factor limiting agricultural production is the lack of running water on the island and the absence of irrigation.

The majority of the more fertile land is found to the north of the island, whereas the land towards the southern part has been subjected to extensive clearing, cultivation and soil depletion. These areas of extensive soil depletion are called fernlands (or desert areas). These degraded areas can be largely attributed to the combination of fragile soils, deforestation/land clearance, and unsustainable agricultural practices.

The primary soil related problems are soil fertility, soil depth or lack of it, and structure decline. Generally Niuean soils are poor quality due to the minimal depth to baserock, limestone outcrops and surface boulders. Characteristics of Niue soils include rock outcrops covering 10 – 60% of land surface, low water holding capacity, moderately to highly alkaline ph, high phosphorous retention, abundance of calcium and magnesium, zinc deficiency varying from moderate to high and low to very low potassium reserves.

The fragile soils, lack of soil depth, fertility and organic matter content does not lend itself for large scale market gardening, orchards, or intensive livestock husbandry systems. It is also a contributing factor to the generally low dietary supplement of fresh fruit and vegetables. This in turn leads to a heavy reliance on costly imports from New Zealand and contributes to the huge trade imbalance of NZ \$3.8 million, with imports of approx. NZ \$4 M in 2002 compared with exports of approximately NZ \$200,000

Socio-economic context: Population and Welfare: The indigenous Niuean people are of Polynesian descent and are thought to originate from the neighbouring islands of Tonga, Samoa and Pukapuka Island of the Cook Islands, as all share strong cultural and language similarities.



In contrast to many developing countries, Niue has a declining population mainly due to emigration to New Zealand and Australia. The population has steadily declined from 5,296 in 1969 to 1707 in 2002. Prior to 1969 the population was relatively stable fluctuating between 4,000 and 5,000. A number of governmental measures have been put in place to counteract this trend, with limited success.

Niue's Human Development Index (HDI) of 0.87¹ is ranked third in the Pacific region, and is reflective of their high life expectancy of approx. 67 years, low infant mortality and universal rates of adult literacy of 99%. The education curriculum is based on the New Zealand system with mandatory attendance up until 14 years of age. There is also a satellite University of the South Pacific, offering extension courses at the diploma level, and the first two years for degree level students, in addition to vocational and community level programs. All Niuean's have universal access to free education and health provision. Average household size (3.4 members/household) is low by Pacific standards, with the majority of houses having access to running water and electricity. There are no obvious signs of poverty.

Women enjoy a high social status, and are afforded equal opportunities in education and the workforce, where their participation has increased over the years, and figure prominently in government sector, private business and informal trading.

Economy: Although there are no formal regular estimates of GDP; the GDP for Niue in 2002 was NZ \$14.2 M of which New Zealand Overseas Development Aid accounts for NZ \$6.25M, the remainder is sourced via Australia Aid, International Business Company Registrations, currently under review due to international pressure, and the allocation of fishing licenses to fish within Niue's EEZ.

Niue's economy is dominated by the public sector accounting for approximately 59% of the total local employment (2005 Employment Statistics) whereas the private sector accounts for the remaining 41% of which 18.3% are self employed. Government of Niue (GoN) administration and essential services are funded by New Zealand aid. The economy is supplemented by subsistence agriculture, fishing and eco-tourism. Current development policy focuses on eco-tourism and private sector development through increased employment opportunities and agricultural production as mechanisms to reduce aid dependency, the majority of which are directly linked to the nation's ecosystem services.

Cyclone Heta 2004, significantly impacted Niue's economy with an overall estimated damage of US \$60M. Damage was sustained to properties, agriculture, government and industry infrastructure, which in turn has led to the relocation of infrastructure, including a downscaled version of the original hospital; and private dwellings to higher inland areas deemed low risk from the effects of a cyclone and resultant oceanic wave surges. This has resulted in an increase and relocation of water bores in an attempt to avoid contamination to the water lens; during normal climatic conditions, the water table constantly flushes itself by draining into the sea – this flushing of contaminants may not be as effective with inland settlements as opposed to the previous coastal settlements, or in periods of drought.

¹ Poverty in the Pacific – An Analysis: 2003, compiled by Lydia Good, DG Development, European Commission



Land Use and Tenure: There are two types of land tenure in Niue. Firstly, there is Crown land, which is land, vested to the Crown through acquisition by the government. Secondly Niuean lands that are owned by Niueans and is legally vested in the Crown but held by the traditional owners. Land cannot be alienated in Niue under present land laws other than by transferring the land to the Crown, leasing the land or by security charge.

The alienation restrictions do protect the Niuean culture from the dominance of externals. However it also results in a system where there are no land consolidation or redistribution mechanisms – a necessary tool for economic and sustainable development.

Agriculture remains the most important land-use on Niue and is a major economic activity in Niue with the majority of households dependent on agriculture for subsistence. A Household Income and Expenditure Survey (HIES) conducted in 2002 concluded that the major primary source of household income was that of wages/salaries (55.3%) with the second largest (12%) source of income was produced by the households themselves.

Major agricultural export commodities include taro and honey with small quantities of coconut, handicrafts, and recently vanilla and noni juice.



(ii) Executive Summary

1. Focal Point Institution:

| | |
|--|---|
| Name of focal point | Mr Sauni Tongatule Director of Environment |
| Address | Department of Environment Private Mail Bag Alofi NIUE Phone: 683 4021 |
| Country specific websites relating to desertification | None |

2. Status of NAP

| | |
|--|--|
| Date of validation | Government of Niue Cabinet Endorsement December 2004 |
| NAP reviews | None |
| NAP has been integrated into the poverty Reduction strategy (PRSP) | Not specifically as of yet |
| NAP has been integrated into the national development strategy | Not specifically, however the national development strategy strongly encompasses sustainable development. NAP is in line with the National Development Strategy of 2003 -2008 |
| NAP implementation has started with or without the conclusions of partnership agreements | No Currently building the capacity and resource mobilization in order to implement the NAP via the GEF MSP Targeted Portfolio Approach |

3. Member of SRAP/RAP

| Name of subregional and/or regional cooperative framework | Specific Involvement |
|--|--|
| 1. Asia/Pacific | Not formalized nor adopted by the Pacific Island Forum Countries as a SRAP |

4. Composition of the NCB

| Name of institution | Government (√) | NGO (√) | Male /Female |
|---|-----------------------|----------------|---------------------|
| 1. Department of Agriculture Forestry and Fisheries | √ | | (2) Male, Female |
| 2. Department of Environment | √ | | Female |
| 3. Niue Island Organic Farming Association | | √ | Male |
| 4. Department of Justice, Lands and Surveys | √ | | Male |
| 5. Department of Public Works | √ | | Male |
| 6. Minister of Agriculture, Forestry and Fisheries | √ | | Male |
| 7. GEF Operational Focal Point | √ | | Male |



NIUE'S THIRD NATIONAL REPORT ON UNCCD ~2006
(ii) Executive Summary

5. Total Number of NGOs accredited to the process: _____

| | |
|--|--|
| Has an NGO National Coordinating Committee on desertification been established. | Not specifically an NGO coordinating body, however a UNCCD Steering Committee and a statutory National Council for Sustainable Development, which is yet to meet. Both of which have representatives from NGOs |
|--|--|

6. Total number of acts and laws passed relating to the UNCCD:

| Title of Law | Date of Adoption |
|------------------------------------|--|
| 1. Environment Act | 2003 |
| 2. Biosafety Framework Regulations | 2006 – provision under the Environment Act |
| 3. Niue National Forest Policy | December 2000 |
| 4. Water Resources Act | 1996 |
| 5. Mining Act | 1997 |
| 6. Land Ordinance | 1969 |

7. The consultative process

Number of partnership agreements that have been concluded and/or being initiated within the framework of the UNCCD.

| Official title of partnership | Donor(s), international organization(s), and/or agencies of the UN system involved | Date of (expected) conclusion |
|--|--|-------------------------------|
| UNDP Multi-country Programme | UNDP | 2003 - 2007 |
| Reducing Vulnerabilities of Pacific ACP States | SOPAC-EU EDF9 | 2005 - 2009 |
| National Capacity Needs Self Assessment (NCSA) | GEF | 2004 -2006 |
| FAO Technical Cooperation Irrigation Project | FAO SAPA | 2005 - 2006 |
| SPC Development of Sustainable Agriculture in the Pacific (DSAP) | EU, SPC | 2004 - 2008 |
| LDC and SIDS Targeted Portfolio Approach for Capacity Development and Mainstreaming of Sustainable Land Management | UNDP - GEF | 2006 - 2009 |



NIUE'S THIRD NATIONAL REPORT ON UNCCD ~2006
(ii) Executive Summary

List of consultative meetings on UNCCD implementation listed in reverse chronological order.

| Name of consultative meeting | Date/year | Donor Countries Involved | International organizations or agencies of the UN system involved |
|--|----------------------|---|--|
| 1. Pacific Regional Workshop, Sustainable Land Management Project | 26 -29 June 2006 | Government of Samoa | SPREP, UNDP and UNDP-GEF |
| 2. NCSA Workshop | May 2006 | | GEF and SPREP |
| 3. 7 th Conference of Parties (COP7) | 17 – 28 October 2005 | Republic of Kenya | UNCCD, UNDP-GEF |
| 4. Consultation with all relevant stakeholders for the formulation of Niue's GEF LDC-SIDS Portfolio Project for Sustainable Land Managment | 30 Sept – 9 Oct 2005 | Government of Niue | GEF |
| 5. National Action Plans and UNDP-GEF's Sustainable Land Management Portfolio Approach for SIDS/LDCs | 22-26 August 2005 | Government of Fiji | GEF, SPREP and UNDP |
| 6. Subregional NCSA workshop | March 2005 | Department of Environment & Heritage, Australia | SPREP, UNEP, GEF, UNDP and GoN |
| 7. UNCCD National Action Plan Consultative Workshop, NIUE | 15 September 2004 | Government of Niue | UNCCD, GEF |



NIUE'S THIRD NATIONAL REPORT ON UNCCD ~2006
(ii) Executive Summary

8. Name up to 10 projects currently under implementation which are directly or indirectly related to the UNCCD

| Name of Project | Project implemented within the framework of the NAP/SRAP/RAP | Project implemented within the framework of | Timeframe | Partners Involved | Overall Budget |
|---|---|--|------------------------------|--------------------------|---|
| 1. Reducing vulnerabilities of Pacific ACP States - ICT Needs Assessment and Map Server | Yes | Hazard Mitigation and Risk Assessment Land Use Information Systems | 2005 -2009 | EU, SOPAC | US \$35,483 |
| 2. FAO Technical Cooperation Project | Yes | Sustainable Agriculture and Food Security | 2005 - 2008 | FAO | US \$159,000 |
| 3. Development of Sustainable Agriculture in the Pacific (DSAP) | Yes | Sustainable Agriculture | 2004 - 2008 | EU, SPC | US \$146,612 |
| 4. Poultry Production & Small Holder Pig Farming | Yes | Regional Programme on Food Security interlinks with the DSAP and Niue Young Farmer's project | 2006 - 2007 | FAO | US \$109,848 |
| 5. Groundwater Assessment in Niue, Niue Island | Yes | Drought Mitigation | 2005 - 2006 | UNESCO SOPAC NZAid | US \$26,000 US \$16,000 US \$28,800 |
| 6. Niue Young Farmer's Project | Yes | Sustainable Agriculture and Capacity Building | Reviewed Annually 2004 -2007 | NZAid | US \$ 70,000 |
| 7. Nonu/Vanilla Project | Yes | Sustainable Agriculture and Capacity Building | Reviewed Annually | NZAid | US \$175,000 |
| 8. Niue Organic Farming Association (NIOFA) | No | Sustainable Agriculture, Capacity Building and Public Education/ Awareness | Reviewed Annually | NZAid | US \$21,000 |
| 9. National Capacity for Self Assessment | Yes | Capacity Assessment | 2003 - 2006 | UNDP, SPREP | US\$250,000 |



(iii) Strategies and Priorities Established within the Framework of Sustainable Development Plans and /or Policies

□ National Plans and Strategies Available in Other Social and Economic Areas

As a small island developing nation Niue very much reliant on its natural resources and is therefore conscious and critically aware of the implications in sustainable development.

Niue's Integrated Strategic Plan for 2003 – 2008 formulated by the Economic Planning and Development Unit (EPDSU) has incorporated into its strategic objective for the environment, *the sustainable management of Niue's natural resources for future generations*, which is reiterated in its strategic objective for economic development to *maximize benefits from Niue's resources in a sustainable manner*.

Similar to many SIDS, Niue's Integrated Strategic Plan has identified tourism, agriculture and fisheries that have a comparative advantage and are therefore targeted as key initiatives.

Niue's Strategic Integrated Plan cross cuts with that of the Millennium Development Goals of poverty reduction and ensuring environmental sustainability which is reinforced by the UNDP Multi-country Programme (MCPO 2003 – 2007) for Niue, Cook Islands and Tokelau. The strategic support for Niue under the MCPO being economic and social policies and strategies focused on the reduction of poverty, sustainable livelihoods and the sustainable management of natural resources.

The Department of Justice, Lands and Survey (DJLS) *Land and Marine Resource Use Plan 2000*, incorporates a number of Sustainable Development Guidelines produced to guide future land use and resource use decision-making, and include:

- Sustainable Development Guidelines for Village Planning which aims to promote methodology for the planning of the physical structure of villages and the strategic allocation of “preferred use areas”
- Sustainable Development Guidelines for Tourism Development to assess the physical and environmental implications on development.
- Environment Land Use Allocation and Planning
- Guidelines on the Content and Processing of Environmental Impact Assessments

The Environment Act 2003 provides for the establishment of a *National Council for Sustainable Development (NCSD)*. Appointment to the council is currently being presented to Cabinet for consideration, where the NCSD is to comprise of representatives from government departments, private sector and community interest groups. The aim of the NCSD is to replace the various existing steering committees with one overall “watchdog” and in turn the steering committees become working groups. Functions of the NCSD will include; to review and provide feedback on environmental policy, raise awareness of environmental issues, co-ordinate and promote the implementation of environmental policy nationwide, facilitate interagency information sharing, monitor performance of specific projects and to provide quality control of technical and policy reports on specific projects.



□ **National Plans or Strategies in the Field of Combating Desertification Developed Prior to the UNCCD NAP**

Organic Farming, *Niue Island Organic Farming Association (NIOFA)* is a legally recognized organization which exists to promote and drive the principles and practices of organic farming in Niue. NZAid is currently funding the project titled "Niue Organic Farming Project" with the objective of promoting organic farming techniques, methods and their underlying benefits; establishment of a register of farmers who adopt organic farming methods and issue of certificates of membership upon completion of the registration project. The ultimate goal of the NIOFA is to promote Niue as the first organically certified nation by 2010.

FAO Funded Technical Cooperation Irrigation Project: titled "*Developing an Appropriate Irrigation Scheduling Strategy for the Intensification of Import Substitution Agriculture*" is currently being implemented by Department of Agriculture Forestry and Fisheries (DAFF) and was formulated in response to the Government of Niue which identified the need to increase the farmer's capacity to produce import substitution crops in addition to quality export crops such as fruits, vegetables and vanilla in an effort to enhance Niue's economic sustainability. The major objective of the project is to assist the Government of Niue in devising, implementing and promoting a viable and sustainable irrigation plan for the intensification of import substitution agriculture. The irrigation project will further create an enabling environment for permanent sustainable agricultural systems.

Young Farmers Training Programme: An NZAid funded project with the objective of introducing farming to the youth as an alternative income generation scheme, and the transfer of knowledge to the next generation. The programme is targeted towards school leavers who were more practically inclined and were not furthering their academic education.

Vanilla and Noni Project: Also a NZAid funded project with the objective of expanding the vanilla and noni industries through the establishment of private plantations based on organic farming principles.



(iv) Institutional Measures taken to Implement the Convention, Including Legislative and Institutional Frameworks or Arrangements, Linkages and Synergies with Other Environmental Conventions and, as Appropriate, with National Development Strategies

□ NAPs as Part of the National Economic and Social Development and Environmental Protection Plans

In 1993, the Government of Niue (GoN) developed its National Environment Management Strategy (NEMS) highlighting the importance in linking economic growth and environmental management in the development of the country, which is now embodied in the GoN National Integrated Strategic Plan. The scope of the NEMS was broad and included the development of appropriate environmental legislation, the development and implementation of environmental management, training and awareness programmes.

The Niue State of the Environment (SOE) was prepared as a component of the NEMS and provided a comprehensive reference document for the state of the environment in Niue, and outlined the environmental challenges facing Niue. In essence the SOE provided a vehicle to enhance the decision-making process.

Subsequently, additional environmental sustainable development strategies and action plans have been formulated which include the CBD BSAP 2001, UNCCD NAP 2004 and POPs NIPs 2005. National assessment reports include Niue's National Assessment for WSSD 2002, Niue's National Report on the Implementation of the UNCCD 2002 and Niue's Initial National Communication to the UNFCCC 2000.

Niue's UNCCD National Action Plan was formulated as a result of extensive literature reviews of previous environmental recommendations which relate to sustainable land management and address the issue of land degradation; consultation with key departmental personnel; participatory workshops in order to further formulate a National Action Plan with stakeholders; and the circulation of the draft National Action Plan to key stakeholders present at the workshop for final validation.

Niue's NAP identified the need for a participatory practical approach targeted at resource users with tangible economic and environmental benefits clearly outweighing any preconceived disadvantages. The major constraints identified regarding the implementation of the UNCCD NAP within Niue were the lack of finances, technical capacity and resources and is the common theme in Niue's ability to fulfill many of its international obligations.

There are a number of GEF funded projects currently being implemented within Niue that cross cut with land degradation/drought mitigation and have capacity assessment and building activities within the project and include:

- ***Additional funding for National Biodiversity Strategy & Action Plan (NBSAP) and first National Report to the COP:*** The formulation of this project was based on a need to raise awareness and understanding of the Convention on Biological Diversity (CBD) and issues specific to Niue and to build Niue's capacity to deliver on the previously prepared



NIUE'S THIRD NATIONAL REPORT ON UNCCD ~2006
(iv) Institutional Measures Taken to Implement the Convention

National Biodiversity Strategy and Action Plan (NBSAP).

The objective of the project is to enable Niue to conduct capacity needs assessment in three selected priority areas under the focal area - biodiversity. The priority areas are: in-situ and ex-situ conservation measures; methodologies to evaluate threats to biodiversity; and preservation of traditional knowledge, innovations and practices. In addition, this funding also allows Niue to complete its Clearing House Mechanism (CHM) to ensure the wide sharing and dissemination of biodiversity related information.

- ***National Capacity Needs Self Assessment (NCSA)***: The project objective is to carry out an assessment of Niue's national capacity to address and implement global environmental issues, in particular relating to Niue's obligations under the UNCBD, UNFCCC and the UNCCD. The ultimate aim being to catalyze domestic and externally assisted action to meet Niue's needs and priorities for capacity building in a well-planned and coordinated manner.
- ***Enabling Activities for the Preparation of the Second National Communication relating to the UNFCCC***: Through the preparation of the second national communication, Niue will further build its capacity in areas relating to climate change at both technical and policy levels. Included amongst the enabling activities relevant to this project is the proposed Water Evaluation and Planning System (WEAP model) used to simulate water demands and supplies. Targeted research for the assessment of existing water resources and its implications for other socio-economic sectors will also be undertaken.
- ***Niue Enabling Activity: An Initial Assistance to Niue to Meet Its Obligations Under the Stockholm Convention on POPs*** : The National Implementation Plan (NIP) describes how Niue will meet its obligations under the Convention to phase-out POPs sources and remediate POPs contaminated sites on Niue. A preliminary inventory of dioxin and furan (POP) releases indicated that the main sources on Niue are due to the incineration of quarantine and medical wastes and uncontrolled burning of organic matter, including landfills and backyard rubbish fires. This is particularly relevant where the use of fire as a land clearing tool is still practised and validates the shift to sustainable agricultural practises such as composting, mulching and integrated pest management. A practical organic growing component is incorporated into the primary school curriculum funded by the POPs project as a public awareness tool.

Steering committees exist for the various projects and conventions including the UNCCD which are comprised of the key governmental departments and private sector stakeholders. This ensures that the projects' easily interlink and compliment each other, the avoidance of duplication and are in line with Niue's Strategic Integrated Plan. This is due to be further improved with the establishment of the National Council for Sustainable Development as a requirement under the Environment Act.

The Environment Act 2003 provides a mechanism for the development of environmental policy and law, establishment of an Environmental Department, and provides enforcement powers for environmental officers. The Environment Act in itself is a general multipurpose act designed to be constantly reviewed and updated by additional regulations where deemed appropriate by Government.



□ **Linkage Achieved with Subregional and Regional Action Programmes
(SRAPs and RAPs)**

A regional SOPAC –EU EDF9 project titled “*Reducing Vulnerabilities of Pacific ACP States*” aimed at addressing vulnerability reduction in the Pacific ACP States through the development of an integrated planning and management system, Island Systems Management. The objective is to strengthen integrated development by concentrating on three focal key areas in the island system, hazard mitigation and risk assessment; aggregates for construction; and, water resources supply and sanitation. The project will be implemented by SOPAC, over a period of four years, with the basis of the Project focusing on field surveys in selected onshore areas and coastal harbours, lagoons, bays and shallow waters. User-friendly spatial databases will be developed from these survey areas through the application of GPS, GIS and Remote Sensing tools. Access for all stakeholders to these common spatial databases via effective communications networks will be established through the foundation of dedicated information and communication centres in-country and training in the use of the tools developed.

This will enable the development of user friendly land use information systems, improved dissemination of information to relevant governmental departments and stakeholders allowing for strategic/rational decision making, and links in with the following UNCCD thematic programmes; desertification monitoring and assessment; agroforestry and soil and biological diversity conservation; and capacity building for drought mitigation.

DAFF’s project titled “*Development of Sustainable Agriculture in the Pacific (DSAP)*” funded by the European Union and implemented by the Secretariat of the South Pacific is a 4-year regional project initiated in 2004. The main objectives of the project are to support the development of national capacities in agriculture extension, promotion of sustainable agriculture development, improved food security and livelihoods of target farm families and is in line with the UNCCD thematic programmes; agro-forestry and soil and biological diversity conservation; and local development initiatives.

Both the Smallholder Pig Farming and Poultry Production projects currently implemented are jointly funded by the FAO and Italy through the *FAO Regional Programs on Food Security*. The projects are interlinked with the Young Farmers Project and that of the DSAP project, with regard to import substitution, sustainability, provision of manure for composting/ nutrient recycling and the empowerment of the community for additional income generation.

Least Developed Countries (LDC) and Small Island States (SIDS) Targeted Portfolio Approach for Capacity Development and Mainstreaming of Sustainable Land Management (SLM):

Developed by UNDP-GEF in response to the need for greater project effectiveness and impact, while at the same time reducing administrative costs/burdens. Approved in September 2004, the Portfolio Approach only focuses on those countries that have not completed their NAPs and otherwise show weakness in capacity for SLM, as they constitute a special group of countries with similar needs and constraints (49 LDC and SIDS countries).

Niue has recently submitted its GEF Medium Sized Project (MSP) titled *Capacity Building for Sustainable Land Management in Niue*. The project aims to address sustainable land



NIUE'S THIRD NATIONAL REPORT ON UNCCD ~2006
(iv) Institutional Measures Taken to Implement the Convention

management issues via a targeted practical participatory “bottom up” approach inclusive of all stakeholders of Niue society. The ultimate objective being that the capacities for sustainable land management are built in appropriate governmental departments, civil society groups, resource users and mainstreamed into government planning and strategy development – effectively building the capacity of the nation and the mobilization of resources to implement the NAP which was officially endorsed by GoN in December 2004.

□ Established and Functional National Coordination Body

The National Coordinating Body, NCB (also known as the UNCCD Steering Committee) is comprised of key stakeholders and includes the Minister for Agriculture, Forestry and Fisheries, the GEF Operational Focal Point, representatives of the Department of Agriculture, Forestry and Fisheries, Department of Public Works, Department of Justice, Lands and Survey, Department of Environment and NIOFA. The selection criteria is based on a cross sectoral representation of all relevant stakeholders to the UNCCD and formalized by Cabinet.

The NCB is still very much centralized in terms of financial, human and material resources and is unlikely to change in the near future due to the limited human resource pool and capacity within Niue. The relative advantage of the limited human resource pool is the fact that the same individuals are often involved in a number of environmental related steering committees, ensuring the synergistic developments for sustainable land management with related programme frameworks and the avoidance of unnecessary duplication.

The specific identifiable capacity needs of the NCB and the NFP are the need for the current land information systems to be updated and mainstreamed as a working tool for management systems; for planning sustainable land management development; for monitoring the sustainability of land uses; and for monitoring sustainable land management and the application of sustainable land management policies/regulations.

The formulation of Niue’s NAP and subsequent development of the GEF MSP for Capacity Building for Sustainable Land Management in Niue has seen an increase in the level of stakeholder participation particularly the civil society organization as the identified land management issues are in the process of being addressed through a targeted practical participatory approach with tangible outputs.

□ Institutional Framework for Coherent and Functional Desertification Control

Each department develops a corporate plan outlining activities which must be in line with the Integrated Strategic Plan. Where there is a shortfall in capacity to implement some of the activities, the GoN has access to the Council of Regional Organizations in the Pacific (CROP) agencies for the provision of funding or technical expertise to address the shortfall, with the overall aim to build capacity at the national level. Such examples include the FAO funded Technical Cooperation Irrigation Project and the SPC implemented DSAP project.



NIUE'S THIRD NATIONAL REPORT ON UNCCD ~2006
(iv) Institutional Measures Taken to Implement the Convention

However there is a real need, as identified in the NAP, to further develop capacities to collect and update land information data for the establishment of benchmarks for the monitoring and assessment of land degradation, in addition to the establishment of user friendly land knowledge information relevant to all stakeholders, in order to establish a well functioning information exchange between relevant stakeholders.

The regional SOPAC – EU EDF9 project “Reducing Vulnerabilities of Pacific ACP States” and the recently formulated GEF – UNDP MSP for Capacity Building for Sustainable Land Management in Niue both address the need to develop capacities for land knowledge management.

Through the GEF – UNDP MSP for Capacity Building for Sustainable Land Management in Niue, the civil society groups within Niue such as NIOFA, Niue Young Farmers, Growers Association and Village Community Groups will be integrated into the project as beneficiaries and resource persons. They will be actively involved in the drafting of the regulations and their amendments and conditions for leases to incorporate sustainable land management on a larger sustainable commercial scale as opposed to the current form of subsistence farming. They will contribute to traditional knowledge sharing in reviews, workshops and meetings. It is envisaged that the community groups through the establishment of the demonstration unit, incorporating sustainable land management best practices will take ownership of the project and become the driving force in promoting sustainable land management practices within Niue

□ Coherent and Functional Legal and Regulatory Framework

Niue’s Environmental Act 2003 is the only new legislation relating to environmental sustainability and land degradation since Niue’s last UNCCD report. As mentioned earlier in this section the Act is a general multipurpose act designed to be constantly reviewed and updated by additional regulations where deemed appropriate by Government. The Act takes into consideration the maintenance and enhancement of the quality of the environment; the efficient use and development of natural and physical resources; the concept of sustainable development; protection of the water lens from contamination; protection of indigenous flora and fauna and their habitats; protection of historic areas from inappropriate use and development; the relationship of Niueans and their culture to their lands and historic areas; the conservation and sustainable use of biological resources; and the compliance to multilateral environmental agreements that Niue is a party to.

The Environment Act saw the establishment of the Department of Environment and its functions; provided enforcement powers to its environmental officers; and initiated the formulation of the National Council for Sustainable Development.

Additional relevant legislation to land degradation include Water Resources Act 1996 (includes the responsibility of Village Councils); Mining Act 1997; Land Ordinance Act 1969; and Village Council Ordinance 1967, and are recorded in more detail in Niue’s NAP Addressing Land Degradation and Drought.



NIUE'S THIRD NATIONAL REPORT ON UNCCD ~2006
(iv) Institutional Measures Taken to Implement the Convention

As reported in Niue's NAP Addressing Land Degradation and Drought, there were no regulations in place to enforce the Water Resources Act by the Water Supply Division/Department of Environment. In addition the management of water resources with any precision is difficult due to the absence of information characterizing island hydrology such as the demand on water lens recharge, village bore (well) draw down, contamination and effects of saltwater intrusion on village bores. However these needs will be addressed through Niue's participation in the regional

SOPAC –EU EDF9 Reducing Vulnerabilities of Pacific ACP States, the Enabling Activities for the Preparation of the Second National Communication relating to the UNFCCC, and the UNESCO funded project Groundwater Assessment in Niue, Niue Island.

The National Forestry Policy for Niue was endorsed by the Government in December 2000. There is now an urgent need for the formulation of Forestry Legislation to aid the investigation of sustainably utilizing the forest resources with both DAFF and the Department of Environment driving the legislation, with necessary technical assistance to be sourced from SPC-GTZ and FAO.

Niue's NAP through stakeholder consultations, workshops and report validation identified the need for the development of a Land Clearing Code of Practice incorporating sustainable land management principals.





(v) Participatory Process in Support of Preparation and Implementation of Action Programmes, Particularly Processes Involving Civil Society, Non Governmental Organisations and Community Based Organisations

□ Effective Participation of Actors in Defining National Priorities

Due to Niue's small geographic size and population, dissemination of information, awareness programmes and workshop consultations are undertaken with relative ease in comparison to its Pacific neighbours.

Niue's UNCCD NAP was formulated as a result of environmental literature reviews, consultation with key departmental personnel and a participatory workshop with relevant stakeholders. As a result of the participatory workshop the concerns/issues were raised, addressed and prioritized to formulate the UNCCD NAP. There is ownership of the NAP therefore a high level of stakeholder interest which continues to propel sustainable land management practices within Niue.

This is further supported by the GoN with technical assistance provided by DAFF extension officers, in promoting sustainable agriculture practices through the DSAP programme, the development of food security projects and the TCP Irrigation project to private sector stakeholders such as NIOFA, Niue Young Farmers, Growers Association, and Village Community Groups.

In order to maintain the active involvement of national and local stakeholders with regard to the planning and implementation of NAP activities, capacity building is needed for:-

- Environmental officers require training in the ability to integrate the land functionality into Environmental Impact Assessment (EIA) Reports; increase the departments' capacity to conduct and vet Environment Impact Assessments; and in the utilization of the Integrated Environment and Landuse Planning Guidelines as a working tool.
- DAFF research and extension officers require in-depth training in the effective use/application of land functionality maps in order to develop a generalized working knowledge of different soil types, their location and capabilities. Capacities need to be developed for soil testing techniques, interpretation of soil data and the ability to formulate recommendations from the data.
- Within the Department of Justice, Lands and Survey (DJLS), there is a need for ongoing capacity training to further develop and update information relating to land and resource use, in particular Niue's limited land functionality model.
- Economic Planning Development and Statistical Unit (EPDSU) are responsible for Niue's planning initiatives and ensuring that they are in line with Niue's strategic objectives. Within the department there is a need to build capacity with regard to the interpretation and incorporation of Land Information Systems, EIA reports and the ability to undertake environmental/economic cost benefit analysis of planning/developmental initiatives.



- Development of awareness programmes and the dissemination of relevant information to the private stakeholders and village community groups, through field demonstrations, practical participatory research/trials, village meetings and empowering workshops.

The criteria involved in ensuring representation of various stakeholders in national priority identification processes is through Government endorsed cross representation of all relevant stakeholders – institutional, private sector, NGOs and women's groups - in all consultations and committees.

Village meetings and radio programmes are the means for the exchange, circulation, transfer and dissemination of traditional knowledge information. Traditional knowledge/technology has a role within the framework of the NAP through the advocacy of organic farming/traditional best practices such as mulching, composting, companion planting and integrated pest management. A practical organic growing component is incorporated into the primary school curriculum funded by the POPs project as a public awareness tool and implemented by DAFF and NIOFA.

The need for strengthening interdepartmental linkages was identified with the UNCCD NAP in terms of land information management systems and knowledge management. To date there is no mechanism in place however through various planned activities and workshops as per the UNDP – GEF MSP on Capacity Building for Sustainable Land Management in Niue (*Refer to Appendix i*) and Niue's participation in the regional SOPAC –EU EDF9 Reducing Vulnerabilities of Pacific ACP States it is envisioned that the interdepartmental linkages will be strengthened.

The formulation of the UNDP-GEF MSP on Capacity Building for Sustainable Land Management in Niue via consultation with the relevant stakeholders, the planned activities within the project for more awareness and consultation, and the validation of the project have ensured continuous feedback from the relevant stakeholders post UNCCD NAP completion.

Participatory awareness campaigns have been conducted dealing with the growing threat to ecosystems and sustainable livelihoods under a scenario of increasingly extreme climatic events; advocacy for participatory rural development as a key element in poverty eradication; the prevention of land degradation is more cost-effective than suffering the severe consequences of desertification and the dissemination of lessons learned and best practices through programmes and projects such as the FAO Regional Projects on Food Security, Enabling Activities for the Preparation of Niue's First National Communication relating to the UNFCCC, National Biodiversity and Action Plan (NBSAP), DSAP project and NIOFA.



NIUE'S THIRD NATIONAL REPORT ON UNCCD ~2006

(v) Participatory Process in Support of Preparation and Implementation of Action Programmes



NIUE'S THIRD NATIONAL REPORT ON UNCCD ~2006

(v) Participatory Process in Support of Preparation and Implementation of Action Programmes



(vi) Consultative Process in Support of the Preparation and Implementation of National Action Programmes and Partnership Agreements with Developed Country Parties and Other Interested Entities, Particularly Mobilization and Coordination of Both Domestic and International Resources

| |
|--|
| □ Effective Support from International Partners for Cooperation |
|--|

Support for the national consultative mechanism with regard to the development of Niue's First National Report on the UNCCD and UNCCD NAP was through the dissemination of information, financial, and technical assistance. The international agencies involved and continue to be involved are GEF, GEF-UNDP and SPREP. The GEF provided funding for Niue's First National Report UNCCD, Niue's NAP and recently the formulation of Niue's MSP under the LDC and SIDS Targeted Portfolio Approach for Capacity Development and Mainstreaming of Sustainable Land Management with the UNDP Country Office in Samoa being the implementing agency and SPREP providing technical backstopping.

To date this has matched the national need for international support to implement the Convention and to build the capacity in order to effectively implement Niue's UNCCD NAP *on the proviso* that the recently submitted MSP under the LDC and SIDS Targeted Portfolio Approach for Capacity Development and Mainstreaming of Sustainable Land Management will be approved. Alternative sources of finance for the implementation of the UNCCD NAP will be the form of Government in kind assistance through staff as resource personnel and the availability of facilities/resources. Niue's recently submitted MSP will also form the basis for a calendar of activities to ensure continuous process monitoring. *Refer to Appendix i*



(vii) Measures Taken or Planned within the Framework of National Action Programmes, Including Measures to Improve the Economic Environment, to Conserve Natural Resources and Promote Sustainable Use, to Rehabilitate Degraded Land, to Enhance Knowledge on Desertification, and to Monitor and Assess Desertification and Drought

□ Adequate Diagnosis of Past Experience

The UNCCD NAP consultative process has raised the issue of the lack of coordination of available land information data, reports and their integration as a resource planning tool to address optimum land functionality with due consideration to ecosystem integrity. And again validates the need for increased dissemination of this information to governmental departments and resource users in an improved/updated user friendly form, allowing for rational decision making and the establishment of benchmarks and indicators for the effective monitoring of land degradation parameters.

As a result there are specific recommendations for dynamic monitoring and evaluation systems to be developed for the monitoring of ecosystem services and include agricultural sustainability/management, soil organic matter content, soil fertility improvement, and water availability for consumption vs. irrigation.

The use of satellite imagery and other remote sensing tools also need to be enhanced/updated as inputs both to Land Information Systems and Monitoring & Evaluation, such as the continued monitoring of forest cover and landuse change.

□ Established Technical Programmes and Functional Integrated Projects to Combat Desertification

To be eligible to secure the GEF incremental funding under the LDC and SIDS Targeted Portfolio Approach for Capacity Development and Mainstreaming of Sustainable Land Management in order to implement the UNCCD NAP required 1: 1 co-financing from other donors and government.

The following projects were integrated in the formulation of the GEF funded MSP which address land degradation and drought mitigation

- NZ Aid funded Niue Young Farmers Project
- NZ Aid funded Nonu/Vanilla Project
- FAO Regional Programme on Food Security – Poultry Production and Small Holder Pig Farming
- FAO Technical Cooperation Irrigation Project
- SOPAC –EU EDF9 Reducing Vulnerabilities of Pacific ACP States
- EU/SPC - Development of Sustainable Agriculture in the Pacific (DSAP)
- UNESCO – Groundwater Assessment in Niue, Niue Island



NIUE'S THIRD NATIONAL REPORT ON UNCCD ~2006

(vii) Measures Taken or Planned within the Framework of National Action Programmes

Specific activities identified and implemented to improve the economic environment with a view to eradicating poverty include the promotion of sustainable agricultural practices through a practical participatory approach, formulation of food security projects and the advocacy of organic farming practices through school education programmes and informative videos. The FAO Technical Cooperation project also creates an enabling environment for larger scale permanent sustainable agricultural systems as opposed to the traditional rainfed subsistence agriculture practices. DAFF being the lead implementing agency for the above specific activities are responsible in ensuring the underlying causes of land degradation are addressed.

Through the NAP consultative process an assessment of the capacity gaps and shortfalls to implement the Convention was undertaken which was then reflected as recommendations in the UNCCD NAP.

| |
|---|
| □ Effectiveness of Measures in Local Capacity Building |
|---|

The capacity building measures needed to ensure implementation of the Convention, particularly at the local level are listed in section (v).

The NAP reflects such capacity needs however it fails to outline ways of addressing them whereas Niue's MSP under the LDC and SIDS Targeted Portfolio Approach for Capacity Development and Mainstreaming of Sustainable Land Management outlines activities to address the identified capacity gaps and shortfalls.



(viii) Financial Allocations from National Budgets in Support of Implementation as well as Financial Assistance and Technical Cooperation including their Inflows. Processes to Identify their Requirements, Areas of Funding and Setting Priorities

□ Adopted Financial Mechanisms

The FAO funded food security projects, NZ Aid funded Young Farmers and the Noni/Vanilla project go some way towards ensuring the access of local resource users to funding sources, although these funding avenues are provisional.

To date there are no specific mechanisms in place to ensure the financing for the NAP aside from the Niue's MSP under the LDC and SIDS Targeted Portfolio Approach for Capacity Development and Mainstreaming of Sustainable Land Management.

The GoN in 2004, entered into a joint venture with a private overseas company in the production a large-scale noni plantation and juice processing facility. The aim is to export organically certified noni juice to niche markets, including New Zealand. The plant accommodates all noni growers through the purchase of noni for processing thereby generating environmental and socio-economic benefits for multiple stakeholders.

□ NAP Financing

Despite the GoN significant financial constraints it's in kind contribution of US\$254,063 in building the capacity for the implementation of the UNNCD NAP through the MSP under the LDC and SIDS Targeted Portfolio Approach for Capacity Development and Mainstreaming of Sustainable Land Management indicates a high degree of priority attached to desertification control.

There are no additional budget lines within Government nor is there a National Desertification Fund for exclusively funding activities of the NAP.

□ Technical Cooperation

Technical cooperation support has been received from GEF-UNDP and the UNDP Country Office in Samoa through the formulation of Niue's MSP under the LDC and SIDS Targeted Portfolio Approach for Capacity Development and Mainstreaming of Sustainable Land Management with capacity building to implement the UNCCD NAP identified as the main priority however it was highlighted that training and human resource development alone is of no benefit without the necessary tools/hardware/equipment to create an "enabling environment".



(ix) Review of Benchmarks and Indicators Utilized to Measure Progress and an Assessment Thereof

□ Operational Mechanisms for Monitoring and Evaluation

Forest cover maps for years 1966, 1981 (surveyed and adjusted by GIS) 1994 and landuse change monitored through the use of SPOT satellite imagery for 1994, 2001 and also 2004 (which was ineffective due to cloud cover) are the measures in place to monitor the dynamics of land degradation within Niue.

There are no measures currently in place to assess the rate of resource degradation aside from the forest cover maps and SPOT satellite imagery.

Government is currently in the process of developing early warning mechanisms set up in an effort to mitigate the effects of drought and desertification through participation in regional SOPAC –EU EDF9 Reducing Vulnerabilities of Pacific ACP States, the Enabling Activities for the Preparation of the Second National Communication relating to the UNFCCC, and the UNESCO funded project Groundwater Assessment in Niue, Niue Island.

In essence there is a need to develop dynamic monitoring and evaluation systems for the monitoring of ecosystem services and include agricultural sustainability/management, soil organic matter content, soil fertility improvement, and water availability for consumption vs. irrigation in order to facilitate better policy formulations/reponses.

Currently there are no benchmark indicators in place to assess and evaluate the impact of the NAP however the MSP under the LDC and SIDS Targeted Portfolio Approach for Capacity Development and Mainstreaming of Sustainable Land Management will establish benchmark indicators to monitor ecosystem services and formulate dynamic monitoring and evaluation systems.



NIUE'S THIRD NATIONAL REPORT ON UNCCD ~2006
(ix) Review of Benchmarks and Indicators Utilized



Annex i: Logical Framework for Sustainable Land Management in Niue

| Outcomes | Key Performance Impact Indicators | Means of Verification | Critical Assumptions/Risks |
|---|--|---|--|
| <p>Long-Term Goal: The sustainable management of Niue's unique natural terrestrial resources while at the same time promoting sustainable productive systems contributing to the social well being of the country of its present and future generations.</p> | | | |
| <p>Project Objective: Capacities for sustainable land management are built in appropriate government and civil society institutions/user groups and mainstreamed into government processes and national development plans.</p> | <ul style="list-style-type: none"> • Best practices and guidelines for SLM are broadly disseminated and fully integrated in development planning, zoning and agricultural extension measures and messages. • <i>Baseline:</i> SLM guidelines currently only integrated into subsistent agricultural extension. | <ul style="list-style-type: none"> • Published best practices (including guidelines). • SLM is mainstreamed into Govt. processes and National Development Plans | <ul style="list-style-type: none"> • Continued political support for integrating SLM into national development planning |
| <p>Outcome 1: Human resource and institutional capacities are adequately trained in SLM</p> | <ul style="list-style-type: none"> • A commercial scale sustainable agriculture unit, integrating /demonstrating SLM principles relevant to atoll agriculture. Targeted bottom up, practical, participatory approach to SLM with tangible outputs, allowing for continuation beyond the life of the project. <i>Baseline:</i> Through the DSAP programme sustainable agricultural | <ul style="list-style-type: none"> • Fully functional training/demonstration unit. • Practical SLM training modules/resources developed via a variety of mediums. | <ul style="list-style-type: none"> • Both community and government support for development of commercial scale agriculture unit, will continue beyond the life of the project. • Commercial scale sustainable agriculture unit will be economically self propelling. |



NIUE'S THIRD NATIONAL REPORT ON UNCCD ~2006

| | | | |
|--|--|--|--|
| | <p>methods are promoted but for small individual subsistence vegetable growers only.</p> | <ul style="list-style-type: none"> • Increased adoption of SLM practices among resource users • APR/PIR, MTR | |
| <p>Outcome 2: Capacities for knowledge development and management for SLM are developed</p> | <ul style="list-style-type: none"> • DAFF, DJLS, DOE and EPDSU have at least one staff member able to integrate/utilise Niue's LIS data as a planning tool for SLM. <i>Baseline:</i> DJLS is the only department able to integrated Niue's LIS as a planning tool. • A clearly defined, protocol in place for government departments and civil society to gain access to information from the SLM-related land information systems. <i>Baseline:</i> No such mechanism exists. | <ul style="list-style-type: none"> ▪ Key departments will have ideally two but at least one staff member trained to integrate Niue's LIS data and SLM guidelines as planning tools • Access protocol for LIS is established and networked. | <ul style="list-style-type: none"> • Departmental inter-linkages will be strengthened and there will be a greater dissemination and coordination of information. • Planning departments are committed to the integration of SLM considerations into development planning • Departments will be willing to collaborate on integrated approaches to sustainable land management and to sharing access to the land information systems developed; • Government commits the resources necessary for digitizing the land use and ownership records needed to make the land information systems more useful for SLM monitoring and planning. • Government will commit the |



NIUE'S THIRD NATIONAL REPORT ON UNCCD ~2006

| | | | |
|---|--|--|--|
| | <ul style="list-style-type: none"> • SLM M&E systems are operational for agriculture and agroforestry. <i>Baseline:</i> No M&E systems exist for these sectors. Development of a water model for water use is currently in the initial process of implementation. | <ul style="list-style-type: none"> • Baselines are established • Dynamic M&E systems are operable • APR/PIR, MTR, project reports | resources needed to maintain beyond the life of the project, the SLM monitoring and evaluation systems to be developed. |
| <p>Outcome 3: Resources are mobilized for the implementation of Niue's completed NAP</p> | <ul style="list-style-type: none"> • Fully funded Strategic Investment Programme in place for the prioritization of Niue's projects. • <i>Baseline:</i> Integrated Strategic Plan exists but fails to strategize funding availability for initiatives that are unable to be funded under the recurrent budget. | <ul style="list-style-type: none"> • Strategic Investment Programme • Project proposals funded • Funding summary report | <ul style="list-style-type: none"> • Government will fully commit itself to the implementation of the Strategic Investment Programme • Funds are mobilized |
| <p>Outcome 4: SLM principals are mainstreamed into national policies, plans and legislation.</p> | <ul style="list-style-type: none"> • Clear concise protocols/guidelines to facilitate the integration of SLM policies into standard practice. • <i>Baseline:</i> Such clear guidelines/protocols do not exist | <ul style="list-style-type: none"> • Niue's Forest Legislation finalized • Organic Farming Policies • Code of Practice for Land Clearance | <ul style="list-style-type: none"> • Continued political support • Both government and resource users will see the benefits in developing clear concise protocols/guidelines |



Annex ii: Detailed Framework for Sustainable Land Management in Niue

| Outputs and Activities | Output Indicator | Activities and Subactivities | Responsibility | Annual Targets |
|--|---|---|---|---|
| Outcome 1: Human Resource/Institutional Capacities are adequately trained in SLM | | | | |
| <p>Outputs</p> <p>1.1 Improve institutional, systemic and individual capacities for full scale integration of SLM principles into agricultural and agro forestry practices</p> | <ul style="list-style-type: none"> Village communities/resource users understand the fundamentals of sustainable agriculture to minimize soil nutrient depletion and maintenance of healthy organic matter content for soil fertility and productivity. Niue's Young Farmers trained in best practices of sustainable agriculture systems in relation to Niue's soil capabilities. All DAFF's extension officers trained in all aspects of integrated cropping management practices including agroforestry and soil rehabilitation. <p><i>Baseline: Currently there is limited small scale activities promoting subsistence sustainable agriculture scattered throughout the island.</i></p> | <p>1.1.1 Development of a full-scale pilot demonstration unit integrating applicable SLM practices relevant to Niue. Demonstration unit = land preparation, plant nursery, composting/mulching facilities, implement shed and training facility.</p> | <p>DAFF/ Mutalau Community</p> <p>In close collaboration with SPC/ DSAP and FAO</p> | <p>Full scale sustainable agricultural demonstration unit which integrates and advocates SLM principals relevant to atoll agriculture.</p> <p>Yr 1</p> <p><i>Community focused and driven</i></p> <p><i>Replicable</i></p> <p><i>Participatory</i></p> <p><i>Co financing FAO \$8,333</i></p> |
| | | <p>1.1.2 Procurement of tools, machinery, equipment and planting materials for the establishment and running of the full scale demonstration unit.</p> | <p>DAFF</p> | <p>Demonstration unit will be fully equipped with tools/hardware necessary to integrated SLM principles into agricultural practices and disseminate the information in a realistic practical manner.</p> <p>Yr 1</p> |
| | | <p>1.1.3 Conduct practical participatory training on sustainable agriculture particularly integrated cropping management practices, restocking of soil organic matter and machinery safety.</p> <p>Integrated with DSAP</p> | <p>DAFF SPC/DSAP and FAO</p> | <p>Training courses building on existing knowledge for resource users, Niue's Young Farmers, Organic Farmers, DAFF Extension Officers.</p> <p>Yr 1 and ongoing</p> <p>1 field day per annum summarizing best practices to date.</p> <p>Yr 1 and ongoing.</p> |



NIUE'S THIRD NATIONAL REPORT ON UNCCD ~2006

| | | | | |
|--|---|---|--|--|
| <p>1.2 Enhanced national capacities for land rehabilitation and restoration of ecosystem functionality via a practical participatory approach</p> | <ul style="list-style-type: none"> • DAFF's forestry officers trained in all aspects of agroforestry options and forestry practices addressing rehabilitation of degraded fernlands. <p><i>Baseline: Some knowledge does exist amongst the forestry officers, but is not extensive or comprehensive.</i></p> | <p>1.2.1 Practical participatory training in the introduction of indigenous tree spp. on demonstration unit pending suitability and the overall purpose. Eg shelter, support, ground cover (legumes). Integrated with DSAP</p> | <p>DAFF SPC/DSAP, and FAO</p> | <p>Evaluation on superior performance of indigenous tree spp. and silvaculture practices.</p> <p>Yr. 3</p> |
| | | <p>1.2.2 Development of cost effective strategies for land rehabilitation and restoration through participatory research trials at the demonstration unit and Vaipapahi Research Farm.</p> <p>Integrated with DSAP</p> | <p>DAFF Extension Officers DAFF Research Officers Niue Young Farmers</p> | <p>Evaluation of suitability of various cover crops and planting densities.</p> <p>Yr. 3</p> |
| <p>1.3 Capacity developed to adopt and implement current environmental planning guidelines and resource data as a planning tool for SLM</p> | <ul style="list-style-type: none"> • Environment Officers/Resource Planners able to use the Integrated Environment and Land use Planning Guidelines as a working tool. • Environment Officers/Resource | <p>1.3.1 Conduct practical participatory training in the use of the Integrated Environment and Land use Planning Guidelines as a working tool for the proposed demonstration unit for 1.1.1</p> | <p>Contracted Matt McIntyre</p> | <p>One 2 day training course held in Yr 1.</p> <p><i>Note: 1.3.1 and 1.3.2 will be done back to back with same IC.</i></p> |



NIUE'S THIRD NATIONAL REPORT ON UNCCD ~2006

| | | | | |
|--|--|--|--------------------------|---|
| | Planners able to utilize LIS into EIA Reports. <i>Baseline: The information and guidelines exist, however there is a lack of capacity to integrate this information as a working tool for resource assessment and planning.</i> | 1.3.2 Practical participatory training of the utilization of LIS into EIA. Utilized for the proposed demonstration unit for 1.1.1 | Contracted Matt McIntyre | One 3 day training course held in Yr 1. |
|--|--|--|--------------------------|---|

| Outcome 2: Capacities for Knowledge Development and Management are Established for SLM | | | | |
|--|--|--|--|--|
| Outputs 2.1 Participatory assessments of the sustainability of land use systems and functionality of ecosystem services | <ul style="list-style-type: none"> The causes and severity of soil fertility loss have been identified for major agricultural systems and best practices/lessons learned for each ag. system have been identified. <i>Baseline: Information exists none of which have been compiled into a ready reference or user friendly form</i> | 2.1.1 Develop synthesis of lessons learned, best practices, knowledge gaps and research needs | DAFF SPC/DSAP and FAO | One report in Yr. 3 |
| | | 2.1.2 Identification of mitigation options for land degradation problems | DAFF SPC/DSAP and FAO | Participatory workshop/training module for all resource users and extension workers utilizing the demonstration unit as the working example. Yr 2/3 |
| 2.2 Knowledge sharing, information resources and access to these improved | <ul style="list-style-type: none"> DAFF staff to investigate and implement alternative agricultural practices incl. traditional methods/knowledge through consultation, literature reviews and applied research. (incl. best practices within the | 2.2.1 Develop and implement training modules for sustainable agricultural practices eg. Composting/mulching modules, nutrient input module. | DAFF / DSAP and FAO Niue Young Farmers | Training modules available to all resource users for full scale sustainable agriculture. Yr 2/3 Includes visual, audio and published mediums/ public awareness programmes <i>Co – financing DSAP</i> |



NIUE'S THIRD NATIONAL REPORT ON UNCCD ~2006

| | | | | |
|---|---|---|---------------------------------|--|
| | <p>region)</p> <ul style="list-style-type: none"> All members of assembly and key decision makers receive SLM policy briefs <p><i>Baseline: Limited information available for sustainable agricultural practice which is targeted towards subsistence agriculture.</i></p> | <p>2.2.2 Develop policy briefs on SLM for decision makers</p> | <p>DAFF, DOE</p> | <p>Policy brief on SLM in Yr. 1</p> |
| <p>2.3 Enhanced institutional/stakeholder capacities in the use of integrated land information systems/GIS/remote sensing for SLM and enhancement/maintenance of ecosystem functionality</p> | <ul style="list-style-type: none"> DAFF, DJLS, DOE and EPDSU have at least one staff member able to utilize/integrate Niue's LIS database as a planning tool for SLM. <p><i>Baseline: DJLS is the only department able to use/integrate Niue's LIS as a planning tool.</i></p> | <p>2.3.1 Conduct practical participatory training in the development of a land functionality map for the site proposed for the demonstration unit for 1.1.1</p> | <p>Contracted Matt McIntyre</p> | <p>One 1 week training course held in Yr 1. Follow up in Yr 2 and Yr 3.</p> |
| | | <p>2.3.2 Practical participatory training of staff to update/upgrade Niue's LIS from satellite imagery and incorporate additional data fields</p> <p>EU/SOPAC GeoCMS</p> | <p>DJLS/SOPAC</p> | <p>Training course held in Yr 1.</p> <p>Train Tolana = resource person to continue training staff at DJLS</p> <p><i>DOE salary US\$33, 413 SOPAC cofinancing</i></p> |
| <p>2.4 Land Information Systems for SLM developed and operational</p> | <ul style="list-style-type: none"> A protocol for integrated standards, access conditions and data sharing is established and applied for LIS providing essential information required for SLM <p><i>Baseline: No protocol for standards, access and sharing exist</i></p> | <p>2.4.1(a): Identify overlaps and gaps amongst existing LISs</p> <p>2.4.1(b): Develop an interagency protocol on LIS information access; sharing and data standards for resource users, govt. institutions and investors</p> | <p>DJLS, DOE, SOPAC</p> | <p>(a): Collation and compilation of existing information</p> <p>(b): LIS information access and data sharing protocol. Yr 3</p> <p><i>SOPAC cofinancing</i></p> |



NIUE'S THIRD NATIONAL REPORT ON UNCCD ~2006

| | | | | |
|---|--|---|---|---|
| 2.5 Monitoring and evaluation systems for SLM developed and operational | <ul style="list-style-type: none"> A system for monitoring the use of best practices for SLM A system for monitoring soil organic matter content and fertility. A system for monitoring water usage, potable vs. irrigation. <p><i>Baseline: None of these systems are currently in place although a system to monitor water usage is due to be implemented in the near future.</i></p> | 2.5.1 Develop a system for monitoring agricultural sustainability and management | DAFF In close collaboration with SPC/DSAP, FAO | Framework for M&E in Yr 2. <i>Yr 1, 2, &3: GIS component</i> |
| | | 2.5.2 Develop a system for monitoring soil organic matter content | | Framework for M&E in Yr 2. |
| | | 2.5.3 Develop a system for monitoring soil fertility improvement | | Framework for M&E in Yr 2 |
| | | 2.5.4 Develop a system for monitoring water usage as a management tool to determine the availability of water for potable use vs. irrigation/future economic developments and as a drought mitigation tool. | | Ground water/hydrology model for Niue as a water resource management tool. Yr 2 <i>Cofinancing UNESCO US\$26,000 SOPAC: US\$6,430</i> |
| Outcome 3: Resources Mobilized for NAP implementation | | | | |
| 3.1 Project concepts and ideas for financing are developed | <ul style="list-style-type: none"> Development of relevant project concepts and ideas into project proposals as a tool towards NAP implementation <p><i>Baseline: To date no projects have been identified and prioritized for NAP implementation</i></p> | 3.1.1 Participatory consultation with relevant stakeholders | DAFF, DOE, DJLS, PWD, EPDSU | One day workshop for resource users, project managers, decision makers and planners in Yr 3 |
| | | 3.1.2 Formulation of project proposals | | Detailed project proposals ready for submission. Yr 3 |
| 3.2 Strategic Investment Programmes are developed | <ul style="list-style-type: none"> Development of a strategic investment programme. <p><i>Baseline: Integrated</i></p> | 3.2.1 Formulation of a Strategic Investment Programme | EPDSU Contracted | Strategic Investment Programme. |



NIUE'S THIRD NATIONAL REPORT ON UNCCD ~2006

| | | | | |
|---|---|---|-------------------|--|
| | <i>Strategic Plan exists but fails to strategize funding availability for initiatives that are unable to be funded under Govt.'s recurrent budget</i> | | | |
| | | 3.2.2 Prioritization of projects by as per Niue's Strategic Investment Programme | | 2 projects submitted for funding, in Yr 3. <i>Printing/communications US\$500</i> |
| 3.3 Bilateral and multilateral discussions with donors on resource mobilization for NAP implementation are completed | <ul style="list-style-type: none"> Potential sources of funding for projects identified and prioritized. <i>Baseline: Funding source for NAP implementation have not yet been identified</i> | 3.3.1 Traditional and alternative funding avenues identified for resource mobilization for NAP implementation. | EPDSU, DOE, DAFF, | Summary report detailing sources of funding, amount and prerequisites for consideration of funding |

Outcome 4: SLM mainstreamed into National policies, plans and legislation

| | | | | |
|---|---|--|-----------|---|
| Outputs | | | | |
| 4.1 Undertake assessment of capacity gaps and barriers in existing policies and regulations to support integration of SLM principles and practices at the national level | <ul style="list-style-type: none"> Existing policies/regulations and departmental plans reflect the integration of SLM Formulation of guidelines for the reduction/removal of barriers to SLM <i>Baseline: There are policies/regulations and departmental plans which do reflect the integration of SLM to an extent, however there does not exist a process for the</i> | 4.1.1 Conduct a review of current policies/regulations in place for SLM to identify gaps. | DOE, DAFF | Amend/incorporate SLM into existing policies and regulations where gaps have been identified, in Yr 3. |
| | | 4.1.2a Conduct workshop for stakeholder inputs and validation. 4.1.2b Prepare a post workshop report on identified barriers and possible solutions for the mainstreaming of SLM | DOE, DAFF | Publication of Guidelines distributed to decision makers, planners, members of assembly and resource users in Yr 3. |



NIUE'S THIRD NATIONAL REPORT ON UNCCD ~2006

| | | | | |
|--|--|--|----------------|--|
| | <i>identification and reduction/removal of such barriers to SLM</i> | principles | | |
| 4.2 Protocols/guidelines for the integration of SLM into national policy and planning frameworks are developed | <ul style="list-style-type: none"> • Adoption of indigenous tree species for replanting. • Increase in number organically certified farming units. • Increase in soil fertility status and productivity combined with reduced chemical input reliance. • Adoption of Code of Practice for Land Clearance by PWD. <i>Baseline: Such protocols/guidelines do not exist</i> | 4.2.1 Finalization of Niue's Forestry Legislation which incorporate SLM principles | DOE | Niue's Forestry Legislation in Yr 1 |
| | | 4.2.2 Development of Organic Farming Policies which incorporates SLM principles | NIOFA, DAFF | Organic Farming Policies in Yr 1 |
| | | 4.2.3 Code of Practice for Land Clearance which incorporate SLM principles | DOE, DAFF, PWD | Code of Practice for Land Clearance Yr 1 |
| 4.3 SLM principles reflected and incorporated into current and future National Integrated Strategic Plans | <ul style="list-style-type: none"> • National Integrated Strategic and Investment Plans incorporate SLM principles <i>Baseline: Current National Integrated Strategic Plan encompasses SLM principles although not strategically incorporated.</i> | 4.3.1 Formulation of National Integrated Strategic and Investment Plans which incorporate SLM principles | EPDSU | National Integrated Strategic and Investment Plans incorporating SLM principles Yr 3 |



BIBLIOGRAPHY

1. 1993, Niue State of the Environment Report, SPREP
2. 1998, DAFF, Niue National Forest Policy
3. 1998, Coral Pasisi, Capacity Building for Environmental Management in the Pacific. Country Report for Niue.
4. 2000, Environment Land Use Allocation and Planning, Land and Marine Resource Unit Planning Project, DJLS.
5. 2001, Niue Environment Department, Niue National Biodiversity Strategy and Action Plan
6. 2001 Census, Department of Statistics
7. 2001, “Development of Sustainable Agriculture in the Pacific (DSAP)” Project Implementation Workshop, Nadi, Fiji, 24 –26 June 2001
8. 2002, Niue’s National Report on the Implementation of the United Nations Convention to Combat Desertification.
9. 2002, Household and Income Expenditure Survey, Department of Statistics, Government of Niue
10. 2003-2008, Niue Integrated Strategic Plan, Government of Niue
11. 2004, Development of Sustainable Agriculture in the Pacific (DSAP). Preliminary Consultations – NIUE, June 2004
12. 2006, Niue’s National Action Plan Addressing Land Degradation and Drought
13. Disaster Preparedness and Mitigation Assessment (DPMA), Niue, Prepared by DPMA Team, HQUSARPAC, Honolulu, HI, USA.