



GEF – National Capacity Self Assessment Project



United Nations Convention to Combat Desertification (UNCCD)



Logging operation on Vangunu Island (Kele Bay) in the Marovo lagoon of the Western Province, Solomon Islands – Photo courtesy of Leeroy Joshua, SICHE, Solomon Islands

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And not forgetting our funding partners, GEF and UNDP for making this report possible.

Acronyms

AWP	Annual Work plan
BPOA+10	Barbados Programme of Action, 10 Year Review for SIDS
COP	Conference of Parties
DAL	Department of Agriculture and Lands
DFEC	Department of Forest, Environment and Conservation
EIA	Environmental Impact Assessment
EU	European Commission
FAO	Food and Agriculture Organization
FD	Forestry Division
GCCG	Grand Coalition for Change Government
GDP	Gross Domestic Product
GEF	Global Environment Facility
GIS	Geographic Information System/s
GoSI	Government of Solomon Islands
GPS	Global Positioning System
IA	Implementing Agency
IWP	International Waters Project
MAL	Ministry of Agriculture and Lands
M&E	Monitoring and Evaluation
MDG/s	Millennium Development Goal/s
MEA	Multi-lateral Environment Agreements
MFEC	Ministry of Forests, Environment and Conservation
MS	Meteorological Services
NAP	National Action Programme
NAPA	National Adaptation Programme of Action
NBSAP	National Biodiversity Strategy and Action Plan
NCSA	National Capacity Self Assessment
NEMS	National Environmental Management Strategy
NDP	National Development Plan
NGO	Non-government organization/s
PFNet	Pipol Fastaem Network
PMU	Project Management Unit
RAMSI	Regional Assistance Mission to Solomon Islands
RTCs	Rural Training Centres
SICHE	Solomon Islands College of Higher Education
SIG	Solomon Islands Government
SISDAC	Solomon Islands Sustainable Development Advisory Council
SLM	Sustainable Land Management
SOE	State of the Environment Report
SOLFRIP	Solomon Islands Forest Resource Inventory Survey
SNR	School of Natural Resources
SPBCP	South Pacific Biodiversity Conservation Programme
SPC	Secretariat of the Pacific Community
SPREP	Secretariat of the Pacific Regional Environment Programme
TKM	Traditional Knowledge and Management
TOR	Terms of Reference
UNCBD	United Nations Convention on Biodiversity
UNCTAD	United Nations Conference of Trade and Development
UNCCD	United Nations Convention to Combat Desertification
UNDP	United National Development Programme
UNEP	United National Environment Programme
UNFCCC	United Nations Framework Convention on Climate Change
WWF	World Wide Fund for Nature
WSSD	World Summit for Sustainable Development

Executive Summary

Solomon Islands is emerging from four turbulent years (1999 – 2003) of an ethnic crisis with a very weak economy, a rapidly growing population and a government system struggling to cope with the delivery of basic services. The country's people are custodians to globally significant terrestrial and marine biodiversity that is at risk of being over-exploited and lost due to uncontrolled and unsustainable development activities. In recognition of the importance of environmental management and conservation the country ratified the United Nations Convention to Combat Land Degradation (UNCCD) as well as a host of other Multilateral Environment Agreements (MEA) including the United Nations Convention on Biological Diversity (UNCBD) and the United Nations Framework Convention on Climate Change (UNFCCC). Despite its affiliations to these global agendas the country's performance in addressing its obligations has been very poor.

With funding made available by the Global Environment Facility (GEF) through the United Nations Development Programme (UNDP) Solomon Islands has been able to take stock of its capacity to address important environmental issues and its obligations to the above three conventions. This Thematic Assessment report follows a Stock-take report aimed at assessing the measures taken by the government and people, as required under the Convention obligations, to address land degradation and mitigate the effects of drought. The report highlights the direct as well as underlying causes of land degradation in the country as well as the difficulties in trying to mitigate the effects of drought.

The main causes of land degradation in the country are deforestation due to logging activities, agro-deforestation, unsustainable agriculture practices and coastal erosion due to natural and anthropogenic causes. Underlying these direct causes is a host of related root causes including, *inter-alia*, increasing population pressure on land, very low income levels in rural areas, weak governance systems, weak government and community based institutions, very limited access to information and technology and very limited human and financial resources to implement initiatives and programmes to combat land degradation.

This report identifies a range of capacity development needs at the systemic, institutional and individual levels required to address the range of root causes, and identifies appropriate capacity development actions. The self-assessment exercise has found that many decision makers and institutions that deal with land and natural resources management in the country are not well aware of land degradation issues and its wider implications although the effects are evident and felt by people in rural areas. This lack of awareness amongst high-level decision makers is contributing to the generally tepid attention the national government is giving to this important issue.

At the operational level government agencies, some NGOs and community-based organizations are not well positioned and are very poorly resourced, rendering them incapable of addressing the complex and interrelated nature of land degradation. There is also no mechanism in place to coordinate the work of government agencies, NGOs and

communities. As a first step the government needs to establish a coordination mechanism and identify officers that will oversee this coordinating role.

The majority of the rural population in Solomon Islands relies on the continued cultivation of land and harvesting of its resources for their livelihoods. Providing this population with alternative livelihood options and technologies to conserve and enrich the soil will go a long way to combating land degradation. Measures to combat land degradation and mitigate the effects of drought require very good coordination as well as cooperation. The efforts by regional and international organizations, donors and the scientific community rely on the establishment and maintenance of an enabling environment for joint action by the government of Solomon Islands. The geographical features of the country, the diverse cultures of its people and the tiered government system is added reason why coordination is crucial. This report therefore identifies systemic level capacity development as a priority.

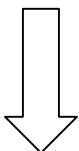
The report also identifies a range of institutional and individual level capacity needs that must be addressed if the country is to make good progress in combating land degradation. It identifies the (Ministry of Agriculture and Lands included) Department of Agriculture and Livestock (DAL), Forestry Division (FD), Meteorological Services (MET), National Disaster Council (NDC), NGOs and the School of Natural Resources (SNR) of the Solomon Islands College of Higher Education (SICHE) as important national institutions that need support to enable them to play a more effective role in supporting rural communities address land degradation.

Finally, initiatives and programmes intended to combat land degradation must have a special focus on rural people. Rural communities and traditional institutions must be active players and be empowered to assess intervention options and take appropriate action. This report recommends the establishment of pilot community-based land-use planning initiatives to start a process of engaging and empowering communities to assess and consider land-use options and measures to counter land degradation. At the end of the day measures to combating land degradation is as much about socio-economic empowerment than it is about technological fixes.

A quick guide to this Thematic Assessment Report

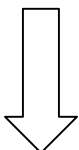
The report is divided into 5 of main components:

1: Introduction



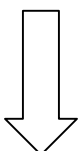
Introduces the salient socio-economic and environment features of Solomon Islands, its ratification of the UNCCD, and experiences with implementing other GEF projects.

2: NCSA methodology



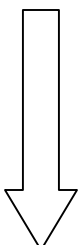
Introduces the NCSA, its purpose, objectives and methodology applied during the assessment.

3: Stakeholders



Presents an overview of the main players involved in addressing land degradation and in mitigating the effects of drought.

4: Issues, convention Obligations and Capacity Development needs.



Links the Convention obligations with the issues experienced at the country level, identifies gaps in efforts to address the obligations and recommends capacity development measures needed to fill the gaps.

Article 10 of the Convention urges countries to identify the root causes of land degradation and identify remedial measures. Section 4.4 of the report discusses a set of root causes and measures to address them as identified during a national consultation workshop in July 2006.

5: Summary of Capacity Development Needs

The capacity development needs identified throughout the report are summarized here into the 3 different levels of capacity – Systemic, Institutional and Individual.

1:0 Introduction

1:1 National Context

Solomon Islands lies north east to Australia consists of a double chain of over 900 islands sprawling diagonally south-east from Papua New Guinea to Vanuatu, covering over an area of 1,600km. There are 6 main islands, Choiseul, New Georgia, Santa Isabel, Malaita, Guadalcanal and Makira, which are characterized by a rugged and mountainous landscape of volcanic origin to low lying coral atolls. The islands are forest covered and surrounded by fringing reefs and lagoons.

The Solomon Islands has a large sea area totaling 1.34 million sq. km, compared to total land area of about 28,000 sq. km. Climate is tropical though humid throughout the year with temperatures averaging 27° C. The annual rainfall is about 305 centimeters, with heavy rainfall and cyclonic activities occurring between November and April.

The last census conducted in 1999 placed the country's population at 409,052. With a growth rate of 2.8% it is now estimated that the current population is well over ½ million. The majority of Solomon Islanders (90%) are Melanesian, about 4% Polynesian, and the Chinese, European, Micronesians, and naturalized citizens make up the remaining 6% of the population.

Traditionally Solomon Islands do not have a central authority that controls an entire island. People are organized into tribes, clans, and lineages to which they owe their loyalty and allegiance. The common bond motivating strong loyalty and allegiance to tribes, clans and lineages is land (Tuhanuku, 2000).

Members of tribes collectively own land in Solomon Islands. Clans which normally an off-shoot of family groupings have use rights that are clearly demarcated and respected by other clans within their tribe. Land to Solomon Islanders and most of Melanesia is the foundation of their material and cultural existence (Burt, 1994). It shapes their social and economic patterns and behaviour. Land therefore, although not bought in monetary terms is exchanged for a favour or for appeasement for ones wrong doing. Land therefore is not seen as a commodity for monetary gains, but it is a social and physical environment which gave rise to culture and customs. As Kabutaulaka (1995) stated, the forest is not just an economic commodity with the potential of generating monetary income. Rather, it is part of the physical and social existence of society. Land is handed down from mother or father depending on the local custom (ie. matrilineal or patrilineal).

The majority (85%) of people live in rural areas maintaining a subsistence way of life, with occasional contribution to copra and cocoa production, marines and fisheries, and timber milling to name a few. Control and use of the natural resources (both land and sea) are most often made by the chief of the clan or tribe which has somewhat eroded. Traditionally, customary tenure provided a successful means of regulating resource use

by controlling individuals and communal rights, limiting access and allocating resource responsibility.

The main economic base of the country remains in the primary sector. Copra, timber, fish products, coca and palm oil make up for about 90% of the country's export commodities. Its per capita GDP of \$340 ranks Solomon Islands as a lesser developed nation, and more than 75% of its labor force is engaged in subsistence farming and fishing. Until 1998, when world prices for tropical timber fell steeply, timber was Solomon Islands main export product, and, in recent years, Solomon Islands forests were dangerously overexploited. Other important cash crops and exports include copra and palm oil. In 1998 Ross Mining of Australia began producing gold at Gold Ridge on Guadalcanal. Minerals exploration in other areas continued. However in the wake of the ethnic violence in June 2000, exports of palm oil and gold ceased while exports of timber fell

The Solomon Islands government is a parliamentary democracy within the commonwealth. The monarch is represented by the Governor General chosen by the parliament for a 5 year term. The national parliament has 50 members elected for 4 year term.

1:2 Why combating land degradation is important for the people and environment of Solomon Islands.

This section will briefly mention some of the reasons pertinent to combating land degradation in the Solomon Islands. Throughout this report they are again being referred to and further explained.

Although Solomon Islands is not a continent and desert environments like those in Africa or our neighbour Australia might seem far removed from our expectations, it must be realised that land degradation or the ability of the soil to maintain its fertility and productivity to sustain our livelihood is fast declining.

There are a number of factors that contribute to land degradation. The stock take report and the consultative workshop re-emphasized the causes and the root causes, these are; uncontrolled logging; unsustainable agriculture practices, coastal erosion; population pressure; low rural income base; limited access to finance/markets; narrow economic base; economic dependence on larger countries for markets and investment; limits on alternative farming, fishing methods and forest activities; vulnerability to climatic conditions such as droughts, cyclones; conversion of natural forest to plantation forest; conversion of fertile land to large scale mono-cropping activities or plantation crops, such as cocoa and coconut; lack of awareness and access to appropriate information; unaccustomed to family planning practices; lack of technical staff/skills; lack of government priorities and creation of infrastructure; (**Annex 2**)

The challenge is to move towards combating desertification whilst attempting to sustain agriculture, fisheries, forestry, coconut and mining activities, in the context of improving

and sustaining communities and rural livelihoods, reducing poverty and providing basic services such as access to education, health, water, sanitation, etc. Against this backdrop, Solomon Islands population is well past ½ million, and is growing at 2.8% annually with a density of 18 persons per square kilometer.

This also challenges the sustenance of traditional shifting cultivation, as fallow periods were shortened, soil fertility declined, erosion increases, hill-side gardening on steep slopes becoming common, and most importantly to note is the low yield or return from garden food crops.

Allowing these trends to continue without some form of intervention will further deplete land productivity and can result in food shortages, increasing hunger and malnutrition, poverty, sickness and death.

1:3 Solomon Islands and the UNCCD

The Solomon Islands Government, (SIG) subscribe to the United Nations Convention to Combat Desertification on 16th April 1999. In compliance with Article 26 of the Convention and COP decision 11/COP.1, SIG presented the National Report on UNCCD in June 2002, with support from the UNCCD Secretariat and the regional institution SPREP.

Initially the focal point was with the Permanent Secretary of the Department of Forest Environment and Conservation DFEC. Although there is no committee appointed to monitor and take note of progress for the convention, a Technical Working Group TWG for the NCSA acts as the committee responsible for looking after and ensure the tasks are completed on schedule. There is also an established Advisory Council called the Solomon Islands Sustainable Development Advisory Council (SISDAC), co-chaired by the Permanent Secretary of DFEC and DNPAC, which advises the Minister on matters relating to the environment.

The focal point was recently shifted to the Department of Agriculture and Livestock (DAL). Currently there is no person appointed to be in charge of the UNCCD focal point, however there are parallel programmes that can be linked and are relevant to UNCCD; Development of Sustainable Agriculture in the Pacific [Project] EU/SPC; Capacity-Building in Farming Systems Practices Project (FAO 2004/05); RAMSI/AusAID Rural Livelihoods Strategy; South – South Cooperation Programme: Food Security (FAO-Italian government); EU/ROC Micro-Projects Programme; and the Food Security Project (FAO 2005+); whereby personnel involved can be appointed as a focal point due to the nature of work and experience in similar activities.

It is to Solomon Islands advantage that land degradation must be addressed. The continuing exploitation of resources, deforestation due to uncontrolled logging and unsustainable agriculture practices gave rise to food security issues, decline in social and economic structures, which further affect rural communities and their livelihood.

1:4 The NCSA and other GEF funded projects in Solomon Islands

The National Capacity Self-Assessment in Solomon Islands (NCSA) is funded by the Global Environmental Facility (GEF), implemented by the UNDP and executed by the Department of Forest Environment and Conservation (DFEC) with assistance from the South Pacific Regional Environmental Programme (SPREP), and is aimed at assisting countries to assess their priority national capacity for Multilateral Environmental Agreements (MEAs). These MEAs include the United Nations Framework Convention for Climate Change (UNFCCC), United Nations Convention for Biodiversity (UNCBD), and United Nations Convention to Combat Land Degradation (UNCCD). The NCSA is unique in that it promotes synergy among the three MEAs. Through the self-assessment, countries will identify capacity gaps and then come up with their own solutions to rectify these gaps.

The objective is to (a) carryout an assessment of local capacity to address global and national environmental issues, and (b) develop a plan for the implementation of key activities to achieve capacity building needs as identified through assessment relating to UNFCCC, CBD and UNCCD.

The focal point for the NCSA is the Permanent Secretary to the DFEC and is coordinated by the project staff assigned to the DFEC.

GEF assistance towards Solomon Islands has been noted especially in the following areas:

- **UNFCCC 1st and 2nd National Communication:** Under Article 4 and 12 of the UNFCCC all parties are obliged to prepare and submit national communications to the UNFCCC Secretariat. The potential threat of climatic change and global warming is taken seriously by the government and hence the submission of the national communication was considered an important priority. Contained in the national communiqué, amongst others, is a national greenhouse gas inventory; addresses issues of mitigation and vulnerability; and adaptation; public awareness, education and capacity building. This in itself epitomizes the governments' commitments whilst securing GEF support. Programs to implement the objectives of the UNFCCC also recognize the relationship between climate change and land degradation (i.e. desertification and deforestation). In fact, deforestation contributes more to climate change than any other forms of land degradation as it results in the release of carbon dioxide and the loss of sequestered carbon in biomass and soils. The work program of the UNFCCC, therefore, emphasizes the role of conservation and sustainable management of forests and woodland in carbon sequestration and carbon dioxide emission.
- **The International Waters Programme (IWP):** funded under GEF for Solomon Islands identifies protection of coastal waters and marine resources as most pressing issues. The study also realizes the inter-connectedness between land based activities and the impact it has on the coastal environment and hence integrate watershed

management as part of the project objectives. The effects of logging in Marovo Lagoon, where the pilot project was sited, is more obvious during heavy rain when sediments are washed into the sea, affecting the majority of people who depend on the sea for their livelihood.

Community awareness and public forum, publication of information sheets, radio and video documentaries, marine protected areas and management plans, and mangrove planting were some of the activities IWP was involved in.

- **The National Biodiversity Strategic Action Plan (NBSAP):** Comply with requirements under the CBD to develop a national biodiversity conservation action plan and establish a platform for national Biodiversity planning. The project was started last year and its status is pending.

The CBD recognizes the importance of addressing land degradation. For example, the program priorities of the convention highlight the role that land degradation and deforestation prevention and control can play in the conservation and sustainable use of biodiversity.

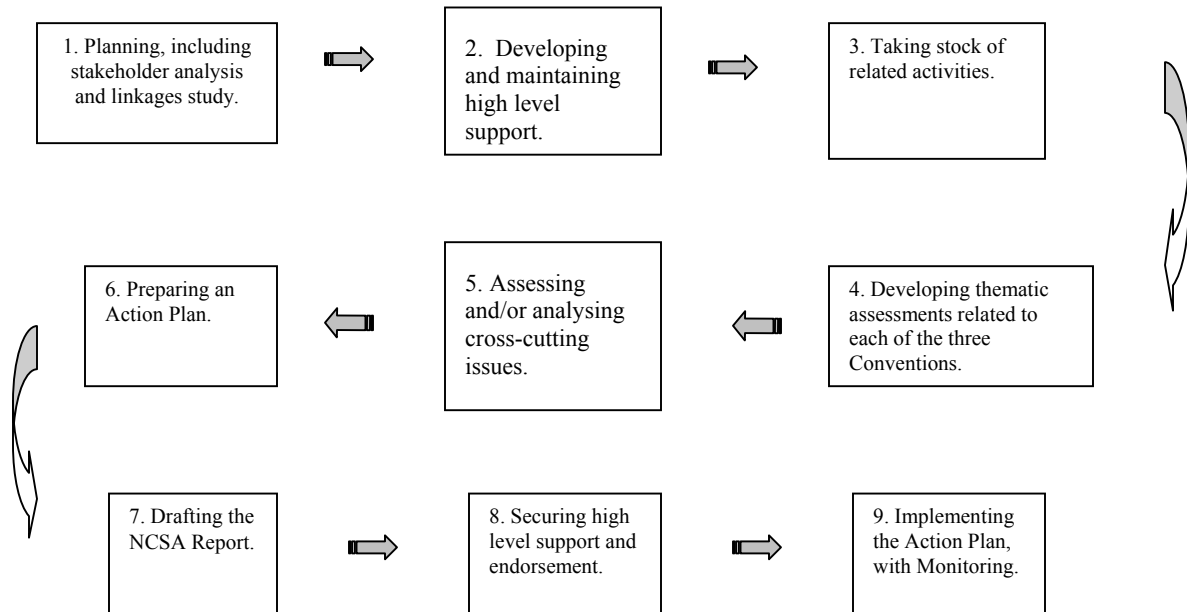
- **National Adaptation Programme of Action (NAPA)** A first meeting was organized but until then its status is unclear.
- **Sustainable Land Management (SLM):** To build capacity to effectively mainstream SLM into national development frameworks in order to achieve MDGs, integrate SLM in the rural sector, develop creditable investment plans & strategies that can motivate donors [international & local] to invest.

These projects and others can be effectively linked to the intent of the NCSA, in addressing the objectives of the UNCCD. To promote synergies, these three conventions are developing joint work programs to address land degradation and deforestation to achieve multiple global benefits, including poverty alleviation; and preservation of ecosystem stability, functions, and services such as soil and watershed protection, carbon uptake and storage, water purification, climate regulation; and nutrient retention.

2:0 NCSA METHODOLOGY

2:1 The diagram may help to explain the process involved in the NCSA.

Figure 1: The Nine Steps of the NCSA



The key analytical Steps are 3 – 6. In Step 3, the Stock-Take Report for the UNCCD was compiled under a wider consultation process both locally and regionally. It gives an overview of the convention status, past and current activities, and provides the basis for future activities. This culminates in a 3-day workshop where the stock-take reports were presented.

In Step 4, a thematic assessment on capacity needs, gaps and opportunities that relates to the three conventions was compiled. It also involves a wider consultation process, and builds on the stock-take report with initial priority focus areas were identified in the workshop mentioned earlier. Questionnaires were designed and circulated to government departments, provincial PS's and NGO's. The report presents a better understanding of problems and opportunities for the 3 conventions.

Step 5 examines the priority areas and identifies which issues cuts across the three conventions.

Step 6 will build on the problem analysis from Steps 4 and 5, and determine the necessary measures to be implemented through the Action Plan, and how. Further focussing is very likely.

2:2 Inception

The inception report provides a brief outline of the processes to follow and the expected outcomes, closely related to the TOR. The inception report was provided a week after the signing of the contract and is attached in the **Annex 1**.

2:3 Stock-take and thematic assessment

The Stock-take is a review of previous and ongoing activities related to capacity building. It involves consultation, review of reports, follow-up of project and progress of programmes. The Stock-take is essential as a foundation for the capacity assessment, it ensures that issues are not neglected, and provides a reliable basis for priority setting and focussing. The Stock-take creates an open, non-controversial description of previous activities and provides a platform for dialogue and debate. The Stock-take report was later discussed at length at a 3-days workshop in which the findings were prioritised and later used in the thematic assessment.

The thematic assessment is a list and description of the capacity situation, priority constraints, barriers and needs in relation to each of the three Conventions; The Assessments are prepared through an in-depth analysis. Starting with the list of requirements under the Convention and the Stock-take, the analysis identifies which requirements are not being met; it identifies the layers of underlying causes, the contributing factors and the key barriers. This requires stakeholder analysis, and confirmation of land degradation issues and root causes derived from the Stock-take report.

The analysis leads to a complete understanding of the nature of the capacity needs, constraints and opportunities. Finally, the analysis leads to a clear identification of optimal interventions points – i.e. where an appropriate capacity development intervention can have the most impact. The Thematic Assessment is the basis for all future action to develop capacity.

It involves stakeholder consultations, interviews, questionnaires and literature reviews. Due to time constraint certain key stakeholders were not interviewed.

2.4 Cross-cutting Assessment

The cross cutting assessment considers the capacity situation, priority constraints, barriers and needs that cut across the three Conventions.

It is obvious from the findings in the Land Degradation thematic assessment that land-use planning, education and public awareness, management information systems, research and technical skills, is rated among the priorities that impact on the other two conventions.

With regards to education and public awareness its commonality may render it as not cross-cutting, however there could be some synergies construed whilst undertaking similar activities.

The cross-cutting assessments were taken at several levels: cross-cutting requirements under the Conventions; cross-cutting capacity constraints; cross-cutting capacity needs; cross-cutting opportunities; cross-cutting natural resource management problems. These were combined under a single report for the three conventions

(2.5) Action Plan

The action plan, are plans to meet the needs and to address the constraints, incorporate a mechanism for monitoring and evaluate the progress.

The action plan uses results of earlier assessments and converts them into programmable, realistic, bankable actions that will be supported over the medium term immediately following the Assessments. The Action Plan is the vehicle for ensuring there is follow-up to the NCSA process. It should also mobilise specific support to specific follow-up activities.

3:0 STAKEHOLDERS INVOLVED IN LAND DEGRADATION AND UNCCD RELATED ISSUES

Government Agencies	UNCCD Related roles
Department of Agriculture and Livestock	<ul style="list-style-type: none"> ▲ UNCCD Focal Point (person yet to be appointed) ▲ Provision of services for agricultural production to rural villagers ▲ Research; Extension and Training; Livestock and veterinary; Planning and Quarantine ▲ FAO Regional Food Security Programme coordinated by DAL; to improve productivity, husbandry practices, adopt appropriate use of modern technology, enhance institutional capacity in research, extension, policy and trade. ▲ Development of Sustainable Agriculture in the Pacific [Project] (EU/SPC)
Department of Lands and survey	<ul style="list-style-type: none"> ▲ SIISLAP – AusAID Land Information Management Project to improve capacities for land management, recording, and production of maps, dissemination and use of related information.
Department of Forest, Environment and Conservation	<ul style="list-style-type: none"> ▲ NCSA Project to examine the capacity to address land degradation ▲ SPREP Focal Point
Department of Foreign Affairs	<ul style="list-style-type: none"> ▲ Signatories to Conventions and Treaties ▲ Ratification of Conventions, reporting to conventions ▲ Keep an inventory of list of conventions ▲ Political focal point
Department of Culture and Tourism	<ul style="list-style-type: none"> ▲ Protection of tamboo sites and those of national heritage/archeological significance ▲ Protection of world war II relics

Department of National Planning and Aid Coordination	<ul style="list-style-type: none"> ▲ GEF Focal Point ▲ Coordinate and facilitate implementation of GEF funds.
Department of Meteorology	<ul style="list-style-type: none"> ▲ Provide average rainfall data, outlook and drought prediction for the country
National Disaster Council	<ul style="list-style-type: none"> ▲ Respond to and address needs in drought stricken areas in the country preparedness
CEMA	<ul style="list-style-type: none"> ▲ Regulating markets for local products such as copra, coconut oil, cocoa, etc.
SICHE	<ul style="list-style-type: none"> ▲ Training in Agriculture and Forestry ▲ Training in Survey and Land Administration

Although these departments have some aspects of their work include land degradation, they independently carry out their tasks as *built-in* activities within their respective Departments and organisations.

However, there are national committees or working groups that recognizes the other Departments' roles and contribution towards land degradation and they are often invited as members of these committees, eg. DSAP Committee, TWG, Solomon Islands Sustainable Development Advisory Committee, National Agriculture Council, IWP, SICHE Course Advisory Committees and others, whereby the composition of these committees includes a wide sectoral representation by government departments, private sector, communities and NGOs. Unfortunately, SISDAC was not active due to change of Permanent Secretary postings in the DFEC and DNPAC, whom are the chair and co-chair respectively.

Civil Society Organizations	UNCCD Related Roles
World Wildlife Fund	<ul style="list-style-type: none"> ▲ Conservation and Forest Protection ▲ Adding forests to marine
The Nature Conservancy	<ul style="list-style-type: none"> ▲ Conservation and Marine Protection
Conservation International	<ul style="list-style-type: none"> ▲ Conservation and documenting terrestrial species ▲
Tetepare Landowners Descendants Association	<ul style="list-style-type: none"> ▲ Conservation and Forest Protection
Makira Community Conservation Foundation	<ul style="list-style-type: none"> ▲ Conservation and protection of forest resources

Civil Societies and NGO's are very active players on issues of environmental concerns in the country. They have in past activities combined/share their resources to be more efficient. The conservation of Arnavon Island as a sanctuary for turtle nesting ground and the formation of the SILMMA (?) (it is a network of all NGOs) and based with FSPI are examples for such partnership.

The regional organizations are providing support, training and capacity building for the local organizations.

There are continuing dialogue between NGO's and government departments to facilitate some of the environmental concerns that are governed under the various conventions. However, the lack of capacity within and among government departments and NGO's to enhance addressing some of the environmental concerns foils efforts of cooperation and commitment.

Donors and Regional Organizations	UNCCD Related Roles
RAMSI/AusAID	▲ Rural Livelihood Strategies – seek alternatives to destructive forest practices and unsustainable agriculture trends
EU/ROC	▲ Micro Projects – support village farmers in alternative options
EU/FAO	▲ Food Security
SPC	▲ Food Security ▲ Development of Sustainable Agriculture in the Pacific
SPREP	▲ Implementation of UNCCD ▲ Capacity building in UNCCD
GEF/UNDP	▲ Provide funds and implement UNCCD ▲

Input from donor communities are most important attributes to the success of the various conventions including the UNCCD. There are focal points within the various government departments that deal with our donors. The major contributors to the UNCCD are the Global Environment Facilities and the United Nations Development Programme. Whilst the GEF has its focal point with the Department of Planning and Aid Coordination, the UNDP has a sub-regional office in Honiara.

Donors are combining well and distributing their funds towards various projects that compliment each other in combating land degradation. SPC/FAO food sustainability project, ROC/EU Micro Project, RAMSI/AusAID Rural Livelihood Strategies, are some examples of donor funded projects that promotes the underlying principles of the UNCCD.

4:0 UNCCD CONVENTION OBLIGATIONS, IMPLEMENTATION GAPS AND CAPACITY NEEDS

This section of the Thematic Assessment report builds on the findings of the NCSA UNCCD Stock-take carried out during the first half of 2006 and the information developed during a national consultation workshop held in July 2006 that was intended to confirm and further elaborate on the findings of the Stock-take report. During this workshop participants developed a Problem and Objective Tree to identify the root causes and higher level effects of land degradation issues and the actions necessary to address these root causes. **(See Annex 2)**

Throughout the NCSA consultations it was found that the level of awareness of and understanding on land degradation issues and the UNCCD convention was very low. Any concerted initiative facilitated and guided by the national government to address land degradation in the country will have to begin with raising public awareness on the issue, obtaining public acceptance that it is an important issue in the country and seeking greater stakeholder and public ownership in planning, implementing and monitoring actions to address the root causes of land degradation.

The people and government of Solomon Islands are just recovering from the ethnic crisis of 1999-2003 and a host of development challenges are facing the country including the need to rebuild the economy and peoples livelihoods, establish fiscal integrity and have affected provinces, communities and families go through a reconciliation and peace building process. Efforts to implement recommendations from this report will need to be carefully planned in cognizance of the socio-economic context and the other competing priorities.

The stock-take exercise and the national consultation workshop have both enabled stakeholder representatives to reflect on national circumstances and agree that land degradation is affecting the environment and people of the country and needs to be addressed in a planned and coordinated manner. The nature and scale of the problem needs to be properly assessed and the range of remedial and mitigation measures carefully planned and designed in a participatory and coordinated approach involving as key players, the rural communities in the country.

The Stock-take report and feedback from the national consultation workshop in July together have identified a number of important gaps in and capacity needs for the implementation of the UNCCD in Solomon Islands. These are discussed below and every opportunity is made to link these to the convention requirements. A summary of the Convention requirements is presented in Annex 3.

4:1 General obligations

UNCCD Article 4: General Obligations
UNCCD Article 5: Obligations of affected country Parties
Obligations and implementation gaps to be addressed
<p>i) Identify and confirm the position within a government agency that will be the UNCCD liaison and coordination officer.</p> <p>i) Raising awareness and understanding of the UNCCD Convention</p> <p>Many of the stakeholders and actors that should be involved in addressing the country's UNCCD obligations are not familiar with the Convention, are not aware of the country's obligations as a Party to the Convention and have not had the opportunity to know more about how the Convention can guide the country in addressing land degradation. Any measure to address the requirements of the Convention needs to begin with these stakeholders understanding of the Convention Objectives, its Articles and the decisions of past Conference of Parties (COPs). A number of programmes and initiatives have been and are being planned that can contribute significantly to addressing the country's UNCCD obligations however the Solomon Islands does not have a national programme targeted specifically at combating land degradation and is yet to develop a NAP, through which many of these initiatives can be coordinated. The UNCCD operational focal point is now to be assigned to the Ministry of Agriculture and Lands however the Ministry is yet to identify a position that will coordinate work to address the Convention.</p> <p>ii) Strengthening coordination mechanisms</p> <p>By default, the NCSA Technical Working Group has been used as a coordinating body for UNCCD related consultations. The government needs to confirm a coordinating body and have clear Terms of Reference for its members.</p> <p>iii) Strengthening participation by Provincial Governments</p>
Priority capacity building needs
<ul style="list-style-type: none">• Identify an officer within the Ministry of Agriculture and Lands who will be responsible for UNCCD liaison and coordination work.• Considering their leading role in supporting work of the Convention, appropriate officials in the Ministry of Agriculture and Lands, Ministry of Forest and Conservation and Ministry of Finance, National Reform and Planning need training to enhance their understanding of the convention articles, important COP decisions and opportunities for collaboration and coordination with other countries and organizations and how the UNCCD objectives and land degradation issues can be mainstreamed into national planning processes. The same training needs to be done for the members of the UNCCD coordinating body.• Awareness on the issue of land degradation, its root causes and effects need to be raised among the public, particularly rural communities. Awareness raising on the UNCCD need to be linked closely to the issues with examples that are relevant to Solomon Islands.

4:2 Relationship with other conventions

Article 8: Relationship with other Conventions
Obligations and implementation gaps to be addressed
<p>i) Lack of an overall coordination of the work being carried out in the country across the range of Multilateral Environment Agreements (MEAs)</p> <p>ii) In-adequate level of awareness amongst officers in appropriate government and non-government agencies on the different MEA's, their complementarities and how synergies can be achieved through joint programming particularly in the fields of research, training, systematic observation and information collection and exchange.</p>
Priority capacity building needs
<ul style="list-style-type: none">• Awareness raising amongst key stakeholders on the range of MEAs that Solomon Islands is a Party to.• Review of policies and legislation to identify and strengthen linkages.• Training on how policies and programming can be coordinated to promote an integrated approach to environmental management

4:3 Development of a National Action Programme

Article 9: Basic approach – National Action Programme (NAP)
Obligations and implementation gaps to be addressed
<p>i) Lack of a NAP and a coordinated approach to developing one</p> <p>Solomon Islands government obtained funding from the UNCCD Global Mechanism in 2005 to begin development of a NAP. To date there has been no progress on this and some of the main reasons for the delays include;</p> <ul style="list-style-type: none">• Lack of guidance provided to the appropriate government agencies to plan for and develop the NAP.• Absence of a designated UNCCD liaison and coordination officer within the government.• Action to develop a NAP not incorporated into the appropriate agency's work plan
Priority capacity building needs
<ul style="list-style-type: none">• Key government officials and NGO representatives need to be trained on the requirements for and their roles in the development, implementation and monitoring of the UNCCD NAP• Public awareness and understanding need to be raised on the purpose and objectives of the NAP and its importance for the people and the environment.

4:4 Identification and documentation of factors causing land degradation and identification of remedial measures

Article 10: National Action Programme (NAP)

Note: While the NAP is yet to be developed, past studies and assessments have identified some of the direct and underlying causes of land degradation in the country.

Obligations and implementation gaps to be addressed

i) Article 10/1

Identification and documentation of **factors causing land degradation and practical measures necessary to combat land degradation and mitigate the effects of drought.**

Closely related, and one that needs more urgent attention is the identification of areas of land in the country that are vulnerable to land degradation as well as those that are already seriously degraded due to human and natural factors, and the identification of measures to manage and rehabilitate these lands.

Drought prone areas in Solomon Islands need to be identified and strategies established to assist people living in these areas to implement measures to mitigate the effects of drought on the environment and their livelihoods.

The functions of NDC, Met Services, SIISLAP and other agencies should be harnessed to identify and map drought prone areas for strategic planning in implementing mitigating measures.

Priority capacity building needs

To date various initiatives have been implemented to develop inventories and information on land and land resources as well as having them easily accessible to the public. Inventories and information on a range of land features e.g. forest cover, forest species distribution, soil types, agriculture opportunity areas, topography, land-use and potential mineral deposits are gradually being organized and made more easily accessible to the public. In light of these development the following are priority capacity building needs;

- a) Improve information baseline on the state of land degradation and its impacts
- b) Developing information systems for monitoring and assessing land-use change
- c) Developing knowledge and skills of field staff and decision-makers to use and interpret land information technology
- d) Developing capacity of community organizations and land owning groups to use a range of approaches and technologies to develop more detailed land-use inventories to assist in land-use planning
- e) Raising awareness of communities on the link between land degradation and loss of marine biodiversity and loss of livelihoods.
- f) Develop capacity of field workers to raise awareness amongst communities on land degradation and the importance of planning and implementing measures to mitigate the effects of drought.
- g) Support training and research institutions to document and disseminate information on traditional practices for maintaining land productivity and for mitigating the effects of drought.

4:4:1 Main direct causes of land degradation and recommended capacity development measures to address them.

4:4:1:1 Logging

Unsustainable logging in Solomon Islands is one of the biggest causes of land degradation, affecting most of the large and medium sized islands in the country. **Of a total forest area ofha,ha is harvestable andhectares have already been subjected to logging activities.** A National Forest Resource Inventory Project (SOLFRIP) carried out between 1993-1995 calculated that the natural forests of the Solomon Islands could support a sustainable yield of 320,000 m³ per annum. However the rate of extraction to date is grossly unsustainable and it is estimated that, given the current extraction rates (645,000 m³/yr), the country will lose all its commercial forests by 2015. In 2005 alone the total volume of logs exported was 1.1 million cubic meters.

In addition to the wholesale removal of trees, logging activities also destroy large areas of land that support ecosystems and a rich diversity of species many of which are endemic to Solomon Islands. Removal of trees and earthmoving activities have also resulted in large volumes of soil being washed into rivers and the sea causing pollution, sedimentation and loss of marine life. Tons of topsoil have also found their way into

rivers and streams depriving villages of clean water for domestic use and resulting in an increase in water borne diseases. Use of heavy machinery has resulted in the removal of the rich topsoil coating the relatively poor acidic soils on the bigger islands and large areas of land have also been subjected to compaction rendering them unsuitable for cultivation and growing of food crops.

There is a host of underlying reasons why logging is rampant in the country and difficult to control;

i) A source of government revenue

The national government relies on logging as a source of national revenue. Between 2000-2004 export of logs contributed to an average of 15% of total export earning for Sol Is. There has been no political will on the part of past governments to curb the unsustainable harvesting of trees. Instead the government has been facilitating the processing of logging licenses and accounts of corrupt practices by politicians, public servants and the educated elite and leaders of the country are now legion.

ii) Limited capacity of FD to enforce regulations and the Code of Logging

Limited funds, means of transport and a lack of close supervision have made it difficult for staff of the FD to enforce forestry regulations and the Code of Logging Practice. Staff are usually not well rewarded by the government for working in difficult conditions in remote rural locations and are usually tempted to accept money and 'gifts' from logging company officials.

iii) Low levels of income of rural population

Unless rural families have access to alternative means to earn much needed family income to meet basic needs, the sale of logs will always be an attractive short-term option. Many rural communities in the Solomon Islands do not have access to good educational and medical facilities, transport, banking services and a steady source of income. The relatively large amounts of money promised to villagers by leaders and logging company officials usually lure most families to agreeing to provide timber concessions to logging companies through logging agreements.

iv) Lack of awareness of the economic value of forest (include other values) and importance to subsistence life in the rural areas

Past studies have shown that the present value of services derived from the forest by local communities exceeds the amount received through royalty payments from logging. (See Box 4:4a below) Rural communities take for granted the invaluable services that the forest provides and do not fully understand the important role forests play in environmental protection.

Box 4:4a - Subsistence values compared with logging royalties in two tropical rainforest communities in the Solomon Islands.

Cassells (1992) researched and valued the subsistence use of tropical rainforest, in the villages of Nukiki and Kuku on the island off Choiseul, Solomon Islands. He concluded that villagers were heavily reliant on the subsistence use of the rainforest for their livelihood. Values for these uses in Nukiki were calculated at NZ\$10,512 per annum for the average sized (7) household.

Using information derived from Nukiki and applying it to the village of Kuku, where logging operations had trespassed on village land, it was clear that the villagers had been severely disadvantaged when their forested land was logged. For example, one area of 41 hectares near Kuku village, was calculated to have yielded 2 018 m³ in merchantable logs. The villagers were to be paid \$9.00 per m³ which would give them a once-only royalty payment of \$18 162. Subsistence losses from the same area were reported to be four garden sites, six nari and sulu nut trees, 21 betel nut trees, 346 sago palms and about 25 percent of the villagers' other useful trees such as those used for house building, canoe making, medicine and food. This loss in subsistence production would be sustained over many years and was calculated to have a present value of \$176 613. The net loss suffered by the village as a whole was therefore \$158 450, or a substantial \$7 545 for each of the 21 households.

Source: Cassells, 1991 (cited in Pacific Islands Forests and Trees Newsletter, June 1997).

4:4:1:2 Agro-deforestation and unsustainable agriculture

About 85% of the total population of just over half a million people in Solomon Islands live in the rural area and rely on subsistence agriculture production, small-scale production of export crops and operation of small businesses as sources of livelihood. This rural population is growing at 2.8% and exerting increasing pressure on the limited areas of available land for agriculture production. Fallow periods have decreased considerably from 25 years down to 4-5 years resulting in gradual loss of soil fertility and many people are now farming on very steep slopes (30-75°). Larger areas of primary forests are being felled every year as people search for more fertile land to grow food.

Alongside logging activities agro-deforestation (and unsustainable agriculture practices) is one of the main causes of land degradation in Solomon Islands. The limited use of nitrogen fixing trees and crops is resulting in the rapid decline in soil nitrogen levels and high demand for potassium by most root crops is causing its fast removal from the soil. Newly cleared garden areas on slopes expose the topsoil to rain and erosion, evidenced by the large plumes of silt found outside river mouths during and after the rains.

Some of the underlying causes of the increasing degradation caused by unsustainable agriculture activities include;

i) Increasing populations

The 1999 national census recorded the population at 409,000 people and growing at 2.8% per annum with a relatively young age structure, with 41.5% of the population under the age of 15. At this rate the population would now be in excess of half a million people with an average population density being relatively low at 14.6 persons/km². This in no way indicates that there is sufficient land for everyone in the country. Past settlement patterns, tribal wars and the evolution of tribal and land ownership structures have given rise today to a situation where there are tribes with more land than others, e.g. the ‘artificial islands’ of the Lau and Langalanga lagoons are inhabited by people who do not have land rights on the mainland. Families and communities actually build islands out of limestone rocks and soil brought in from the mainland.

Population pressure as a cause of land degradation is more visible in the agriculture sector where increasing areas of primary forests are cleared for food gardens and soil nutrients are declining rapidly due to more frequent cropping on the same areas of land and the very limited use of soil enrichment and soil conservation technologies. Future strategies to address land degradation need to consider the variation in population densities across the islands and focus on the areas of higher densities. Table 4.4b below shows the population distribution across the country.

Table 4:4a: Distribution of rural population by province in 1999

Province	Population	Percentage of rural population	Average population density (person/km ²)
Malaita	122,620	34	29
Western	62,739	17	11
Guadalcanal	60,275	17	11
Makira-Ulawa	31,006	9	10
Central	21,577	6	35
Isabel	20,421	6	5
Choiseul	20,008	6	6
Temotu	18,912	5	22
Rennell-Bellona	2,377	1	4
Honiara town	49,107	0	-
Total	409,042	100	15

Source: Solomon Islands National Census 1999



*Children of Lake Tenggano, Rennell Island
Renbell Province, Photo courtesy of L. Joshua*



*Children at Wranghams, Kolombangara Island
Western Province, Photo courtesy of Nora Makini*

41% of the national population is under the age of 15.

- ii) Limited use of technologies to conserve soil fertility and minimize soil loss.

Much effort that has been put into trialing and adapting technologies to conserve and manage soils in the country were put to a stop during the ethnic crisis of 1999-2003. The government agriculture research station housing soil laboratories was destroyed, field experimental stations in the Provinces and field trials abandoned and many trained personnel leaving the DAL. Information on many of the technologies that have been tried and tested in developing countries are not easily accessible by most people and the institutional structures to support on-the-ground trials and demonstrations in the Provinces is yet to be well established. As a result most subsistence farmers are still applying shifting agriculture and traditional methods of farming. There is an urgent need to re-introduce a nationwide programme to conserve and enrich soils particularly in areas of high population density.

- iii) Absence of institutionalized process for supporting land-use planning by communities

The DAL established a Land Use Division (LUD) during the 1970's, which focused mainly on assisting communities and tribes manage coconut and cocoa plantations on ex-alienated lands. The government is yet to initiate an approach to assisting communities and tribal groups to plan the use of their land not only for agriculture purposes but also for forestry, conservation, recreation and other purposes.

Planning land use, particularly on customary land, needs to be done carefully given the sensitivities surrounding land ownership. Any approach to supporting land-use planning by communities and tribal groups need support of traditional leaders, provincial governments, church leaders and the national government. The current government has

pledged to address land issues and specific policy statements have been issued (see Box below)

Box 4:4b Grand Coalition for Change Government (GCCG) Policy Statement on Land Ownership and Land Use.

Government will:

- (a) Amend/peel existing land laws so as to make customary land a bankable or transferable commodity or introduce new legislation for the purpose;
- (b) Work closely with land owners to discuss ways - such as the registering of tribally owned customary lands and the opening up of such lands to prospective developers - to enhance economic projects. Introduce land reform policies to optimize the utilization of the asset;
- (c) Address the following areas in carrying out land reform: recognition of indigenous tribes as corporate entities; indigenous tribes as corporate owners of land as opposed to individual ownership and the protection of land from further alienation;

Source: Solomon Islands Grand Coalition for Change Government (GCCG) Policy Statement (2006)

The policy prescriptions are intended to facilitate the use of customary land for development purposes however there is a glaring absence of any intent to assist customary landowning units plan the use of their land for either commercial, subsistence or conservation purposes.

iv) Limited alternative livelihood options

As in the case of logging activities, one of the root causes of land degradation due to unsustainable agriculture is the very limited options people have for pursuing alternative income generation opportunities. On a national scale, the government needs to proactively seek out opportunities and secure funds to establish ventures that create employment and income in rural areas, improve infrastructure and provide marketing outlets. At the village micro-economy level there is need for training of individuals and groups in small business management, production technologies, husbandry skills and marketing.

The more than 1,000 islands and islets that make up the nation of Solomon Islands are arranged in a double chain that stretches 1400 km along an area from 5 degrees to 12 degrees south of the equator. The land forms are as diverse as the people and range from high mountainous islands to those that are less than 2 metres above sea level particularly the very small islands in between the large ones and those found in the Ontong Java atolls while coastal erosion occurs on all islands, it is a more serious form of land degradation on the smaller islands and atolls where the populations are high and people do not have alternative areas of land to move to. On such islands the main causes of coastal erosion are;

- a) Natural causes – storm surges and sea level rise.

The older generation of people living on small low lying islands as well as those on the bigger islands can testify to the receding coastline over the years as a result of sea level rise and can easily provide evidence of this phenomenon. Sea level rise is a real threat to low lying islands and valuable strips of land along the coast is gradually being lost to the sea. There is also increasing evidence of rising sea levels causing increased salinization of the fragile fresh water lens and traditional root crops are being affected by saline water as a result of unusually high tides.

- b) Removal of sources of natural protection by humans.

The degree of vulnerability of small islands to rising sea levels is compounded by the removal of coastal vegetation by people. Trees and shrubs along the coastlines are cut down to clear areas for buildings, for use as firewood and building materials.

4:4:2 Recommend capacity development measures to address direct and underlying causes of land degradation.

Causes of land degradation	Capacity development measures
Logging	<p>Increase the number of Forestry Division staff to monitor logging operations, enforce the logging code and provide staff with adequate operational budgets, incentive schemes, equipment and transport.</p> <p>Raise awareness of landowners on the importance of the forest and the economic value of the services that forests provide for rural subsistence.</p> <p>Provide funds and equipment to the National Forestry Training Institute to support training needs of the Forestry Division, NGO's and communities.</p> <p>Provide more opportunities for communities to access training in small business management, marketing, specific technological and husbandry skills.</p> <p>Raise awareness of communities on the Code of Logging practice to enable communities to assist government in monitoring logging activities.</p> <p>Provide training, equipment and funds to enable government to assist NGOs and community based organizations support communities through participatory processes to plan the use of their land to minimize degradation due to logging activities.</p> <p>Provide training and necessary operational funding and logistical support for officials of provincial government planning departments to identify and pursue alternative investment and income generation opportunities and undertake consultation with landowners to assess options.</p> <p>Provide funds for NGO's to expand on their advocacy efforts to promote sustainable forest management and environmental protection.</p> <p>Provide training for government and NGO field workers to assist communities identify areas for conservation and develop conservation management plans.</p>

Causes of land degradation	Capacity development measures
Unsustainable agriculture practices	<p data-bbox="459 415 1448 653">Provide funding to the national government to establish and strengthen capacity of Land-use and Research Divisions within the Ministry of Agriculture and Lands to conduct research and demonstration trials in soil conservation, development of community-based land-use plans, agro-forestry demonstrations, alley cropping, use of indigenous plant varieties and soil enrichment trials. Capacity building measures for these Divisions will focus on training, acquisition of equipment, provision of transport and hiring of technical expertise.</p> <p data-bbox="459 684 1448 821">Provide funds to enable the Kastom Garden Project and the Ministry of Agriculture to expand services to more communities in the country to promote use of indigenous technologies and plant varieties that are more adaptable to local growing conditions, are drought tolerant and easy to manage.</p> <p data-bbox="459 852 1448 989">Provide funds, transport and equipment to enable the Solomon Islands Planned Parenthood Association in association with the Ministry of Health and the Ministry of Agriculture and Lands and NGOs to implement family planning programmes targeting areas of high population density.</p> <p data-bbox="459 1020 1448 1157">Provide funds to the Ministry of Commerce, Solomon Islands College of Higher Education, Rural Training Centers and NGOs to offer more training opportunities for rural people in areas such as: small business management, marketing, use of appropriate technology, animal and crop husbandry, agro-forestry etc.</p>

Causes	Capacity development measures
Coastal Erosion	<p data-bbox="459 1377 1448 1476">Provide training to government and NGO field staff to undertake participatory community-based vulnerability assessments to determine extent of coastal erosion in low lying islands and its root causes.</p> <p data-bbox="459 1507 1448 1606">Provide training and funding support for coastal communities to identify and assess alternative adaptation measures and take appropriate action to rehabilitate degraded coastlands.</p>

4:5 Roles of government, communities and stakeholders in addressing land degradation and mitigating the effects of drought

Article 10: National Action Programme (NAP)...contd.....
Obligations and implementation gaps to be addressed
i) Article 10/2 and 10/2/a Identifying the roles of government, communities and stakeholders in addressing land degradation and mitigating the effects of drought through implementation of the NAP and other related strategies. Integrate NAP into national and provincial level development strategies
Priority capacity building needs Relevant national and provincial government agencies need to be well versed with the country's obligations to the UNCCD and be able to identify linkages between their respective programmes and these obligations as well as the opportunities for partnerships, collaboration and use of the scientific and technological community. In this context the officials of these agencies need to firstly understand the Convention requirements, be familiar with land degradation issues in their respective Provinces and commit to action. Throughout the country chiefs are custodians over the land on behalf of the people. Members of tribes have access/use rights to land depending on family relationships and whether land is passed on through the matrilineal or patrilineal system. Customary land ownership systems and customary chiefs are important community institutions that play an important role in guiding community decision-making over land use. Chiefs need to be familiar with government policies and approaches and be given the opportunity to participate actively in efforts to link government agencies with communities. Capacity building will therefore need to target; <ul style="list-style-type: none">• Raising awareness and understanding amongst provincial level government officials and village chiefs on the UNCCD, the need for the NAP and their roles in facilitating and guiding implementation of the NAP at the provincial and community level.• Raise level of understanding on how strategies for land degradation and the UNCCD objectives can be mainstreamed into provincial level development planning.• National and provincial level planning officers need training on the NAP, how it can be mainstreamed and incorporated into national and provincial level development strategies and the roles of various stakeholders in its implementation.• Training is needed for government and NGO field workers on participatory community based assessment of land degradation issues and identification of measures to mitigate the effects of drought.

4:6 Preventative measures for lands that are not yet or only partly degraded.

Article 10: National Action Programme (NAP)....contd.....
Obligation and implementation gaps to be addressed
<p>i) Article 10/2/c</p> <p>Give particular attention to implementation of preventative measures for lands that are not yet or only partly degraded.</p>
Priority capacity building needs
<ul style="list-style-type: none">• Targeted capacity building activities is needed for government and NGO field workers and communities in the use of participatory land-use planning approaches and identification of measures to prevent land degradation, targeting the remaining and relatively small portion of land in the country that has not been subjected to logging activities.• Training is needed for the identification and assessment of highly vulnerable areas and areas of high biodiversity significance, followed by the development of community-based management plans that are supported by the government. In such areas communities also need to be supported with initiatives that develop their capacity to identify and implement alternative livelihood and income generation opportunities and options. These would include skills training in small business management, eco-tourism, food processing, production of handicrafts etc.

4:7 Promotion of policies and institutional frameworks

Article 10: National Action Programme (NAP)...contd.....
Obligations and implementation gaps to be addressed
i) Article 10/2/e & f Promotion of policies and institutional frameworks and encourage participation of stakeholders at national, provincial and community levels including rural communities

Priority capacity building needs

- The Ministry of Agriculture and Lands, Department of Forest, Environment and Conservation, School of Natural Resources of the Solomon Islands College of Higher Education and other agencies that are involved with land resources management need to develop capacity to assist a community-based approach to land use planning and land-resources management.
- In light of the complexities surrounding land tenure and the sensitivities over land-use, any approach to developing and supporting institutional frameworks for land resources management need to take a bottom-up participatory and integrated approach, be community-based and be supported by national and provincial governments and NGOs. Training will need to target topics such as; community consultation skills, GPS handling and basic data transfer, use of GIS, survey techniques, participatory land use planning etc.
- MAL, MFEC and national NGO bodies will need support to develop capacity to provide advice to communities, provincial governments, national governments and the private sector on land-use, land-suitability and land-use planning. Appropriate equipment and technology will need to be acquired and staff need to undertake specialized training.
- Staff of government agencies, training institutions and consultants need training in of Environmental Impact Assessment and Strategic Environmental Assessments to support planning of large scale development activities that will minimize impact on productivity of land resources and have minimal effects on marine resources.
- Government agencies need to establish a whole of government approach to supporting land use planning and land resources management. Institutional structures need to be improved and processes established to maximize coordination and cooperation between communities, provinces and national agencies.
- Awareness of the UNCCD and land degradation issues needs to be raised amongst members of the National Agriculture Council and National Forestry Industries Association.
- Training attachment opportunities to be provided to government officials to learn about the process involved and main requirements for developing a Land Use Policy in a country within the Region that has such Policy in place, eg: Fiji .

4:8 Drought preparedness, food security and alternative livelihoods

Article 10: National Action Programme (NAP)...contd.....
Obligations and implementation gaps to be addressed
<p>i) Article 10/3/b, c & d</p> <p>Strengthen capacity for drought preparedness at local, provincial and national levels, promote and strengthen food security strategies and alternative livelihood projects.</p> <p>Currently the contingency approach to natural disaster is very much reactionary and focused on assessment, providing logistical support, and rehabilitation at the aftermath of a cyclone. The legislation on natural disaster and hazards is currently under review to incorporate drought preparedness and promote food security strategies and alternative livelihood projects.</p>
Priority capacity building needs
<ul style="list-style-type: none">• The National Disaster Act needs to be reviewed to respond to natural disasters brought about by prolonged drought periods. The action plan must also include preparedness.• There is a need to develop information to identify areas within the country that are susceptible to prolonged drought periods, with collaboration between the DAL, NDC, Met Services, and the Lands Division.• A contingency plan to address drought stricken areas in the country needs to be developed in collaboration between the National Disaster Council, Meteorology, and DAL.• Training in contingency/strategic planning for the departments concerned, as well as at community, and provincial level is important• Provincial Disaster Committees and Agriculture Extension Staff need proper logistics and training to respond to food security and drought issues• DAL staff need to collaborate with rural communities on traditional methods for preserving food and water during prolonged drought periods.•

4:9 International cooperation, sub-regional action and support for implementing national action programmes.

Article 11: Sub-regional and regional Action Programmes
Article 12: International cooperation
Article 13: Support for the elaboration and implementation of Action Programs
Article 14: Coordination in the elaboration and implementation of Action Programs

Obligations and implementation gaps to be addressed

Solomon Islands officials have been attending COPs and other related UNCCD meetings in the past and have also been actively participating in sub-regional consultations and training workshops. While it is important to participate effectively in such meetings and workshops, the development of the NAP and the strengthening of national systemic, institutional and individual capacities remains a priority for the country.

Efforts are underway to develop a Pacific Sub-Regional Action Programme coordinated by the Secretariat of the Pacific Regional Environment Programme. Solomon Islands will be participating and contributing to its development and implementation.

Priority capacity building needs

- The country needs to strengthen its networking and establishment of partnerships with international and regional technical agencies and inter-governmental organizations to obtain support for developing priority capacity needs in technology transfer, research and development.
- Training is needed to strengthen capacity for negotiating at the regional and international levels, grant proposal writing and a better understanding needs to be developed on international funding opportunities, donor requirements and procedures.
- There is need for officials involved with the UNCCD in Solomon Islands to learn more about how other countries are implementing their NAPs, the structures established, how resources are mobilized and how inter-agency coordination is managed.
- There is a need to establish an institution for research on environmental issues

4:10 Information collection, analysis and exchange

Article 16: Information collection, analysis and exchange

Obligations and implementation gaps to be addressed

Information collection, analysis and exchange is clearly one of the main areas that needs improving if effective participation by stakeholders and rural communities is to be effective in the country. The NCSA stock-take report has identified a range of past initiatives that have developed a large body of information. These need to be analyzed, simplified and made available to the public. There are also networks established to link agencies in the national capital with regional and international partners. A big gap exists in making information on land resources, land-use technologies and opportunities available to the provincial governments and rural communities by agencies in the central government.

Priority capacity building needs

- Support the Department of Lands under the Solomon Islands Institutional Strengthening of Land Administration Project (SIISLAP) project to package and disseminate land resources information to provincial headquarters and rural e-mail PFNet stations by; provision of necessary hardware, software and accessories. Land resource information can be distributed either through the internet or in CD's and training needs to be provided for provincial government officials on the use of the hardware and software to access information developed by the Department of Lands.
- Establish a database on land degradation in Solomon Islands including inter-alia; case studies of root causes and remedial actions, technologies used and adapted to address land degradation, traditional knowledge, conservation management approaches, case studies of efforts to rehabilitate degraded land,
- Strengthen capacity of the Agriculture Information Unit of DAL and private media organizations to develop and disseminate print and audio-video productions to highlight land degradation issues in the country and promote remedial measures.

4:11 Research and development including Technology

Article 17: Research and Development

Article 18: Transfer, Acquisition, Adaptation and development of Technology

Obligations and implementation gaps to be addressed

There is very little if no research work currently being carried out to assess the cause and effects of land degradation and identify pilot remedial initiatives. Research activities on land degradation and related problems were badly disrupted when the national agriculture research station was totally destroyed by militants in 2000. The DAL is in the process of re-establishing capacity to undertake research work. Without an infrastructure and dedicated site the Department will need to start with conducting research observations and trials in farmers fields in close collaboration with farmers and communities. Research proposals need to be developed to seek resources for implementing field trials.

The FD research work is currently focused on supporting silvicultural work and very little if not no research work is done to investigate land degradation-related problems such as rehabilitation of post-logged areas, agro-forestry systems, economics of non-timber forest products, traditional practices in forest conservation etc.

While there is a wide range of technologies available for use in addressing land degradation, there has been very limited use and testing of these technologies in the field situation. Many of these technologies have been developed in the Pacific region however many communities are not aware of their usefulness and how they can be utilized. Technology development, adaptation and transfer need to be included in the roles of national research and training institutions that also need to be supported with resources.

Priority capacity building needs

- Support the Ministry of Education and government technical agencies, Forestry, Environment and Conservation Department of Agriculture in reviewing national research policy to address research and development relevant to MEAs.
- Strengthen capacity of the Research Division of DAL and SNR of SICHE to undertake on-site scientific and socio-economic research work and investigate the causes and effects of land degradation as well as conduct trials on potential remedial measures.
- Strengthen the capacity of the FD Research Unit to conduct research into the rehabilitation of post-logged areas as well as to identify, seek funding for and implement other priority research themes.
- Provide financial resources and training to enable NGOs to promote use of local and traditional technologies including local plant varieties, traditional farming practices etc use in areas that are vulnerable to degradation or are already degraded.
- Provide financial resources, plant varieties and tools to Rural Training Centres (RTC) and provide training for staff to design and conduct small scale agro-forestry trials that demonstrate soil enrichment, yield improvement and supply of food, traditional medicines and building materials.

4:12 Capacity building, education and public awareness

Article 19: Capacity building, education and public awareness
Obligations and implementation gaps to be addressed
<p>i) Training and human resource development</p> <p>While a range of capacity building needs continue to be identified as a result of changing circumstances and challenges, the opportunity to design, deliver and monitor in-country targeted capacity building activities is constrained by the limited capacity of national tertiary and vocational training institutions. Donor funding particularly by the EU, AusAID and NZAid are targeting primary and secondary education and teacher training. Over the past 10 years there has been no dedicated funding for strengthening national tertiary institutions to provide short courses for government and NGO field workers in the area of land management.</p> <p>Specific technical skills needed for research and development and for implementing field assessments and demonstrations are very limited and there are very few post-graduate level scholarship opportunities for specialized training.</p>
<p>ii) Public awareness</p> <p>There are no effective public awareness strategies and programmes as officials are not very familiar with the Convention and what the pertinent national issues are. There are also very limited human and financial resources to support a sustained and coordinated public awareness programme to combat land degradation.</p>
<p>iii) Education</p> <p>While the formal education curricula has subjects that teach students about geography, agriculture, physical sciences there is need for the development of resource materials for students to use in practical sessions that would demonstrate the importance of caring for the land and its resources.</p>
Priority capacity building needs
<ul style="list-style-type: none">• Financial resources to enable training institutions to design, deliver and monitor short training courses that have a strong practical component and targeting sustainable agriculture and forestry practices, soil conservation, small business management, eco-tourism and setting and use of benchmarks and indicators for sustainable land management and land degradation.• Scholarships to enable nationals to undertake post-graduate level training in specialized areas that can contribute to the development of a critical mass of expertise that can be used in the country. Specific areas for post-graduate training include; natural resource economics, agro-forestry, soil conservation, water resources management, meteorology, soil and water engineering.• Financial resources to enable the Ministry of Education and the Environment Division to develop booklets and posters for use in primary and secondary education that promote land care, and equipment that support practical exercises in and out of the classroom.

4:13 Financial resources

Article 20: Financial resources
Obligations and implementation gaps to be addressed
<p>Mobilization as well as the effective management of financial resources is essential if many of the initiatives to address land degradation and mitigate the effects of drought are to be successful in Solomon Islands. Given the current economic climate the national government is not able to budget and commit sufficient financial resources to support such initiatives due to the very weak state of the economy and the need to direct scarce resources to attend to the delivery of basic services such as health, education, law and order. Various government technical agencies (agriculture, forestry, conservation, energy and mines) are also having difficulties getting vacant positions filled resulting in many of the existing staff carrying heavy workloads.</p> <p>Resource mobilization strategies also need to align with organizational strategic and corporate plans, government agencies will need to establish strategic plans through consultations with stakeholders.</p> <p>Solomon Islands is also not effectively utilizing the opportunities for funding sustainable land management and capacity building that are made available by donor countries and funding organizations. Some of the main reasons for this very low capacity to mobilize donor resources include; very little understanding by government and NGO officials of funding opportunities, donor requirements and procedures, limited skills in developing grant proposals and project cycle management, officers not having the time to spend on writing proposals, very few private consultants that can avail their services to assist in development of grant proposals</p>
Priority capacity building needs
<ul style="list-style-type: none">• Training in GEF procedures and requirements for government, NGO and consultants• Training in developing grant proposals and in project cycle management• Training in development of resource mobilization strategy to support implementation of NAP• Training on how to mainstream the NAP into national and provincial level government planning and budgetary processes• Training in the development of a programmatic approach for sustainable land management

5:0 Summary of Capacity Development Needs

Presented below is a summary of the capacity development needs discussed in this report. The range of needs are summarized alongside each bullet point and grouped according to the three levels of capacity recommended in the NCSA guide.

5:1 Systemic level capacity development needs – creating an enabling environment

- Review and revise forestry and agriculture policies and regulations to improve support for and guide land-use development, forest management and agriculture practices.
- Support the government to develop the UNCCD National Action Programme (NAP) through a consultative and collaborative approach and use the NAP to strengthen coordination and collaboration.
- Strengthen mechanisms and processes that coordinate the work of government agencies and civil society organizations across the various sectors aimed at combating land degradation and mitigating the effects of drought and for the coordination of work across MEAs.
- Develop regulations in accordance with the Solomon Islands Environment Act (1998) to enable the Environment Division to enforce rules for environmental management and protection.
- Establish the Environment Advisory Council as stipulated in the Solomon Islands Environment Act (1998)
- Review and revise the regulations to conduct research in Solomon Islands and establish a link between the Environment Advisory Council and the Research Committee to effectively consider, plan, monitor and evaluate research work on the environment and natural resources in Solomon Islands and establish a database of past and current research work.
- Strengthen capacity of Lands Division to progress the work on customary land registration.
- Support the ECD plan and develop a State of Environment Report (SOE) as well as review the Solomon Islands NEMS to incorporate strategies aimed at addressing land degradation

5:2 Institutional level capacity development needs

- Support DAL to re-establish the Land Use Division (LUD), strengthen the capacity of Research Division to implement initiatives aimed at supporting rural communities address priority land degradation issues.
- Develop and strengthen capacity of the Research Section of the FD to conduct trials aimed at rehabilitating post-logged areas in collaboration with NGOs, Department of Agriculture and communities.
- Develop and strengthen capacity of the SNR to design, implement and monitor in-service training programmes to support priority training needs of the Agriculture and Forestry sectors.
- Strengthen capacity of the DAL , FD, Meteorological Services and NDC to develop and disseminate information to assist all stakeholders combat land degradation and mitigate the effects of drought.
- Through pilot projects, develop capacity of government, NGOs and training institutions to assist community-based organizations and tribes assess land capability, identify and assess land-use options, establish and implement land-use planning approaches.
- Appoint an appropriate staff within the Department of Agriculture to be the liaison and coordinating officer for the UNCCD and the NAP and have this work incorporated in his/her annual work programme.
- Strengthen capacity of NGOs to provide training and support communities address land degradation.
- Strengthen capacity of RTCs to establish and maintain demonstration plots and research trials that promote sustainable agriculture and agro-forestry.

5:3 Individual level capacity development needs

- Awareness-raising for national parliamentarians, senior government officers, NGOs, the general public and rural communities on Land Degradation issues in the country and on the country's obligations to the UNCCD and other MEAs.
- Short, targeted and practical-oriented training courses and on-the-job training attachments for government and NGO field staff on a range of technical skills needed to support initiatives aimed at combating land degradation and mitigating the effects of drought. See **Annex 4** for a detail list of training needs.

- Short, targeted and practical-oriented training courses for rural communities, targeting women and youth on soil conservation and soil enrichment techniques and approaches.
- Training in project cycle management, development of grant proposals, resource mobilization and communication strategies targeting government, NGO and community representatives.

6:0 Conclusions and Recommendations

The country's weak economy, increasing population, and unstable political climate whilst government is struggling to provide basic services to the rural areas has allowed uncontrolled and unsustainable development activities to take place, at the detriment of the environment, reducing soil fertility and land productivity.

The country must take advantage of the global community and their initiative to combat land degradation and mitigate the effects of drought, through active involvement and participation in their programmes.

As highlighted throughout this report, a series of capacity building activities were raised. It is recommended that:

- Raising awareness and training on land degradation issues and effects of mitigating drought, across all sectors within government, NGOs, institutions and communities, and to gauge an understanding of convention requirements and country's' obligation under the MEAs.
- Provide alternative livelihood options for rural communities to minimize the pressure on land, and adopt appropriate technologies that would improve soil fertility and promote traditional knowledge in food preservation and practices to mitigate effects of prolonged drought.
- Undertake Land-Use Planning schemes or establish pilot projects in rural areas who are experiencing land degradation, food shortages, deforestation due to logging, flooding, reef degradation, and promote traditional land use practices that are sustainable, or adopt appropriate technologies that would enhance mitigate the effects of drought.
- Adequately resource government agencies, Provincial Government, academic institutions, NGOs, RTC's and community-based organizations in their efforts to combat land degradation.

Annex 1

Inception Report

This inception report provides an outline of the methodology for completing the outputs of the UNCCD Thematic Assessment for the Solomon Islands National Capacity Self Assessment (NCSA).

The Thematic Assessments will be undertaken individually by each of the three consultants. The Crosscutting Assessment and identification of actions will also be undertaken by the individual thematic consultants. However, the team leader (Jackie Thomas) will coordinate the compilation of the crosscutting assessment and action plan reports. Each consultant will prepare a power point presentation on their own components for presentation at a final workshop.

Due to the synergies between the thematic and crosscutting assessments as well as the action planning, it is logical that some elements of these components can be carried out simultaneously, particularly in the review of resource documents and the questionnaire and interview components.

Thematic Assessment

Summary - Identification of gaps in meeting convention requirements and addressing national environmental issues and capacity development opportunities.

Objective – To develop a thematic profile that addresses the major needs, challenges and opportunities for capacity development in Solomon Islands in order to be able to implement the requirements of the UN Conventions on Biological Diversity (CBD), Climate Change (CCC) and Combating Desertification (CCD); and address national environmental issues. The thematic assessments will build upon the stocktaking exercise and involve consultation with major relevant stakeholders where possible.

Methodology –

- 1) Analysis of reports, strategies, policy documents and articles to identify, assess and prioritize the key capacity gaps and root causes, and opportunities for capacity development. This assessment will also consider:
 - i) Roles and responsibilities of government and NGOs
 - ii) Governance Processes and Structures
 - iii) Policy and Legal Development
 - iv) Programme Development and Implementation
 - v) Resourcing Human and Financial
 - vi) Ability of the Environment Division to fulfil its role and responsibilities as specified in the Solomon Islands *Environment Act 1998*.

Suggested resource and reference documents include:

- UNCCD, UNCCC, UNCBD Stocktake reports
- NCSA July 2006 Workshop Report (*to be provided by NCSA unit*)
- Capacity Assessment of the Environment and Conservation Division
- National Economic Recovery, Reform & Development Plan 2003-2006 (NERRDP)
- NERRDP Implementation Report
- Development Services Exchange Leadership Capacity Needs Analyses and Training reports (Makira, Western Province, Choiseul and Malaita)
- WWF Legislation and Policy Gap Analysis 2006
- Solomon Islands Government National Policy Document
- Department of Fisheries and Marine Resources Strategic Plan
- Audit Reports into Ministry for Natural Resources (Fisheries and Forests)
- Coastal Governance in Solomon Islands
- Rural Livelihoods Strategy
- SPREP Action Strategy for Nature Conservation 2003-2007
- SPC Oceanic & Coastal Fisheries Programmes, 2006-2008
- Solomon Islands National Environmental Management Strategy (NEMS)
- Isabel Province Development Plan 2003-2007
- Western Province Development Plan 2006-2010
- Marine Resource Management & Conservation in Solomon Islands: Roles, Responsibilities and Opportunities. (International Waters Programme Report).
- National Assessment of Environment, Natural Resources & Relevant Related Legislation & Regulation in Solomon Islands, Strategic Action Programme for the International Waters of the Pacific Small Islands Developing States. (IWP).
- Asian Development Bank - Solomon Islands Country Environmental Analysis: Mainstreaming Environmental Considerations in Economic and Development Planning Processes, Draft Final Report November 2005.

- 2) Categorize information into:
 - i) prioritized CCD issues
 - ii) cross cutting issues with CCC and CBD
 - iii) priority cross cutting issues common with National Government environmental management and sustainable development initiatives
 - iv) priority cross cutting issues with other regional and international Conventions and MEAs.

- 3) Formulate a matrix with the key issues (needs), opportunities and prospects for capacity development to identify those at the *systemic, institutional* (organisational) and *individual* level.

- 4) Commence draft Thematic Assessment report.

Workshop Power Point Presentation:

A power point presentation on the key issues of the thematic assessments for a National Consultation Workshop of stakeholders in the first week of October. The workshop will consider the draft report and make recommendations.

Finalisation of Report

The draft report will be finalised following feedback from the National Consultation Workshop. Deadline for completion is Friday 13th October 2006.

Timeframe:

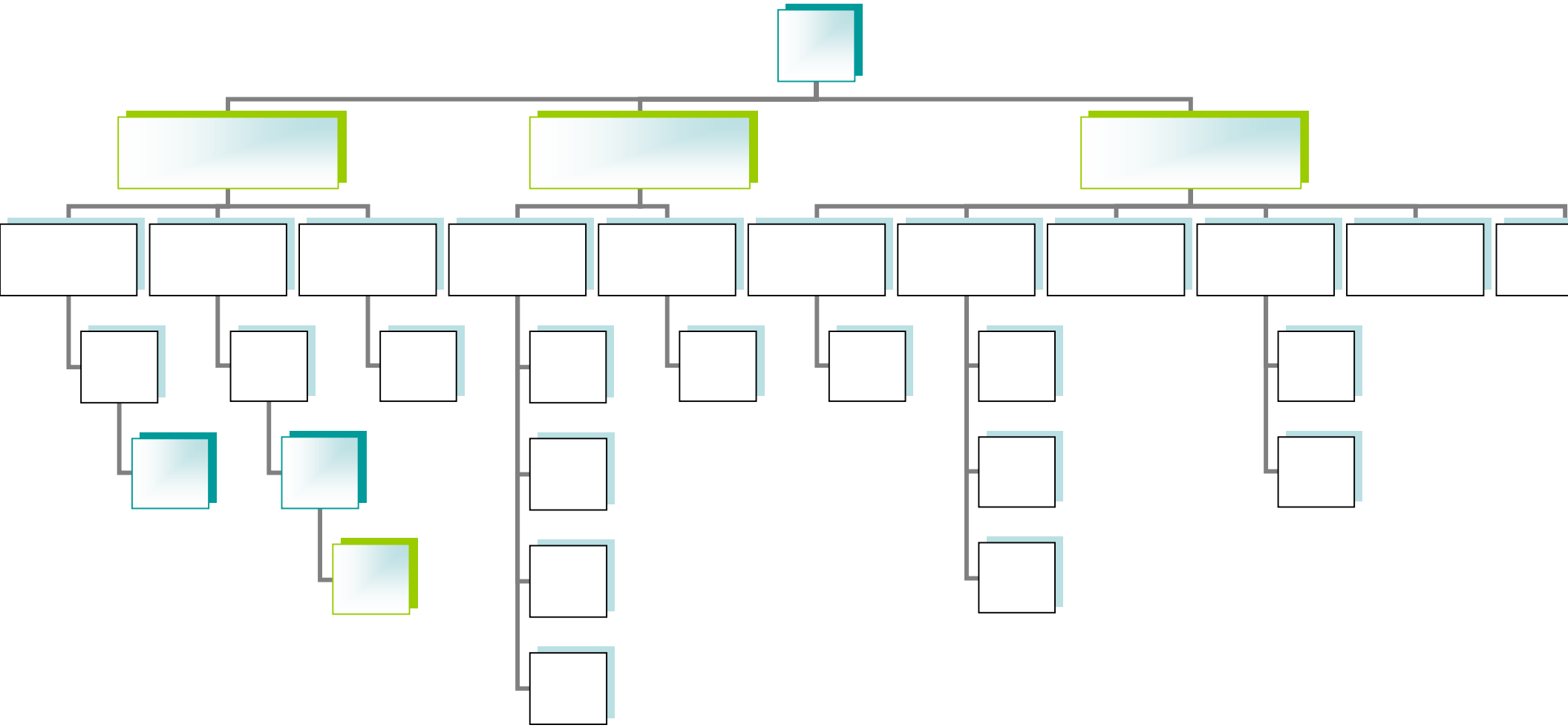
Inception Report	27 July 2006
Consultations 2006	27 July – 29 Sept
Progress Report & Meeting No 1 of Technical Working Groups August	28 August – 31
• Consulting team provide crosscutting issues report and priority actions reports to team leader	8 September 2006
• Team leader collate CCA report & Action Plan	18 September 2006
• Team leader circulate draft CCA & Action Plan to NCSA & consulting team for initial comment & feedback 2006	18-22 September
• Team leader complete edits to draft CCA & Action Plan 2006	22-26 September
Final Report	13 October 2006

Support/Resources Required from NCSA:

Support from the NCSA PMU may be required in the following areas:

- Guidance on format of reports and information required by the consultants
- Feedback on progress (to ensure the consultants are heading in the right direction with TOR)
- Accessing reports on behalf of consultants if necessary
- Printing of reports for technical working group members
- Organisation of technical working group meetings and final workshop

Problem Tree showing Land Degradation and its Causes Group 2



Annex 3: Specific training needed for stakeholders to effectively address land degradation and mitigate the effects of drought.

SC = Short courses TA = Training attachments WS = Workshops FTAC = Full time award courses S = Short seminars

Thematic area	Brief description of training needed	Type of training
Meteorology	Degree/Post Graduate studies in meteorology, weather, use of equipments and their maintenance, analysis of data, such as rainfall patterns for drought early warning systems	FTAC
Hydrology	Degree/Post Graduate in Water Engineer,.	FTAC
Farming systems	Degree/Post Graduate in Agriculture Engineer, farm systems and modeling, sustainable agricultural practices integrated with traditional knowledge and skills to maintain land productivity and soil fertility	FTAC
Agro-forestry	Degree/ Post Graduate studies in Agro-forestry, and agricultural systems, use of traditional agro-forestry practices and communal land tenure systems.	FTAC
Natural resource economics	Bachelors/Post Graduate studies in Resource and Environmental Economics	FTAC
Rural Sociology	Degree/Post Graduate studies in Sociology/ Anthropology,	FTAC
Community engagement	Public awareness, community building and participation Understanding rural livelihood, demographic structures and mobility, community organizations, etc.	SC/WS/TA
Agro-forestry	Management of inter-cropping forest trees, cocoa, and coconut plantations with short-term crops such as pineapples, vegetables, root crops, etc.	SC/WS/TA
Land-use planning	Understanding land resources and their potentials	SC/WS/TA
Soil conservation	Use of traditional methods in soil conservation and enrichment, use of organic materials, understanding soil structure, fertility and productivity, soil and food production,	SC/WS/TA
Use of GPS and GIS	GIS as a tool for decision making, map overlays and reading, application of GPS in boundary survey, identifying taboo sites, water catchments,	SC/WS/TA
Data management	Establish and manage information on land and soils, topography, agriculture opportunity areas and ability to disseminate and analyse information for public knowledge, production of information for farmers and communities,	SC/WS/TA
Forest conservation	Training on forest valuation and pricing, code of logging practice, environment law, forest and utilization act, eco-tourism, forest guides	SC/WS/TA

Research methods	Research methodologies, data collection and analysis of information, research on biodiversity, local ecology, research on traditional knowledge, post-logging/harvest areas,	SC/WS
EIA and SEA	Improve project designs, efficient use of natural resources, minimise land degradation and mitigate adverse environmental impacts, methods of undertaking EIA and SEA, understanding role of government agencies, institutions, community groups,	SC/WS
Small business management	Basic management skills in book keeping, finance and banking, how to manage a business,	SC/WS
Marketing	Market trends, WTO obligations, market pricing, accessing and maintaining markets, quality certified products, accessing low environmental impact market niches,	SC/WS
Project cycle management	Project appraisals, design, monitoring and evaluation for community groups (women and youth, institutions), Donor (GEF/EU/NZAID/etc) - project protocols, preparation, timeframes, obligations and compliance criteria for government officers, NGO's, institutions, etc	SC/WS
Communication strategy	Identifying target audience, design and prepare information, strategize what action to be taken as a result of the communiqué, strategize how information effectively reach communities and outlying islands	SC/WS
Water shed management	understanding hydrological cycles, develop methods of conserving and preserving water during prolonged drought periods, consider importance of water its uses and users,	SC/WS
Land degradation/UNCCD	Issues on land degradation, food security and water conservation	S
Mainstreaming NAP		S
Resource mobilization	Stock taking and sharing of resources, e.g use of SIISLAP for map interpretation on mining or plantation establishment,	S

Annex 4:

Sections of the Convention	Descriptions of the Convention
Part I	Introduction
<ul style="list-style-type: none"> Article 1 	Use of terms, e.g. “desertification” means land degradation resulting from various factor including climatic change and human activities, “combating desertification” include activities to develop areas for sustainable development aimed at prevention, rehabilitation and reclamation, etc.
<ul style="list-style-type: none"> Article 2 	Objective: to combat desertification and mitigate the effects of drought in countries experiencing severe drought in consistent with Agenda 21, to contribute to the achievement of sustainable development, improve productivity of land, rehabilitation, conservation and management of water resources to improve living conditions
<ul style="list-style-type: none"> Article 3 	Principle: parties are guided by spirit of cooperation, local community participation, partnership and coordination at sub-regional, regional and international levels.
Part II	General Provisions
<ul style="list-style-type: none"> Article 4 	General Obligations: parties to implement their obligation individually or jointly, through bilateral or multilateral arrangements in an integrated approach to address physical, biological and socio-economic aspects of desertification and drought
<ul style="list-style-type: none"> Article 5 	Affected countries are obliged to prioritize combating desertification and mitigate the effects of drought, establish strategies, address underlying causes, and allocate resources within their means, as well as promoting awareness and participation of local communities
<ul style="list-style-type: none"> Article 6 	Developed country parties are obliged to actively support, individually or jointly efforts of affected country parties to develop strategies, provide financial resources to combat desertification and mitigate effects of drought
<ul style="list-style-type: none"> Article 7 	Priority for Africa
<ul style="list-style-type: none"> Article 8 	Relationship with other Convention: parties are encouraged to coordinate activities under this convention and under other relevant agreements particularly, UNFCCC and CBD to maximize benefits and minimize duplication of activities in research, training, exchange of information
Part III	Action Programmes, Scientific and Technical Cooperation and Supporting Measures
Section 1:	Action Programme
<ul style="list-style-type: none"> Article 9 	Basic Approach: that affected country parties notify the Permanent Secretariat in writing of its intention to prepare a national action programme, NAP
<ul style="list-style-type: none"> Article 10 	The purpose of the NAP is to identify factors contributing to desertification and measures to combat desertification and mitigate effects of drought, specifies the role of government, local communities and land users, enhances meteorological capabilities to provide drought early warning systems, promote policies, develop cooperation and coordination, facilitate access to appropriate information and technology
<ul style="list-style-type: none"> Article 11 	Sub-regional and Regional Action Programmes aims to harmonize, complement and increase efficiency of national programmes, sustainable management of trans-boundary natural resources, scientific and technical cooperation
<ul style="list-style-type: none"> Article 12 	International Cooperation should cover fields of technology transfer, scientific research, information collection and dissemination and financial resources
<ul style="list-style-type: none"> Article 13 	Support for the elaboration and implementation of action programme, funding, replicability of pilot projects,
<ul style="list-style-type: none"> Article 14 	Coordination in the elaboration and implementation of action programme and develop operational mechanisms
<ul style="list-style-type: none"> Article 15 	Regional implementation annexes
Section 2	Scientific and technical cooperation

• Article 16	Information collection, analysis and exchange, integrated and coordinated to ensure systematic observation of land degradation, to better understand process and effects of drought and desertification
• Article 17	Research and development, that parties promote technical and scientific cooperation to combat desertification and mitigate the effects of drought, through appropriate institutions, integrate, enhance, protect, traditional knowledge, improved productivity as well as sustainable use and management of resources
• Article 18	Transfer, acquisition, adaptation and development of technology, that are environmentally sound, economically viable and socially acceptable, relevant in combating desertification and mitigate the effects of drought, through technical and financial cooperation, particular attention to social, cultural, economic and environmental impact of such technology
Section 3	Supporting measures
• Article 19	Capacity building, education and public awareness: that recognition of capacity building, training and development through participation, strengthening research and extension services to disseminate relevant technology and adoption, organize, encourage and promote public participation and awareness, develop educational material, strengthen institutions and training centers, extend networking to harmonise programmes exchange experiences with intergovernmental and non-governmental organizations to avoid duplication
• Article 20	Financial resources: parties must ensure that adequate financial resources are made available, promote additional funding from Global Environment Facilities, promote innovative methods and incentives for financial resources, explore cooperation with bilateral and multilateral, joint consortia and parallel funding,
• Article 21	Financial mechanism: parties shall promote availability of financial mechanism, facilitate provisions, promote multi-source funding, provide information on available funding sources, establish funding mechanisms such as national desertification funds, coordinate national development programmes to ensure efficient use of available financial resources,
Part IV	Institutions
• Article 22	Conference of the Parties: is the supreme body of the Convention, makes decisions, review implementation, functions, arrangements, promote and facilitate information exchange, establish subsidiary bodies, review reports, agree and adopt rules of procedure and financial rules, adopt amendments, promote and strengthen relationships,
• Article 23	Permanent Secretariat: functions is to make arrangements for sessions of COP and its subsidiary bodies, compile and transmit reports, facilitate requests and communication of information, coordinate activities, provide guidance to COP, administrative and contractual arrangements, perform secretarial functions,
• Article 24	Committee on Science and Technology: established as a subsidiary body of the COP, provide scientific information, guidance, advice on technological matters, multidisciplinary and representative of relevant fields of expertise in science and technology relevant to combating desertification and mitigating drought,
• Article 25	Networking of institutions, agencies and bodies: the committee of science and technology make survey and evaluation of existing relevant networks, makes recommendations to facilitate strengthening of networking at national, regional and international levels,
Part V	Procedures
• Article 26	Communication of information: each party communicate to COP through the permanent secretariat, on measures taken on implementation of convention, provide descriptions of strategies established, detailed descriptions of implementations of NAP, information on financial resources provided and used, as well as identifying technical and financial needs associated with action programmes,
• Article 27	Measures to resolve questions on implementation: COP shall adopt procedures and mechanisms to resolve questions that may arise

	regarding the implementation of the Convention
• Article 28	Settlements of disputes: parties shall settle disputes in the interpretation or application of the Convention through negotiation and other peaceful means, in acceding to the Convention parties recognizes (a) arbitration in accordance with COP procedures (b) submission of dispute to International Court of Justice
• Article 29	Status of annexes: annexes form an integral part of the Convention, parties shall interpret provisions on the annexes in a manner that is in conformity with their rights and obligations under the articles of the Convention
• Article 30	Amendments to the Convention: any party may propose amendments, amendments shall be adopted at ordinary sessions of the COP, proposed amendments shall be communicated to parties through the permanent secretariat, amendments to convention by consensus or by two-third majority vote by those present,
• Article 31	Adoption and amendment of annexes:
• Article 32	Right of vote: each party of the Convention shall have one vote, regional integration organizations can exercise right to vote with number of votes equal to number of their member states,
Part VI	Final Provisions
• Article 33	Signature:
• Article 34	Ratification, acceptance, approval and accession: Convention shall be subject to ratification, or accession by states,
• Article 35	Interim Arrangements:
• Article 36	Entry into force: Convention shall enter into force on the ninetieth day after the date of deposit of the fiftieth instrument of ratification,
• Article 37	Reservations: no reservations may be made to this Convention
• Article 38	Withdrawal: any time after three years from date the Convention has entered into force a party may withdraw by written notification,
• Article 39	Depository: the Secretary General of the United Nation shall be the Depository of the Convention
• Article 40	Authentic texts:

Reference

Asian Development Annual Report 2005

Asian Development Bank, *Key Indicators of Developing Asian and Pacific Countries*, 2004

Bond A, Gilling J, and Hughes T (May 2006). *Solomon Islands Forestry Sector Review*, Final Report to AusAID's Solomon Islands Country Programme.

Central Bank of Solomon Islands (2006), *Annual Report 2005*, Honiara, Solomon Islands.

Constitution of Solomon Islands, Statutory Instruments, 1978 No. 783 Pacific Islands, The Solomon Islands Independence Order 1978.

Convention on Combating Desertification with Annexes. Prepared for Paris signing on 14-15th October 1994. GE94-64371, United Nations, 1993.

Department of Forestry, Environment and Conservation Annual Report 2005.

Draft Mauritius Strategy for the further Implementation of the Programme of Action for the Sustainable Development of Small Island Developing States. International Meeting to Review the Implementation of the Programme of Action for the Sustainable Development of Small Island Developing States, Port Louis, Mauritius, 10-14 January 2005.

Global Environment Facility Operational Programme on Sustainable Land Management 2003

Global Conference On The Sustainable Development Of Small Island Developing States
Bridgetown, Barbados, 25 April-6 May 1994 United Nations General Assembly A/Conf.167/9
Distr. General, October 1994, Report.

Hauirae, J (2003). *National Assessment of Environment, Natural Resources and Relevant Related Legislation and Regulation in Solomon Islands, Strategic Action Programme for the International Waters of the Pacific Small Islands Developing States*, International Waters Programme Solomon Islands, Technical Report 2003/02.

Iroi C, Yee D, and Lam M (2006). *The Capacity of Solomon Islands to Meet its Obligation Under the United Nations Framework Convention on Climate Change, A National Capacity Self-Assessment*.

Kabutaulaka T. *chap 6: Rumble in the jungle: land, culture, and unsustainable logging in solomon islands*

McDonald, J & Lam, M (July 2006). *National Capacity Self-Assessment Stocktake Report Convention on Biological Diversity*.

McGovern, Kieren, & Choulai, (2005) *Case Study of Solomon Islands Peace and Conflict-related Development Analysis*, UNDP Human Development Report 2005,

McIntyre, M (2006) UNDP-GEF *National Capacity Self Assessment (NCSA) United Nations Convention to Combat Desertification (UNCCD) Stocktake Report*.

National Economic Recovery, Reform and Development Plan 2003-2006, Solomon Islands Government, Strategic and Action Framework, Department of National Reform and Planning, Honiara, October 2003.

Plan of Implementation of the World Summit on Sustainable Development.

Solomon Islands Government 2005, *Enabling Activity for the preparation of Solomon Islands second National Communication to the UNFCCC*, Honiara Solomon Islands.

Solomon Islands Forestry and Conservation Programme Implementation Protocol Stabex, 7 August 2006.

Solomon Islands Government 2002, *National Economic Recovery, Reform & Development Plan 2003-2006*, Department of National Planning and Aid Coordination. Honiara Solomon Islands

Solomon Islands Government *National Economic Recovery, Reform and Development Plan, Implementation Report*, September 2005, Department of National Planning and Aid Coordination.

Solomon Islands Government, Office of the Prime Minister 2006, *Solomon Islands Government National Policy Document, Grand Coalition for Change Policy*, Honiara Solomon Islands.

Solomon Islands Government, The Revised Solomon Islands Code of Logging Practice, Ministry of Forests, Environment and Conservation, May 2002.

Solomon Islands Sustainable Rural Livelihoods and Broad Based Growth Strategy Draft Final Document, December 2004, Australian Agency for International Development.

Solomon Islands, *The Environment Act 1998*, (No. 8 Of 1998)

Solomon Islands, *The Forest Resources and Timber Utilisation Act Chapter 40* (Rev Ed 1996)

Solomon Islands, *The Land and Titles Act Chapter 133* (Revised Edition 1996)

Solomon Islands, *The Quarantine Act Chapter 106* (1996 Edition)

Solomon Islands, *The Town and Country Planning Act Chapter 154* (Revised Edition 1996)

Solomon Islands, *The Wildlife Protection and Management Act 1998*, (No. 10 Of 1998)

South Pacific Regional Environment Program (SPREP) 2004, *Review of the organizational requirements for the Environment and Conservation Division to implement the Environment Act 1998 and Wildlife Protection and Management Act 1998*, Honiara Solomon Islands

Tuhanuku, J. (2000), *Solomon Islands on the cross road and in need of the Wisdom of King Solomon*, Asia Pacific Press, ANU.

United Nations Convention Text to Combat Desertification, 12th September 1994

Zutu. R, (2002), *Transforming Land Conflict*, FAO/USP/RICS Foundation South Pacific Land Tenure Conflict Symposium

Barbados Programme of Action URL: www.unep.ch/regionalseas/partners/sids.htm
Climate Change Convention URL: www.unfccc.de
Commission on Sustainable Development URL: www.un.org/esa/sustdev/csd/policy.htm
Convention to Combat Desertification URL: www.unccd.int/
Desertification Convention URL: www.unccd.ch/
Food and Agriculture Organisation of the United Nations URL: www.fao.org
SPC URL: www.spc.org.nc
SPREP URL: www.sprep.org
United Nations Conventions URL: www.earthsummit2002.org/roadmap/
United Nations Environment Programme URL: www.unep.org
United Nations URL: www.un.org
Local Sustainable Development Planning: Manual for Local Sustainable Development Strategy Formulation
<http://www.capacity.undp.org/index.cfm?module=Library&page=Document&DocumentID=5193>
Capacity Development: Lessons of Experience and Guiding Principles
<http://magnet.undp.org/Docs/cap/CDPRIN1.htm>