SIGNATURE PAGE

Country: St. Vincent and the Grenadines

UNDAF Outcome(s):

A strong sustainable environmental management

system in place supported by UNDP-GEF.

Expected Outcome(s)/:

Sustainable land management linked to poverty

reduction, MYFF Service Line 3.4

Expected Output(s)/:

Land use policies and plans developed and made

available.

Implementing partner:

FAO, UNDP-GEF

Other Partners:

CEHI

Programme Period: 2007 -2011

Programme Components

Project Title: LDC -SIDS Targeted Portfolio Approach for Capacity Development and Mainstreaming of

Sustainable Land Menagement.

Project ID: 00046250. Project Duration: 4 years.

Management Arrangement: NBX

Total Budget	\$1,862,760
GBF Trust Fund	\$485,000
Allocated resources;	\$1,377,760
o BU	\$792,000
O CWSA	\$82,500
o VINLEC	\$82,500
o FAO	\$8,000
 Global Mechanism 	\$10,000
In kind contributions:	• •
 Government 	\$402.760

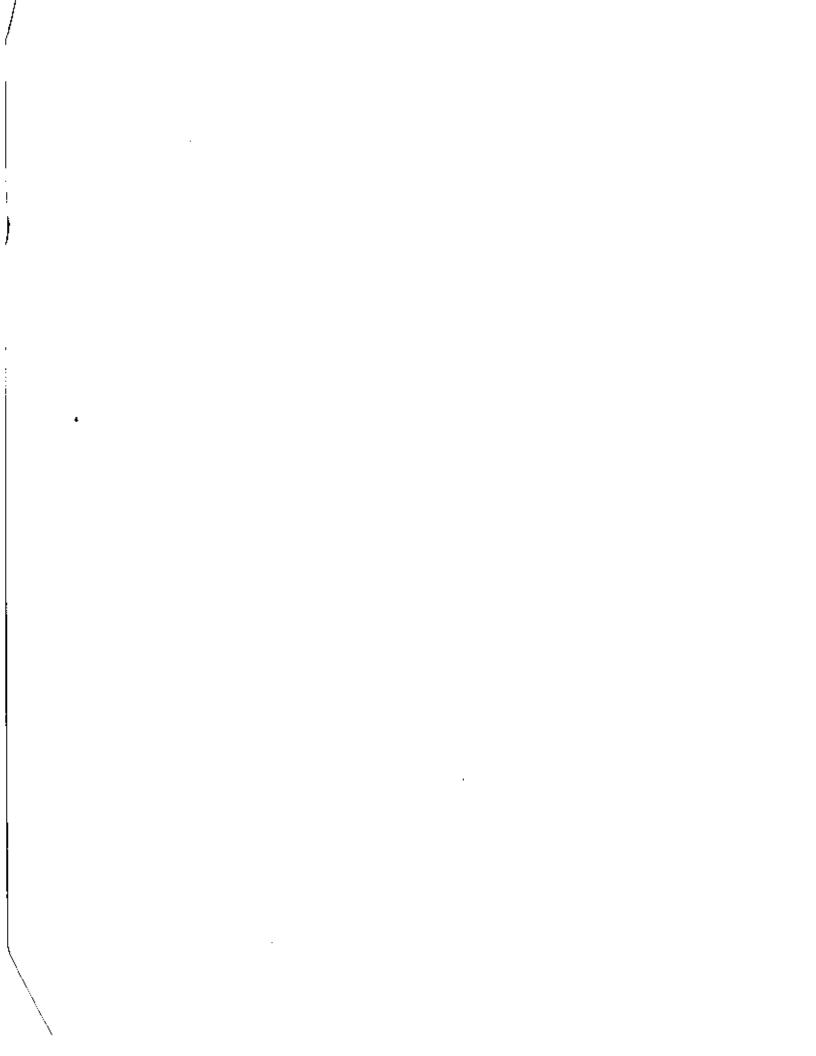
KKB De 1981 Set Lieft College Berkert and a red a reserve or an a large construction of the college of the coll	
	IDENTIFICATION AND AND AND AND AND AND AND AND AND AN
	987Y 1946 & SEAR ANN ANN AN AM AN AM AN
- 11.1998/Petra 9.2595-0.245/Petra 9.259-0.259-0.259-0.259-0.259-0.259-0.259-0.259-0.259-0.259-0.259-0.259-0.2	113 DEGENTEES 1990 SALENDER GEREEMEN DE LANGE EN DE LEGENSE EN DE LEGENS EN DE LEGENS EN DE LEGENS DE LEGENS E
- MANGEROOF IN SEE MEDICARY EIGER AUBER AUGUST TERMEN AND ALANAMAS EIGER AND AN A	600°00AH 1500°06569 CANGOSEKASOR WAYO CHGOYIKO 1509°C KATAOFE CAN
- MBC 3.5 (No. 1991) (1991) (Archive Laboratoria Procession (Archive Material Procession Archive)	SECRETARIS DE CONTRACTOR D
- 魔鬼: 据总统在1000年代的代表的现在分词 计表示 化氯化物 化氯化物 化二氯化物 化二氯化物 医电影 化二氯化物	Carlo I. I. I. Digital di Lauri Nacionesia (100 di 100
- 化对替用 (4.000) 医克勒特氏 (4.000) 医克勒特性	1965年 2640年 6月 日本 - 62 (東京) 1904年 1907年 27 (東京) 1904年 2月 (東京) 1965年 1月 (東京) 1965年 1月 (東京) 1965年 1月 (東京) 1965年 1
	1986 B. B. B. B. B. & B.
。图1966年1978年1978年1978年1978年1978年1978年1978年1978	auteur kana aras naventra (egona Evolucia ili estella del Escapa del Eliza del Albania e Colonia del Albania e
- 我说她说我的一点说,我还是我们的话的话,这一个人的人,我们们还没有一点的话,我把我们不得是我的人	19 医克莱斯氏试验检 医皮肤病 化双氯甲基甲基酚基甲基酚 (1974) (1976) 医原皮 医线线 (1984) (1977)
- 化多类类似性 医克里特氏 化氯化物 经有效的 医多种性 医克特氏病 化二氯化 医多种皮肤 经基础证券	70 BC 1997 FOOT A 1963 WAR WAS A SOUTH GOTHER SERVICES AND AND CONTRACT
- 確認すべきがっから 自動 アメリアといな こうじょし としゃ しょうしゅうほん えんしょりゅうにんじゅかん だいかんだい	ROMAN BULLETON OF SERVEY OF HER WAS A PROPERTY OF THE PROPERTY
- 随着的"原料""结构结构"。 "我们在这样特殊,这一个1人,我们是这位的是这样,是一种最级	并准备 (1.0mm) 16.0%(6.4% 20.0%) 20.0%(20.0%)
- 確保的に保持される。 というしょうしょく しょうしょう はいしょうしょ はんしゅん しんしょくかい	企为12: 27年1月7日的9月2日 11日 25年6月 12:4月1日 21日前2日前14日前4日 15日本月年 18日2年提出前日
- 現業(10)(4-4)(5)(2)(5)(5)(4)(10)(5)(5)(5)(5)(5)(5)(5)(5)(5)(5)(5)(5)(5)	大学 7.500×1666 (1988) - 1885-1986 (1988) - 1885-1988 (1986) - 1885-1988 (1986) - 1885-1988 (1986) - 1885-1988
	13 COMPENIE NI USANASO BARANSO SA PARANTANA EN BARANTANA PARANTANA PARANTANA PARANTANA PARANTANA PARANTANA PAR
植物质 化二氯磺基酚 医克斯特氏 医二十二氏 医二氏性 医二氏病 医多种病 医二氏病 医动物性毒素	自己的数据,100 日产的特殊的企业的自己的特别的企业的企业的企业的企业的企业的企业的企业。
· 被助所的,但可以可以使用的。	4. 1 - 10 C - 5 10 - 6 10 00 00 00 0 6 1 1 0 2 16 15 17 19 00 15 17 19 17 1 (6) 1 - 12 1 1 2 2 4 1
- NY KORY NY SERIE A LA GARAGE AND	[#####] [Politika ###]
	大学 (1975年) 15 (1975年) 16 (1975年) 17 (1975年)
· \$2000 (1911) [1914] [1915] [1915] [1915] [1915] [1915] [1915] [1915] [1915] [1915] [1915] [1915] [1915] [1915]	化过去式和复数形式 化多数多数多数 化多数多数多数多数多数多数多数 化二氯甲基甲基甲基甲基甲基甲基甲基甲基甲基甲基甲基甲基甲基甲基甲基甲基甲基甲基甲基
CONTROL OF A CONTROL OF THE CONTROL	
[68]\$\$ \$\$ \$1 \$4 \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	an ang ang ang ang ang ang ang ang ang a
- PACKER (SECOND DAYOU DIENT DE LA COMPRENCION DE SECONDO DE LA COMPRENCION DE COMPRENCION DE COMPRENCION DE C	\$
	######################################
	A STATE OF THE PROPERTY OF THE
, ,	,

Agreed by UNDP:

Rosina Wiltshire

Resident Representative

23/04/2008







Government of St. Vincent and the Grenadines

United Nations Development Programme and
The Global Environment Facility

Capacity building and Mainstreaming of Sustainable Land Management in St. Vincent and the Grenadines

PIMS 3416 – Atlas Project ID 00046250

This project will promote the mainstreaming of Sustainable Land Management in St. Vincent and the Grenadines through institutional, individual and systemic capacity building. Institutional capacity building will be directed at creating synergies to facilitate maximization of resources in the effective delivery of technical support to government agencies, the private sector, community-based organizations and civil society groups. Systemic capacity building will address issues of land tenure, technology needs and availability, and the roles of individuals, private sector and non-government organizations in supporting sustainable land management. The project will provide support for the evolution of community-based livelihood initiatives targeting rural communities and vulnerable groups.

The project objective is: To strengthen and/or develop capacities for sustainable land management in relevant government ministries, the private sector, and civil society organizations, and to mainstream sustainable land management into national development planning. The project will realize five outcomes: (1) SLM is mainstreamed into national development policies, plans and regulatory frameworks (inclusive of completion and ratification of the National Action Plan), (2) Individual and institutional capacities for SLM are developed, (3) Capacities for knowledge management in support of SLM are developed, (4) Investment planning and resource mobilization for implementation of SLM interventions are elaborated and (5) Adaptive Management and Learning. The three-year project will be implemented by the Environmental Services Unit in the Ministry of Health and the Environment using a multi-stakeholder participatory approach involving public, private and non-governmental organizations.

The total budget of the project is US\$ 1,877,760 of which US\$ 500,000 will be the GEF increment





Expedited Medium Size Project proposal under the

LDC-SIDS Portfolio Project for Sustainable Land Management REQUEST FOR GEF FUNDING

AGENCY'S PROJECT ID: PIMS 3416 - Atlas

Project ID 00046250 GEFSEC PROJECT ID:

COUNTRY: St. Vincent and the Grenadines

PROJECT TITLE: Capacity building and Mainstreaming of Sustainable Land Management in

St. Vincent and the Grenadines.

GEF AGENCY: UNDP

OTHER EXECUTING AGENCY (1ES): Ministry

of Health and Environment.

DURATION: FOUR (4) YEARS (2007 - 2011)
GEF FOCAL AREA: Land Degradation
GEF OPERATIONAL PROGRAM: OP 15
GEF STRATEGIC PRIORITY: SP 1

ESTIMATED STARTING DATE: November 2007

FINANCING PLAN (US\$)				
GEF PROJECT/COMPONENT				
				
Project	485,000			
PDF A	15,000			
Sub-Total GEF	500,000			
Co-financing	•			
GBF Agency				
Government	402,760			
Bilateral (EU)	792,000			
NGOs				
Others (CWSA, VINLEC,	183,000			
FAO, GM)				
Sub-Total Co-financing:	1,377,760			
Total Project Financing:	1,877,760			
FINANCING FOR ASSOCIATE ANY:	D ACTIVITY IR			

CONTRIBUTION TO KEY INDICATORS OF THE BUSINESS PLAN: The project will mainstream sustainable land management into St. Vincent and the Grenadines's social and economic development agendas and build institutional and individual human resource capacities for sustainable land management with environmental benefits accruing to forest and agricultural lands estimated at 15,200 hectares.

Country Eligibility: St. Vincent and the Grenadines ratified the United Nations Convention to Combat Desertification on March 16th 1998 and is eligible for funding under paragraph 9(b) of the GEF Instrument.

RECORD OF ENDORSEMENT ON BEHALF OF THE GOVERNMENT:

(Enter Name, Position, Ministry) Date: (Month, day, year)

Operational Focal Point Endorsement

CCD national Focal Point and date of approval Edmund Jackson

This proposal has been prepared in accordance with GEF policies and procedures and meets the standards of the GEF Project Review Criteria for a Medium-sized Project under the LDC-SIDS Targeted Portfolio Project for Sustainable Land Management.

John Hough

UNDP-GEF Deputy Executive Coordinator, a.i.

Paula Caballero

Regional Technical Advisor Project Contact Person:

Tel. and email: 507 302 4571 Paula.caballero@undp.org

Date: 26 September 2007

Table of Contents

<u>Subject</u>	Page
ACRONYMS	5
SECTION I: ELABORATION OF THE NARRATIVE	6
PART I: SITUATION ANALYSIS - BACKGROUND AND CONTEXT	
Environmental context	
Socio-economic context	
Policy, institutional and legal context.	
Table 3 Regional and International Conventions to which St. Vincent and t	
Grenadines is signatory.	
Table 4 Legislative instruments of relevance to land management in St. Vinc	
and the Grenadines	
Causes of Land Degradation	23
PART II: PROJECT STRATEGY - PROJECT DESCRIPTION	30
Baseline course of action	30
Capacity and mainstreaming needs for SLM	32
Project rationale and objective	.,,35
Expected project outcomes, and outputs	
Global and local benefits	
Linkages to IA activities and programs	40
Stakeholder Involvement Plan	
Table 5. Key Stakeholders and envisaged roles.	
Financial Plan	
Streamlined Incremental Costs Assessment	
Table 6. Project Budget	
Table 7. Detailed description of estimated co-financing sources	
Table 8 PROJECT MANAGEMENT BUDGET/COST	
Table 9 Consultants Working for Technical Assistance Components:	49
PART III: MANAGEMENT ARRANGEMENTS PROJECT IMPLEMENTATION PROCESS	51
Institutional framework and project implementation arrangements	
Implementation Arrangements.	
Responsibilities by Outcome (lead agencies)	
PART IV: MONITORING AND EVALUATION	
MONITORING AND EVALUATION PLAN	
Table 10: Monitoring and Evaluation (M&E) Plan	
SECTION II: STRATEGIC RESULTS FRAMEWORK	
Table 11: Project Logical Framework	
Table 12: Activity Schedule	
Table 13: Summary Budget and Co-financing	71
SECTION III: ADDITIONAL INFORMATION	72
PART 1: GEF Operational focal point endorsement letter	72

Part II: C	Co-Financing Letters	72
Part III:	Detailed Information	72
Annex 1	Total Budget and Work Plan	73
Annex 2	St. Vincent and the Grenadines geography and Land Use (mainland, 1996)	77
SIGNATU	RE PAGE	78

.

.

.

.

•

.

.

ACRONYMS

CARICOM Caribbean Community

CBD Convention on Biological Diversity
CBO Community-based Organization

CEHI Caribbean Environmental Health Institute
CWSA Central Water and Sewage Authority

BA Executing Agency

EIA Environmental Impact Assessment ESU Environmental Services Unit

ESDU Environment and Sustainable Development Unit

EU European Union

GAP Good Agricultural Practice
GEF Global Environmental Facility
GIS Geographical Information System

GOSVG Government of St. Vincent and the Grenadines

IA Implementing Agency

IFMP Integrated Forestry Management Programme

KAP Knowledge, Appraisal and Practice

LIS Land Information System

MAFF Ministry of Agriculture, Forestry and Fisheries

MEA Multilateral Environmental Agreement

MFEP Ministry of Finance, Economic Planning, National Security, Legal Affairs and

Grenadines Affairs

MOHE Ministry of Health and the Environment

MOHPP Ministry of Housing, Informal Human Settlements, Physical Planning, Lands and

Surveys

MSP Medium-sized Project

NAP National Action Programmes

NBSAP National Biodiversity Strategy and Action Plan

NCSA National Capacity for Self Assessment
NEAB National Environment Advisory Board
NEMS National Environment Management Strategy

NEX UNDP National Execution

NGO Non-governmental Organization

OECS Organization of Eastern Caribbean States

SGP Small Grants Programme
SIDS Small Island Developing States
SLM Sustainable Land Management
SVG St. Vincent and the Grenadines

UNCCD United Nations Convention to Combat Descrification

UNDP United Nations Development Programme
UNEP United Nations Environmental Programme

UNFCCC United Nations Framework Convention on Climate Change

VINLEC St. Vincent Electricity Services

SECTION I: ELABORATION OF THE NARRATIVE

PART I: SITUATION ANALYSIS - BACKGROUND AND CONTEXT

Environmental context

Physical attributes

- 1. Saint Vincent and the Grenadines (SVG) is a multi-island State within the archipelago of islands in the Caribbean Sea called the Antilles. The country consists of thirty-four islands, islets and cays and is situated 13° north latitude, and 61° west longitude. It is approximately 150 kilometers west of Barbados, 40 kilometers southwest of St. Lucia, 110 kilometers north-northeast of Grenada, and 270 kilometers north of Trinidad and Tobago. The main island, St. Vincent, lies to the extreme north, is roughly elliptical in shape, 30 kilometers long and 16 kilometers wide, with an estimated land area of 340 sq. km. The Grenadines cover a land area of approximately 50 sq. km. and stretch a distance of 72 km. to the southwest of the mainland, St. Vincent. The seven inhabited Grenadine islands are Bequia and Mustique in the Northern Grenadines; and Union, Canouan, Mayreau, Palm Island, and Petit St. Vincent in the Southern Grenadines. In addition there are a number of uninhabited islets and rocks, including the Tobago Cays, which are of environmental, historic and economic significance.
- 2. The main topographical feature of St. Vincent is the rugged, thickly forested central mountain range that runs in a north-south direction. The highest point on the island, the La Soufrieré Volcano, rises to 1,234 meters. Other peaks range in height from 800 to 1,100 meters. Highly dissected ridges and valleys, which extend to the coast, characterize the topography on the leeward side. The spurs are steep and the valleys deep and narrow. The windward side is dominated by more gently undulating foothills, shallow valleys and extensive coastal plains. There are many drainage systems of small streams and rivers. As such, the mainland is divided into thirteen watershed areas. The Grenadines are low-lying, with the highest point at 330 meters, Mt. Taboi on Union Island. The second highest point, Mt. Royal, on the island of Canouan, is 290 meters high.
- 3. La Soufrieré is an active volcano which has erupted five times in recorded history; 1718, 1812, 1902, 1974, and 1979. On several of these occasions, the toll in terms of human lives, property, and disruption of agricultural activity has been significant. Settlements within the areas of extreme risk with respect to volcanic eruptions are located to the north of the Rabacca and Wallibou Rivers, and include Sandy Bay, Point, Owia, and Fancy.
- 4. There are no major faults or folds anywhere in the country. St. Vincent and the Grenadines occasionally experience earthquakes associated with activity of the La Soufrieré volcano and suffer minor effects from seismic events in the Caribbean Basin.

Climate

5. The country has a humid tropical climate. The temperatures range from approximately 18° C to 33° C, with an annual average of around 26°C. Temperatures tend to be cooler on the higher elevations of the mainland's interior due to the orographic influences of the central

mountain range. There are two distinct seasons: a dry season from January to May, and a wet season from June to December, with the wettest period between June and September. On the mainland, the annual rainfall varies from 2,000 mm on the extreme south coast to 6,000 mm in the mountainous interior. Rainfall intensity decreases from north to south and from the windward side of the island to the leeward coast. The evapotranspiration rate averages 1,250 mm a year along the coast and decreases progressively with altitude. Precipitation is significantly lower in the Grenadines. The average annual rainfall on Bequia, Union and Canouan is about 1250 mm per year. The wettest months are June to November when the monthly average is 150 mm, while the driest period is from February to April during which the average monthly rainfall is around than 250 mm. No rivers and streams are found in the Grenadines.

- 6. Although St. Vincent and the Grenadines is located south of the main Hurricane Zone, the country but has suffered the impact of several severe storms in the past. Most recently, in 2004 the passage of Hurricane Ivan caused extensive damage from flooding, high winds, storm waves, and landslides, particularly on the coastline, destroying settlements and major infrastructural development. Extended drought can bring on ravages particularly in the agricultural sector. The longest and most severe drought in living memory in St. Vincent occurred between December 2002 and April 2003.
- 7. Scientists predict that global warming and associated climate change may cause an increase in the intensity and frequency of storms and hurricanes. Poor land management and deforestation in light of climate change impacts can therefore be a formula for disaster.

Natural resources

- 8. The natural vegetation of SVG occurs in several stages of development and/or disturbance caused by human and natural (volcanic) interventions. It is therefore defined by a climax vegetation formation based on environmental gradients. The concentric variations of rainfall with elevation give rise to concentric variations in vegetation. The slopes of the La Soufrieré volcano have been subject to the frequent disturbance of vegetation by volcanic eruptions, however it shows both the success of re-vegetation along with the variation of vegetation with elevation. This concentric variation in vegetation is modified by factors of topography and geology in the Grenadines, which have lower relief, and a more semi-arid climate than the mainland. The soils of the Grenadines are shallow with a uniform vegetation distribution of scrub and cacti vegetation. The physical and environmental conditions of rainfall, soils, elevation, terrain, and exposure to the trade winds, on these small islands, result in a remarkable diversity of eco-systems and forest types.
- 9. The following is a summary of the vegetation types that exist on the island
 - Elfin Woodland: Found on exposed summits above 500 metres on both sides of the
 central mountains. They consist of pure stands of dwarfed trees about three metres in
 height covered with epiphytes. This vegetation type is commonly associated with the
 Palm Brake vegetation type.

- Rain Forest: Confined to areas in the upper Colonarie, Cumberland and Buccament Valleys between 300 and 488 metres.
- Lower Mountain Forest: This vegetation type did not exist at the time of Beard's survey in the 1940's, the forests having been felled for construction purposes and the land cultivated in the early colonial period.
- Palm Brake: This refers to a sub-climax type typically at elevations over 500 metres
 arising after disturbances such as land slides or tree-falls (opening up the forest canopy).
 The land is covered initially by mosses, then by small tree fems and heliconias followed
 by the characteristic Mountain Cabbage Palms.
- Secondary Rain Forest: This type describes the resultant forests arising from
 disturbances from volcanic eruptions, hurricanes and human activity. The largest areas
 lie around the Soufriere Mountains. The vegetation ranges from almost bare soil on the
 upper slopes of the Soufriere volcano to significant stands of new forest at lower
 elevations.
- Deciduous Seasonal Forests/Cactus Scrub: On the dry southern and southwestern
 coasts of St. Vincent and the Grenadines where the soils are extremely thin, deciduous to
 semi-deciduous and xerophytic species predominate.
- Littoral Woodland: This type of vegetation is characterized by manchineel, button
 mangrove, sea grape and similar species. They exist as small narrow strips along the
 eastern coastline on St. Vincent and on a number of the islets and cays of the Grenadines.
 This type of vegetation is fast disappearing as development takes place along the coast.
- Swamp: Only small areas of swamp occur in St. Vincent and the Grenadines. These exist
 in the southern section of the main land on the coast and on a few of the Grenadine islets.
 The typical species found in these areas are Red Mangrove, Black Mangrove, White
 Mangrove and Button Mangrove.

Historical perspective on land management in SVG

- 10. Deforestation for timber and agriculture has long been known to have deleterious effects on the environment of St. Vincent and the Grenadines. Throughout most of the colonial era sugarcane was the principle crop, cultivated as a mono-crop in large estate plantations mainly in the lowlands. Temporary crops (root crops and vegetables) and tree crops were cultivated on a smaller scale but on the more marginal interior lands. In 1791 the colonial authorities enacted one of the first pieces of environmental legislation in the world with the enactment of the Kings' Hill Forest Reserve Act. This was done to conserve runoff to the surrounding cultivated lands in a relatively dry part of the island; this action served to protect this unique dry land forested area to this day. The legislation was followed by some specific measures to control the loss of top-soil, and land degradation; these were:
 - No land above the 300-meter contour was to be planted in sugar canc;
 - Steep sided slopes and gullies were to be kept in natural vegetation; and

- Hilltops were to be kept in forest or woodland.
- 11. Farming practices in SVG evolved a culture of land conservation during the period under colonial control which incorporated contour farming on slopes with intermittent rows of Vetiver grass which reduced erosion, leaching and water loss, while maintaining habitats in support of biodiversity conservation. Crop rotation was also practiced whereby the land was left fallow for every five or six years. In areas where these good practices were maintained, the lands have maintained high yields over several generations with the absence of significant land degradation.
- 12. In spite of the successes of these early official soil conservation initiatives, planters eventually discovered that at several locations the soil profile comprised of deep-layered volcanic ash of depths of up to fifty (50) meters, and that soil loss was permissible without appreciable loss of crop yield. This realization ultimately lead to reversion to poor cultivation practices with the loss of topsoil at an accelerated pace.
- 13. When lands were converted from sugarcane to banana cultivation from the 1960s, emphasis was on the maximization of plant stocking density. The fact that banana could be cultivated more economically in more varied terrain than sugarcane, led to its rapid expansion well into the interior with loss of forest cover. In recent years illegal marijuana cultivation has spread into St. Vincent's rugged highland forested areas. Many social and economic drivers are causing cultivation to spread and the practice is warranting concern over land degradation in the absence of effective measures to curb the practice.
- 14. According to the FAO report "The State of the World's Forests 2001", forest cover on SVG was estimated at 6,000 hectares in 2000. This was down from 7,000 hectares estimated in 1990. This corresponds to an annual rate of change in forest cover of -1.4%. This is a significant change in the context of historical estimates of forest cover; in 1945 forests covered approximately 50% of the total land area. At present 70% of forest cover is classed as natural forest, 25% plantation forests, with approximately 5% classed as agro-forestry types (tree crops mixed with other agricultural commodities).
- 15. The most recent estimates on land utilization on SVG is quoted in the 2000 census of agriculture (FAO), which revealed that some 7,199 hectares was classed as agricultural, constituting 18% of the total land area. The largest proportion of these agricultural lands was under permanent crops which included banana acreages which stood at just over 3,000 hectares. Table 1 summarizes land utilization within agricultural holdings in SVG at year 2000.

Table 1. Land utilization within agricultural holdings in St. Vincent and the Grenadines

Land use		
	THE SPECIMENTS OF SPECIME	in an allegations are a section
Alland	No action of the property	7.199
Ağrıcullural jand		6 025
1900年には40歳に30分割(4000)(4)、1、1、1、1、1、1、1、1、1、1、1、1、1、1、1、1、1、1、1		
Cropland		4 729
Arable land		1 707
L under temporary crops		1080
fallow land		627
Permanent crops		3 021
Permanent mead /pastures		1 296
Wood or forest land		731
All other land		444

Source: FAO Census of Agriculture (2000)

Current land degradation issues

- 16. Land degradation is a severe problem in SVG and there is recent history of deforestation in SVG due to squatting and agricultural encroachment. The advent of the banana industry has also contributed to this deforestation in many areas. Historic estimates of deforestation in some watershed areas had been placed at some 24 to 28 hectares per year (Caribbean Conservation Association, 1991). Since the last forest inventory in 1993, the rate of deforestation has increased at an alarming rate with the cultivation of bananas, yams, dasheen and other crops beyond the 300-metre contour boundary for crown land. The estimated loss of forest per annum is 3%.
- 17. Erosion rates (landslides and surface erosion) on St. Vincent have not been scientifically quantified given the fact that there are no formal monitoring programmes. Based on observation, erosion appears to be highest in the Yamboo and Colonarie Valleys that have been under banana cultivation, as well as in the Soufriere Volcano hills and Richmond valley which have in recent times been under illegal marijuana cultivation. A preliminary study by R. Murray (2003) using a limited dataset of streamflow and sediment load data extracted from the Great River estimated annual volumes of soil loss at over 1.2x10⁵ m³ of soil each year. If this scenario were to be applied to all districts in St Vincent having rivers with flow volumes equal to or greater than that of North River, of which there are ten, then it could be conservatively estimated that St Vincent loses approximately 1.2x10⁶ m³ of top soil annually. The Grenadines are affected to a lesser extent by erosion because of their gentler topography and less intensive rainfall events.
- 18. The loss of interior forest has increased in recent years due to the illegal cultivation of marijuana. It has been estimated that some 1,500 marijuana farmers operate in the hills of St. Vincent and the Grenadines, cultivating in excess of 1,200 hectares of land. The crop is grown on large clearings hacked out of the forest within the upper reaches of the watersheds, including areas around the Soufriere Hills, with its fertile but unstable slopes. Marijuana fetches much higher prices than those of conventional crops and is therefore lucrative in spite

- of the risk of being caught and imprisoned by the authorities. These growers are willing to engage in alternative activities once these are economically viable.
- 19. Upland land degradation in St. Vincent has been having negative impacts on the quality of surface water resources. Growing concern has been emerging in the Yamboo, Buccament Richmond and Colonarie watersheds. The Yamboo and Buccament Watersheds include several potable water catchments, and two of the three hydropower plants are located within the Richmond and Colonarie watersheds. In some watersheds, upstream activities have been contributing to increased sediment loading particularly during large storm events. During such storm events the water intake infrastructure for both drinking water supply and power generation at Richmond and Yamboo (Majorca and Montreal catchments) are interrupted to reduce possibility of damage.
- 20. There is also growing concern over accelerated erosion and land degradation in areas that have been converted into housing development, particular unplanned development where there has been problems associated with improper road network development and lack of proper drainage. In agricultural areas under citrus, coconut, mangoes, avocadoes, mauby, mahogany, blue mahoe, teak and pine, bananas and dasheen (root crops) the impacts of chronic soil loss is being compensated for through increased fertilizer application rates as natural soil productivity declines. Livestock farming, although undertaken for the most part on a subsistence level also contributes to erosion on the steep slopes of mainland St. Vincent and to an even greater extent on the Grenadine Islands (Union Island in particular). During the dry season animals are allowed to roam freely and this usually results in overgrazing in certain areas.
- 21. Fortunately, most of the upper reaches of the 13 watersheds on the mainland, are crown lands placed under protection under the Forest Resources Conservation Act including the St. Vincent Parrot Wildlife Reserve (this national forest reserve is still to be properly demarcated and gazetted). In spite of this protection, illegal farming is still a concern for forest conservation especially in the Soufriere Hills. Notwithstanding the aforementioned scenarios, watersheds and water resource management is most effective on Crown land/forest conservation areas. The situation can be improved by developing regulations supported by the rigorous enforcement. There is currently a reforestation programme in place under the management of the St. Vincent Forestry Department.
- 22. In the Grenadines, some of the islands are privately-owned while some of the Crown-owned islands are leased. Most of the forests on the Grenadine Islands however, were destroyed centuries ago and what remains is vigorously protected. The Forestry Department has been engaged in several attempts at reforestation of degraded areas using exotic and native forest species. Agro-forestry is also encouraged and practiced as a means of preventing land degradation on slopes, while providing valuable economic support to the farmers and landowners. The Department is however constrained by its limited human and financial resources and these must be addressed to effectively manage the forests and associated biodiversity therein. There is need for capacity building and training of the Department staff so as to enable them to more efficiently and effectively carry out their mandate.

- 23. Some of the tourism-related land degradation issues particularly with respect to the Grenadines include mangrove removal and localized land degradation along the coastal area that results in siltation of reefs. Intensive development including the construction of golf courses often involves the removal of coastal dry woodland forest, and replacement with exotics, resulting in the loss of eco-systems services.
- 24. With the rise in eco-touristic activity there is emerging concern over exceeding of carrying capacities to sites that are particularly prone to erosion under increased visitor foot traffic. This is mainly an issue on Crown lands in the mountainous, wet interior where tours are operated without judicious attention paid to adverse environment impact. Heavy use of tracks without proper maintenance can eventually lead to severe soil compaction which in turn results in channelized erosive runoff and land degradation.

Socio-economic context

25. The 2001 population census indicated that SVG has a population of 106,253 persons. Approximately 90% of the population is of African descent, while the other 10% is a combination of East Indian, European and indigenous people. St. Vincent and the Grenadines is internationally classified as a lower-middle-income country. The economic development is structured around the agriculture, tourism and international business services sectors. The Gross Domestic Product (GDP) per capita (2004) is US\$ 3,512; the literacy rate is 96% and the life expectancy at birth is 74 years. The overall Human Development Index (HDI) Value is 0.751 and the country is ranked 87th in terms of HDI. In 2005, the public sector debt was over E.C. \$900 million.

Agriculture

26. The agricultural sector, in particular the banana industry, has contributed immensely to the economic development of St. Vincent and the Grenadines over the past three decades. It provides income, employment and improved welfare for the Vincentian society. However, the sector's relative contribution to GDP has declined from an average of 19% in the previous twenty years to 10-13%. This decline is directly linked to a fall-off in banana production as a result of the loss of preferential marketing arrangements to the United Kingdom and ever-changing market conditions in Europe, including more stringent quality standards, greater competition and lower prices. Additional factors include new sanitary and phyto-sanitary (SPS) requirements for export of bananas to Europe (under the EUREP-GAP standard), the escalating cost of inputs and low labour productivity relative to labour cost. Banana export earnings and volumes declined from US\$33.1million in 1991 to US\$10.6 million in 2003 and from 62,878 tonnes to 22,558 tonnes respectively. In 2001 the agricultural sector employed approximately 4,793 persons which then represented approximately 13% of the population. This however represents a decline of 37% from 1991 when 7,631 persons were employed.

¹ 2000 Agricultural Census

- 27. St. Vincent was among the world's main exporters of arrowroot flour, however the crop is now of minor importance, dwarfed by banana production. Other crop commodities of significance in SVG include dasheene, eddoes, sweet potatoes and yams. Major tree crops include mango, coconut, avocado and citrus. The livestock industry is relatively small. According to the 2000 Agriculture Census, production (in terms of number of heads), was dominated by sheep and goats and poultry.
- 28. Along with the other Windward Islands, SVG is beneficiary to an economic stabilization programme funded by the European Union, intended to compensate for World Trade Organization (WTO) impositions on preferential trading arrangements into the United Kingdom that has precipitated destabilization of the banana industry. A major component is an Agricultural Diversification Programme which seeks to diversify alternative commodity around the banana industry. It will address as first priority, the issues and constraints identified at the level of the farmer, such as financial and capital resources, labour management, community empowerment and technology. Interventions will be through various avenues ranging from provision of training and capacity building, to financial support to provision of agricultural infrastructure.

Tourism

- 29. The tourism sector contributes approximately 15% to GDP making it at present the leading economic sector. Tourist receipts contributed US\$81.3 million to the economy in 2002 with an estimated 47,700 stopover visitors between January and July of that year². The tourism sector has continued to play an increasingly greater role in recent times as the agricultural sector declined. In 2004 the number of stop over tourists reached 86,700 with tourism receipts totaling US\$95.6 million. Due to the contraction of the agricultural sector the tourism sector is now making a greater contribution to national development with direct investment and ancillary development in support service sectors. This trend is anticipated to increase as national development policy seeks to place the hospitality sector within the main engines of economic growth.
- 30. Tourism in SVG is has been focused primarily on the "sea and sand" experience especially with respect to the extensive array of water-based activities available on the Grenadine islands. The GOSVG has sought to diversify its tourism product with a focus on upscale and niche markets. This has attracted investors such as Mustique Company Ltd., Raffles Resorts, Donald Trump and Disney, which has led to investments including convention centres, yacht facilities and professional golf courses. Incentives are currently being offered to hotel developers interested in properties in excess of 100 rooms.
- 31. Yet another area of diversification is that of 'sports tourism' which has been enhanced through the construction of a National Stadium. The stadium houses an international-sized athletic track, an international-sized football field and an Olympic-sized swimming pool. The tranquility of the islands is being put forward as a major feature, ensuring that the athletes do not suffer from the distractions prevalent in other locations. The increase in the number of rooms available is expected to further boost SVG's capacity for sports tourism.

² www.onecaribbean.org; Official Intranet of the Caribbean Tourism Community

- 32. The issue of airlift is a major constraint, as currently the island is only accessible via turboprop aircraft from neighbouring islands flying to the E.T Joshua Airport. The GOSVG is
 currently undertaking a multi-million dollar airport and condo-villa development project.
 The new US\$178 million Argyle International Airport will be the island's first international
 airport and will feature a 50,000 square-foot terminal. It will effectively open up the island
 to non-stop international flights, and its completion is anticipated by 2011. On the Grenadine
 island of Canouan, a second airport is currently undergoing major expansion (US\$15.5
 million) with an anticipated completion date of November 2007.
- 33. The rise in eco-tourism in SVG is noteworthy in the context of land conservation. Sustainable management of land-based resources is of critical importance not only guaranteeing quality of eco-touristic excursion experience but also quality of marine ecosystems that have dive site potential in that sector. The Ministry of Tourism, Youth and Sports has developed a Community-Based Tourism Programme. The programme commenced as a collaborative effort between the Ministry and the North Leeward Tourism Association and will ensure that communities play a more integral role in the tourism sector. This is seen as necessary if the industry is to thrive.³

Industrial Sector

34. The industrial sector in SVG employs around 8% of the workforce and currently contributes about 10% to GDP. Industrial activity is focused primarily on agricultural processing of foodstuffs such as flour, rice, animal feeds, beans and other dried grain.

Poverty issues

- 35. In 2001 the unemployment rate was 21% while the poverty rate was at 37.5%. The work undertaken by the present Government in the fight against poverty is documented in a publication entitled; "Four Years of Progress: Poverty reduction in St. Vincent and the Grenadines April 2001 to April 2005". The Government has developed a Poverty Reduction Strategy Paper (PRSP) which is intended to develop polices and programmes aimed at addressing key elements of poverty reduction in the short, medium and long term. The PRSP components include, inter-alia, polices to stimulate growth, trade, investment, increase or generate employment opportunities and greater investment in human capital, thus increasing the livelihood of all people in SVG. The European Union is providing financial support to meet commitments under the PRSP which include the Country Poverty Assessment presently being carried out by the Statistics Department, the establishment of a Social Investment Fund to assist in stimulation of micro-enterprises, and the implementation of a Land Registration and Titling Project.
- 36. With regard to unemployment, the GOSVG estimates that since 2001 to 2005 some 8,000 additional jobs have been created. Between 2000 and 2004, over 6,000 additional active workers were on the list at the National Insurance Scheme which means that on average some 1,500 jobs were created in each of the four years between 2001 and 2004.

³ www.gov.vc. The Official Website of Saint Vincent and the Grenadines

- 37. A phenomenon that has been rooted in the circumstance of poverty is the illegal cultivation of marijuana on the steep mountainous slopes in the interior of the island (an emerging major cause of deforestation and land degradation in SVG). The activity is supporting the livelihoods of a segment of the population that may not have access to alternative desirable means of income on account of their situation of poverty. It is estimated that there are over 2,000 marijuana farmers currently making a living from planting this illegal crop, which is substantially more lucrative than the growing of other crops. The average land area that growers tend to cultivate is 0.4 hectares.
- 38. Squatter settlement growth is another one of the manifestations of poverty in SVG and is of consequence in the context of land degradation. Squatter settlements in St. Vincent are typically situated on marginal, less favourable lands for economic development that also tend to be more prone to environmental degradation (such as land slippage) under intensive utilization. Compounding the situation is the fact that these settlements are often devoid of basic sanitation services such as running water and proper sewage disposal facilities which predisposes the residents to water borne diseases such as diarrhea which affect especially children. Given the nature of tenure and lack of resources, residents have little or no vested interest in managing the lands and lack the capacity to make any investments that may address SLM. Some major squatter settlements are at Rosebank, (northwest rural) Byrea (east coast) and Troumaca "German Gutter" (northwest).

Land tenure

- 39. St. Vincent and the Grenadines' history of plantation agriculture remains reflected in the landholding system and until relatively recently, the majority of persons occupying land had no documented or official rights to the land (deeds of title). Since the country's independence in 1979, GOSVG has sought to address this imbalance by purchasing nine estates (totaling approximately 4,046 hectares) and subdividing them into 0.8 2.0 hectare leased farming plots under a National Agricultural Land Reform Programme. The Government continues to remain a large landholder possessing over 30% of the total land area.
- 40. According to the 2000 Agricultural Census, 47% of all agricultural holdings were in owner or owner-like possession, with about 3% squatting on government lands and less than one percent squatting on private lands. Although not formally assessed, the extent of encroachment on forest reserves and private forests for the illegal cultivation of marijuana is recognized as being significant both in extent and impact.
- 41. The 2000 Agricultural Census revealed that the majority of the agricultural land holdings on SVG fall within size classes of less than 2 hectares, constituting in excess of 5,600 individual holdings or 75% of the total number of holdings assessed. However the combined acreages of these small holdings corresponded to just below 40% of the total acreage, suggesting that a significant quantum of land is contained within larger parcels, emphasizing the fact that small farmers which make up the majority, have relatively limited access to land resources. Although no new estimates have been derived since the 2000 survey, the same situation

applies at present. No summary information is available on non-agricultural land tenure for SVG. Table 2 contains data on agricultural holdings by size classes.

Table 2. Classification of agricultural land holdings in St. Vincent and the Grenadines by area class

8/8/19/4/198		68 W.	ંમાં અંધ	JUNIO	(02:93:56°	$[[ij]]_{i=2}^{n}$	1.139	$\{1,2,3,5\}$	418146	ichteach S
Total				1.27 (1.1	. 775 B		380		7.00 mg	7.1
without	land			2.5			B76		e i kain	
< 0.2 h			1 1 1 1 1 1				032			1
0.2 - 0.	73 5 5 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7				::XXX		732		0000	
0.4-1				300			735			10
1-2		100 3	2.00			14 57 75 7	27.77	(Q) (Q) (14
		Os Cord) in 1981	. 11.2	102			
2 - 4 	1.74.7.1			333 c			647			15
4 - 10.1		3. O. T	111	Maria			187	M. 198		9
10 - 20	2011 2010			×:			41		ar (seri	5
20.2 - 4	0.5	1 2 1		**;f	ily 🔛	<i>17.</i>	. 19		196	5
40.5 >			. 40 - 44	1.54	345 (- 9	\$ 75G		· 7

Source: FAO Census of Agriculture, 2000

Policy, institutional and legal context

Policy context

- 42. St. Vincent and the Grenadines developmental agenda has been based on a Medium-Term Development Strategy (MTDS) developed for the period 2002-2004. Although the MTDS has not been updated since 2004 it is still accepted as the guiding developmental framework for the country. Critical issues of environmental concern noted in the strategy include:
 - Loss of agricultural lands to housing and squatting.
 - Deforestation due to illegal agriculture.
 - Mis-management of small ships generated waste.
 - Highly stressed reefs in the Tobago Cays due to poor management.
 - · Lack of proper regulation for sand mining.
 - Poor management of the aggregate site at Rabacca.
 - Lack of public awareness of the importance of the environment to survival.
- 43. The Ministry of Finance and Economic Planning is in the process of preparation of a new 2008 2020 National Strategic Development Plan. This initiative was formally launched in January 2007 and it is anticipated to be completed before the end of 2007.
- 44. SVG, as a member of the Organization of Eastern Caribbean States (OECS) has signed the St. Georges Declaration of Principles for Environmental Sustainability (SGD). This declaration contains 21 principles and mandates member states of the sub-region to work towards sustainable management of the land and water resources.

- 45. Under the aegis of the SGD, the Government has prepared a National Environmental Management Strategy and Action Plan (NEMS). The NEMS was developed through a process of district and sectoral consultations, a review of key policies and programmes, and feedback from a national consultation on the draft NEMS. The NEMS attempts to harmonize existing initiatives and programs of various government agencies as they relate to environmental management and the country's obligations under international conventions. The NEMS will attempt to mainstream environmental concerns into the national development process.
- 46. St. Vincent and the Grenadines lack a national land policy or any comparable policy instrument that deals specifically with sustainable land management.
- 47. A draft National Physical Development Plan (NPDP) was prepared in 2001 by the Ministry of Finance and Economic Planning. However this Plan was never finalized. The plan was intended to set out appropriate policies and strategies that would promote sustainable integrated national development through judicious management of the spatial environment. Some of the key land resources provisions articulated the plan included:
 - Facilitation of poverty alleviation initiatives;
 - · Conservation and protection of the country's natural resources;
 - Promotion of order in the settlement pattern in the country;
 - · Promotion of satisfactory standards in the built environment;
 - Development of an efficient system of transportation and public utilities;
 - Allocation of land and infrastructure for adequate housing;
 - · Guarantee of an equitable distribution of community social facilities.
- 48. By Cabinet decree, the GOSVG set the ground for a formal policy mandating the establishment of a payment for environmental service (PES) mechanism through support to an Integrated Forestry Management Programme (IFMP). The Central Water and Sewage Authority and the St. Vincent Electricity Services, both of which are water resource users/beneficiaries are required to contribute more directly to the cost of maintenance of water resources through the IMFP, which seeks to assist in the development of alternative livelihood for persons involved in forest-degrading activities.
- 49. St. Vincent and the Grenadines is a party to a number of Multilateral Environmental Agreements (MEAs) with the Environmental Services Unit (ESU) within the Ministry of Health serving as the focal point for most. This is further evidence of the GOSVG's recognition of the importance of environmental management and is reflective as well of its commitment to SLM. The MEAs to which SVG is a signatory and the current status of the country's obligations are summarized in Table 3.

<u>Table 3</u> Regional and International Conventions to which St. Vincent and the Grenadines is signatory.

en a e bababan, due les addes en en accourage au accompany		All Control of Plans State of the Party of t
AL DESCRIPTION OF THE PROPERTY	# 144(1)(1)	POND & SECTION OF A
1000 X 4.000 P. 1000 P. P. S. T. L. K. S. S. T. L. K. S.		HER NOVERALIEROSTERA DIVERSI NACIONALE PROPERTIE DE CONTRACTORIA (CONTRACTORIA (CONTRACTORIA (CONTRACTORIA (CO
7. 2001 CHARLES CONT	11 (15) 21(2) 22 (15) 23 (15) 24 (15) 24 (15) 25 (15) 25 (15) 25 (15) 25 (15) 25 (15) 25 (15) 25 (15) 25 (15)	riadi) kriston ka kiring limpora na korasta ka ka ka ka katoko kamban misendiri mimili mimili may k
		######################################

UN Convention to Combat	Ministry of Health and the	National Action Programme under
Desertification (UNCCD)	Environment; Ministry of Agriculture, Forestry and Fisheries; Ministry of Finance and Economic Planning	development
UN Framework Convention on Climate Change (UNFCCC)	Ministry of Health and the Environment	Draft National Climate Change Action Plan developed
UN Convention for the Conservation of Biological Diversity (UNCBD)	Ministry of Health and the Environment; Ministry of Agriculture, Forestry and Fisheries, National Parks Authority	National Biodiversity Strategy and Action Plan developed
Cartagena Protocol on Bio safety	Ministry of Health and the Environment; Ministry of Agriculture, Forestry and Fisheries	National Biosafety Framework being developed
Vienna Convention for the Protection of the Ozone Layer and Montreal Protocol on Substances that Deplete the Ozone Layer	Ministry of Health and the Environment	Terminal Phase-out Management Plan (TPMP) developed and being implemented
Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and their Disposal	Ministry of Health and the Environment	No plan developed
OECS Saint George's	Ministry of Health and the	National Environmental
Declaration of Principles	Environment	Management Strategy developed

Institutional and legislative context

- 50. Several agencies in SVG have varying degrees of jurisdiction over land management. With the exception of the National Environmental Advisory Board (NEAB) which only operates in an advisory capacity, there are no overarching institutional or planning frameworks that guide the interaction of these agencies with respect to coordinated decision-making in the interest of SLM. Land management and development is therefore an ad-hoc process and largely sectorally-driven. The suite of existing legislative instruments has similarly evolved and is not harmonized across thematic areas. The concept of management of land resources against the principle of maintenance of ecosystems services is generally not recognized in agency management frameworks or in legislative and regulatory provisions. The following summarizes the current institutional and legislative environment related to land management in SVG.
- 51. The agency with primary responsibility for environmental matters in SVG is the Ministry of Health and the Environment (MOHE), the environment portfolio having been established in 1989. Environmental management is SVG is however shared by a range of ministries and statutory bodies, which include the Ministry of Agriculture, Forestry and Fisheries (MAFF), the Ministry of Finance and Economic Planning (MFEP), the Ministry of Transport and

Works, the Ministry of Housing, Informal Settlements, Physical Planning, Lands and Surveys (MOHPP) and the Ministry of Tourism and Sports.

- 52. The Ministry of Finance and Economic Planning has oversight responsibility for all development initiatives in SVG and coordinates environmental planning and management. The Central Planning Division of that Ministry coordinates development projects, while the Physical Planning Unit reviews EIAs and prepares physical development plans. All recommendations of the Unit are subject to final decision by the Physical Planning Development Board.
- 53. The Lands and Surveys Department in the Ministry Housing, Informal Human Settlements, Physical Planning, Lands and Surveys is a key supporting agency to the Physical Planning Unit and has a major role in the maintenance of land records, which includes sale and lease of Crown lands. The Department, headed by the Chief Surveyor, has a technical staff of fifteen (15) persons including eight (8) surveyors, onc (1) senior surveyor, and six (6) surveying assistants. This Department has responsibility for surveying all Crown Lands including regulation of the private surveying practice.
- 54. The work of these agencies are loosely guided by a Draft National Physical Development Plan (NPDP); however this Plan has not yet approved by Cabinet and is not required by law.
- 55. In St. Vincent and the Grenadines the Ministry of Agriculture, Forestry and Fisheries; and the Ministry of Housing and Physical Planning (Lands and Surveys Dept.) are the main institutions with responsibility for land management. The Chief Agricultural Officer in the Ministry of Agriculture is responsible for providing technical assistance, regulatory services and the policy framework to guide development of agriculture. To fulfill its mandate, the Division of Agriculture operates through of a number of specialized Units, which work in collaboration with agricultural agencies and institutions to provide technical, regulatory and support services. The Agriculture Division has a total of 60 officers, of which 30 have some degree of specialization in soil and water conservation. This Division includes the Agriculture Extension Officers who deal directly with the farmers and who, therefore, will strongly influence the implementation of any programme aimed at SLM.
- 56. The Forestry Department of the MAFF is responsible for sustainable utilization of the island's forest, wildlife and national park resources; law enforcement; human resource development; revenue generation; public relations and education. The Department currently has on staff 37 permanent staff (all positions not filled). These officers are dedicated to watershed management, forest utilization and mapping and inventory type of activities that is most closely allied to soil/water conservation. These officers have been trained at the diploma level. They are deployed in three geographic ranges (Leeward, Central and Windward).
- 57. The Ministry of Transport and Works manages quarries and mining operations. The Ministry of Tourism, Youth and Sports operates the newly established National Parks, Rivers, and Beaches Authority, which has responsibilities for the development of protected areas and tourism sites. The St. Vincent National Trust is a statutory body charged with conservation and protection of historic and natural resources, primarily historic buildings.

- 58. The Environmental Services Unit (ESU) was established in the Ministry of Health and the Environment. Its mission is to guide national development along the "green path" to a sustainable future through sound environmental health practices, green production and intelligent use/management of natural resources. Although this unit has no legal/institutional mandate or authority in this regard, it serves as focal point, coordinator and clearinghouse for many environmental initiatives undertaken by the Departments of other Ministries. Continued support is needed to formally institutionalize the process and direct the ministerial linkages, define stakeholder roles and function, develop a synergistic approach to the implementation of MEAs, and set a sustainable development agenda. The Unit is small (three technical officers) with limited human and financial resources.
- 59. The National Environmental Advisory Board (NEAB) is a multidisciplinary, multi-sectoral, statutory body that was established in 1996 to guide the implementation of the National Environmental Management Strategy (NEMS) and give general direction to environmental activities in SVG. The Board members are required to advise the Minister of Health and the Environment on all matters relating to the environment, and to oversee, review and monitor all projects and development activities with environmental considerations including land degradation. The Environmental Services Coordinator is the chairman of the NEAB. In practice, the NEAB also assists the ESU in its efforts to promote and coordinate implementation of environmental programs by other government agencies. While this body is one mechanism that has improved environmental coordination and priority setting in SVG, there is a need to strengthen the body since it performs only an advisory role, but its rulings are not binding on government bodies.
- 60. The NEAB is slow to make decisions; partly because it meets once every two months and its participants often do not have the authority to take decisions, but must refer back to their respective agencies. This NEAB needs to take on a more active role in designing, developing and coordinating the implementation of projects related to the environment. It is hoped that revising the membership of the NEAB to undertake an expanding role as a coordinating entity is one mechanism to address sustainable land management by including the involvement of all the stakeholders.
- 61. A new agency, the National Parks, Rivers and Beaches Authority aligned to the Ministry of Tourism, Youth and Sports is envisaged under the National Parks Act No. 33 of 2002. A three-year Tourism Development Project, expected to commence in the early part of 2007, will establish the National Parks Authority and a system of National Parks. The primary responsibilities of the Authority when established will be to: preserve, manage, protect and develop the natural and cultural heritage of St. Vincent and the Grenadines, including the historical and cultural heritage of the country. The Authority will have the mandate to establish National Parks.
- 62. Several NGOs and CBOs are active in environmental management in SVG, including the North Windward Environmental Committee, the North Leeward Tourism Association, JEMS Environmental Management Services, and the National Farmers Union. There is however, only weak interaction between such organizations and the government agencies responsible for natural resource management. The NGO community needs to be empowered to enjoy

- greater involvement in decision-making processes and be formally registered so as to access funding opportunities (such as the GEF Small Grants Programme).
- 63. In general there is need for rationalization of the various legislative instruments related to environment in SVG, and to strengthen existing laws, and/or include new provisions for coordinated SLM with support regulations. The legislative environment needs to be structured such that roles of all stakeholders in the context of SLM are clearly defined to gain maximum synergies and avoid duplicity. A listing of the suite of existing environmental legislation, the institutional authorities, the main legal provisions and the key limitations of the various Acts of relevance to SLM, is contained in Table 4.

Table 4 Legislative instruments of relevance to land management in St. Vincent and the Grenadines

Enabling	Responsible	Keylegislative provisions	Aviditie in anid
Legislation Town and Country Planning Act of 1992	Ministry of Housing, Informal Settlements, Physical Planning, Lands and Surveys	Coordinates and controls all development initiatives in SVG; Makes provisions for the orderly and progressive development of land and the proper planning of town and country areas, as well as for control of development. Under section 30 of the Act, the Minister may order the director of the Physical Planning Board to take such steps as are necessary to remove, mitigate or prevent any condition that	There are no Regulations. The Main Documents such as the National Physical Development Plan to guide development is in Draft and has not been approved.
Forest Resources Conservation Act of 1992	Forestry Department, Ministry of Agriculture, Forestry and Fisheries	poses or is likely to pose a threat to the environment. Forest management, reforestation, forest resources conservation. Creates a specialized forest management agency and authorize it to manage the national forest.	Enforcement authority extends only to crown lands including forest reserves (however makes special arrangements for management of private forests) Regulations to enforce the Act are required

Enabling Legislation	Rasponsible Institution	iKevilegislariyy/provisions	Mali Gane and s
Wild Life Protection Act of 1986	Forestry Department, Ministry of Agriculture, Forestry and Fisheries	Biodiversity conservation, wildlife management including hunting regulation. Sets aside approximately 4,856 hectares of forest as a wildlife reserve	Regulations to enforce the Act are required
Pesticides Control Act, 1973	Ministry of Agriculture, Forestry and Fisheries	Control of the importation, sale, storage and use of pesticides.	Act is outdated and there are no regulations
Central Water and Sewerage Act of 1992	Central Water and Sewerage Authority (CWSA)	Water resources abstraction and distribution, water quality management. Authorizes the Minister to set aside protected areas for the protection of water resource.	Does not make specific provisions for land management
Environmental Health Services Act of 1977	Environmental Health Division, Ministry of Health and Environment	Protection of human health; vector/disease control. Provides a basis for effective environmental health quality control, is limited by the fact that certain minimum standards regarding air pollution and water quality are absent from the Act.	Regulations to enforce the Act are needed. Limited provisions for land management
National Parks Authority Act 2002	National Parks, Rivers and Beaches Authority, Ministry of Tourism, Youth and Sports	Promote the establishment of National Parks for the preservation, management and development of the national physical and ecological historical and cultural heritage of SVG.	Amendments to the existing National Parks Act 2002 will be required to implement new system of protected areas and heritage sites. No Regulations to give effect to Act. Some degree of overlap with the Forestry Resources Act which can lead to conflict/duplication
Quarries Act 1941	Ministry of Transport and Works	Management of quarries and regulation of mining operations	Outdated

Causes of Land Degradation

Internal Root Causes and Driving Forces

- 64. Poor agricultural practices: Unsustainable agriculture is primarily a problem on farms where bananas, vegetables and root crops are grown on steep slopes with little or no soil conservation measures. Cultivation of row crops on steep slopes without regard for principles of contour farming is a common practice, as is the adoption of intensive weed (chemical-based) control measures that leave the soil bare for most of the production period. The main manifestation of unsustainable agriculture is soil loss. Many soils in SVG are very friable making soil loss an especially severe problem. Eroded soil is eventually washed into rivers and streams on the mainland, and into the lagoons and marshes in the Grenadines. This leads to sedimentation, coral-smothering and pollution from nutrients and agricultural chemicals. The tendency for abuse of agrochemicals (fertilizers and pesticides) has also led to soil degradation through the increase in soil acidity, loss of soil organisms with consequent reduction in soil organic matter incorporation and reduced soil fertility, and loss of biodiversity in aquatic environments.
- 65. Limited financial access and incentives for SLM: Additionally, the limited land space (in terms of high-quality, low-slope arable lands) tends to force farmers to maximize the use of their land acreages thus sacrificing soil conservation measures that occupy land space (such as grass barriers and contour drains) and cultivating as close as possible to stream banks. This problem leads to severe erosion in steep areas and rapid river bank degradation once the natural vegetation is removed. Small farmers have been observed to destroy grass terraces that had been previously established to counter land degradation, in order to expand the cultivable area for banana and other crop production.
- 66. The marginal rates of return on investment particularly in small-scale agriculture (in many cases aggravated by declining land productivity on account of land degradation) as well as the limited financial capacity of small farmers are factors that inhibit farmers from adopting conservation techniques and good practices. Additionally, in general there is little in the way of fiscal incentives to encourage small farmers to adopt SLM given the typically marginal rates of return on their investments. However some progress is being made mainly in the banana industry with respect to market-based incentives that reward good practices. With the introduction of concept of good agricultural practices (GAPs) by EU-based retailers under the EUREP-GAP framework, farmers are starting to adopt more careful production techniques with proper use of agrochemicals and more diligent management of lands in general. SVG has a core of farmers that market fruit to the UK under the 'Fair Trade' market label which rewards good production principles both in the context of non-exploitive human resource management and management of other factors of production that includes land resources
- 67. Overgrazing: Livestock production on the steep slopes of mainland St. Vincent is a problem that has led to land degradation. However this problem is amplified on the islands of the Grenadines, where roving livestock is a perennial problem. During the dry season, which is called locally "the let-go season" livestock owners typically allow their animals,

mainly sheep and goats, to roam freely throughout the islands to feed unhindered on any type of forage (in the wetter periods animals are usually tethered and taken from one area to another to feed). By the end of the dry season, vegetation is typically grazed down to bare soil. With the onset of the rains, soil and nutrients are lost to erosion while quality forage species rarely get a chance to complete their reproductive cycle, leading to consecutive lowered replenishment over time and degradation of forage quality in general.

- 68. Poor management of forest lands: Deforestation is the most important cause of land degradation and is a severe problem on the mainland with illegal farming activities, mainly marijuana cultivation on the steep slopes of the mountainous interior. Most of the forests on the Grenadine islands were destroyed centuries ago and what remains is vigorously protected. The Forestry Department has been engaged in several attempts at reforestation of degraded areas using exotic and native forest species. Limited charcoal production takes place in the lower elevation coastal forests contributing to some degree of land degradation.
- 69. Blue Mahoe plantation forests in areas such as the Colonaire, Cumberland, Yambou, Buccament watersheds often do not receive the timely management prescriptions that in some cases contribute to accelerated erosion. The problem arises when complete crown-closure in high-density (un-thinned) plantations does not allow for sufficient ground cover. During heavy rainfall, drop-fall from the canopy will strike bare surface soil aggregates triggering erosion. In some cases, forest clearing for water and power transmission line corridors may cause land destabilization.
- 70. Bush fires: Fire-degraded mountain slopes are found in many areas of mainland St. Vincent as well as in the Grenadines. These grass-covered slopes were once covered with natural forests but were subjected to degradation as a consequence of practices such as the illegal iguana hunting (using fire-flushing techniques along coastal areas), land preparation for agriculture (slash and burn practices) and charcoal production. A consequence of repeated fire occurrence has been an invasion of exotic lemon grass resulting in a "fire climax", ecosystem in areas along the west coast of St. Vincent. It is within these lemon grass areas that wildfires (natural or deliberately set) during the dry season serve to propagate the spread of lemon grass into adjacent forest types literally "taking over" ground. Wildfires in advance of the rainy season defoliate the vegetation cover thus leaving the soil surface exposed to the erosion by the first rains. The Forestry Department needs to address this issue through a strengthened reforestation programme as well as an extensive public awareness campaign although limited human and financial resources are a constraint. To address fire suppression and control there needs to be collaboration with the fire department and police to apprehend persons suspected of setting fires deliberately. In recent years brush fires have affected approximately 25 hectares, mainly on the drier, western side of the island.
- 71. Illegal and extensive marijuana cultivation: Since the last forest inventory in 1993, the rate of deforestation has expanded at an alarming rate, with the cultivation of bananas, yams, dasheen and other crops above the 300-metre contour boundary established as Crown reserve. The loss of interior forest has also increased due to the illegal cultivation of marijuana. The crop is grown by clearing large patches, in many cases, high within the watersheds, including the Soufriere Hills, with its fertile but unstable slopes. It has been

- estimated that some 2,000 marijuana farmers operate in the hills of St. Vincent and the Grenadines, cultivating in excess of 1,200 hectares of land. Over the years conventional approaches to enforcement have not been effective against illegal cultivation.
- 72. Such illegal farming has become a major threat to the nation's water supply as many of the catchments of rivers and streams used for drinking water abstraction are subject to clearing and potential contamination by human activity.
- 73. Poorly managed mineral/aggregate mining and quarrying activity: Most quarrying is done within close proximity to the coast. This activity on the whole does not present a significant land degradation threat in St. Vincent. Of significance however, is the Layou quarry (privately-owned and operated) which contributes to land degradation in the local area through translocation of eroded material by via an intermittent stream that flows during heavy rain. This has potential impacts to the reefs along the leeward coast.
- 74. Limited and Ineffective Land Use Planning: Given the small size of the island and its steep topography, SVG has limited suitable land for commercial and residential development, and the issue of compatibility and degree of conflictive use, based on optimal land suitability and functionality is of concern. Currently, there is a draft National Physical Development Plan (under the Town and Country Planning Act) which seeks to direct growth and development, facilitate more comprehensive planning, and clearly demarcate lands for major uses (conservation, settlement, commercial, recreational, etc), and also to ensure protection of environmentally sensitive areas. This document has not been approved by Cabinet and is currently under review. This plan is largely in the context of urban planning and does not extend to rural agricultural lands.
- 75. As in many of the other Caribbean islands conversion of agricultural lands from farming to alternative uses has been a growing trend. Most of the agricultural land is privately-owned, and without regulatory provisions the GOSVG has little or no control over restricting land conversion (usually to housing and commercial development). Owners are unencumbered in the nature of transactions and can change land use based on the sale. This situation has been presenting a policy dilemma for the country in the context of future food security and the prospects of maintaining a diversified economy that includes a vibrant agriculture sector.
- 76. The Agricultural Census of 2000 indicated that the total available agricultural land had decreased from 12,022 ha to 7,202 ha between 1986 and 2000, a decline by some 40%. While land conversion to other uses suggests that farmers who own these lands may be moving out of agriculture, it has implications for persons who do not have secure title to lands whose livelihoods are dependent on farming. It means that they may be forced on to alternative lands that may not be as productive, typically on hillslopes in the interior. Some former farm workers have gone into marijuana cultivation while owners have realized greater profit from selling off lands for real estate purposes.
- 77. Housing settlements that have grown on former agricultural lands include those within the Marriaqua valley (east coast), the lower Colonarie valley (east coast) and the lower Buccament valley (southwest coast).

- 78. The development of squatter settlements without basic physical and social infrastructure is another consequence of inadequate land use planning. More often than not, squatter settlements occur in environmentally sensitive and disaster-prone areas such as on steep hillsides and gullies. The absence of effective land use policies has created an environment that has fuelled such uncontrolled development. The finalization and adoption of the national physical development plan is expected to be a major policy driver to address these issues.
- 79. Uncontrolled expansion of exotic species: The armadillo, a recently imported species from neighboring states has been causing significant levels of soil disturbance in forested areas on account of its burrowing/foraging activities. In fragile soils excessive burrowing can lead to tree falls and depending on the nature of the site, to accelerated erosion. The armadillo populations appear to be increasing, and is anticipated to be a major long-term contributor to land degradation in the country if control measures are not adopted. In addition, the spread of lemon grass alluded to above is also of concern.
- 80. Lack of Public Awareness: The population of St Vincent and the Grenadines has been showing greater interest and appreciation for environmental matters in recent years. However, knowledge and awareness about the vital role of natural resources in socio-economic development remains limited. A greater understanding of the linkages between economic development and protection of the environment will result in more effective actions to conserve and manage natural resources in a more sustainable manner. Education, training and awareness initiatives would provide an opportunity for NGOs, CBOs, the private sector and civil society in general, to better contribute to the management and sustainable use of natural resources.

External Root Causes and Driving Forces

- 81. Risks associated with climatic phenomenon: St. Vincent and the Grenadines has suffered the impact of several severe storms in the past. In September 2004 the passage of Hurricane Ivan caused extensive damage from high winds, landslides, flooding and storm waves; the greatest impacts were along the coastline with damage to settlements and major infrastructure. In November of that same year excessive rain caused landslides and flash flooding across the island with heavy sedimentation in the lower watershed areas, the result of improper land use in the higher watershed areas.
- 82. Drought is also a damaging phenomenon in the Caribbean. The longest and most severe drought in living memory occurred from December 2002 to April 2003 and wreaked havoc on agriculture in many islands of the Caribbean including St. Vincent and the Grenadines.
- 83. Scientists predict that global warming and climate change may cause an increase in the intensity and frequency of storms and hurricanes in the Caribbean region, warranting concern over potential effects of poor land management practices on the livelihoods and the economy of the country.
- 84. Risks associated with seismic and volcanic activity: The La Soufriere is an active volcano which has erupted five times in recorded history; 1718, 1812, 1902, 1974, and 1979. On several of these occasions, the toll in terms of human lives, property, and disruption of

- agricultural activity has been significant. Settlements and agricultural areas exposed to extreme risk are located to the north of the Rabacca and Wallibou Rivers, and include Sandy Bay, Point, Owia, and Fancy.
- 85. There are no major faults or folds anywhere in the country. St. Vincent and the Grenadines occasionally experience earthquakes associated with activity of the La Soufriere volcano and from seismic events in the Caribbean Basin. There have been no major earthquake events in recent history.
- 86. Uncertainties in the economic environment: In the context of the economic climate, St. Vincent and the Grenadines, as is the case of its Caribbean neighbours is a small, open, vulnerable economy that is subject inter-alia to the vagaries of reformed trade regimes, travel security associated with the risk from terrorism and the variable investment climate in the Caribbean. These factors significantly affect the macro-economic outlook for the country and can dictate the nature and extent to which land resources are exploited. In a worse-case scenario where the country is severely impacted by dwindling foreign exchange earnings and increased poverty, there is a risk that the lands may be over-exploited for basic food and fuel needs causing acute land degradation that will be difficult to reverse. It is assumed that under a positive scenario, with sustained economic growth, the population will have options that will not involve exploitation of its land resources beyond its carrying capacity.

Barriers to Sustainable Land Management in St. Vincent and the Grenadines

- 87. Institutional and Governance: At the national planning level, land management issues are generally handled in a rather fragmented approach between agencies as there is no central coordinating entity that has technical and policy oversight for land development across all sectors. The various state agencies therefore tend to operate in an isolated manner within their jurisdictions. Although the National Environmental Advisory Board (NEAB) was established with the intended purpose of achieving integration in environmental management matters, the NEAB's role is mainly advisory and non-binding on decision making in government agencies. There are gaps in institutional mandates as well as in supporting legislative and regulatory instruments that do not adequately provide for coordinated planning for SLM. While the overarching policy guide is enshrined in particularly laws, the regulations to operationalize the principles are often not elaborated in the context of addressing SLM.
- 88. Human resource capacity of the various agencies in specialized areas of land management is weak. Noted gaps include integration of natural resource economics to guide effective policy decision with respect to land development options and availability of timely and accurate information for decision making.
- 89. The private sector (inclusive of interests in the agriculture, tourism, commercial, manufacturing, industrial sectors), community groups and NGOs are not sufficiently integrated into the process of land development planning due to lack of any formalized mechanism to elicit collaboration.

- 90. Economic and Financial: Resource capacity has to be evaluated at the institutional and individual levels. The bulk of national public investment is directed to the healthcare and education sectors while relatively little is spent in the area of SLM in terms of building capacities within agencies and its resource personnel. The government however makes SLM-related investments in the Ministry of Agriculture where a land management programme is supported through a Soil Conservation Unit. The European Union is also supporting land conservation and knowledge management initiatives through provision of STABEX resources to the Ministry of Agriculture and the Ministry of Physical Planning Financial contributions are made to the Integrated Forestry Management Programme (administered by the Forestry Department) by the water and electricity utility companies on account of the fact that they are water resource users. In spite of these contributions, investment is required at the wider policy and planning tiers in government, in capacity building efforts to more effectively mainstream SLM; that is to remove the sectoral approach that is traditionally afforded to SLM where the focus tends to be on technical areas within departments in the Ministry of Agriculture. Research and monitoring programmes in support of SLM do not exist on account of limited investment.
- 91. Stakeholders that rely exclusively on the land resources for livelihoods (including farmers) are often financially resource-poor, and unable to make the investments in required soil conservation measures. The downward trend in the agricultural sector (mainly associated with banana production) has forced abandonment of cultivation, the very vehicle through which some degree of investment in soil conservation can be made. Some former banana farmers have resorted to marijuana cultivation in the interior mountains.
- 92. Social and Behavioral: Recently the population in St Vincent and the Grenadines has been showing greater interest and appreciation for environmental matters. However, there still remains limited knowledge and awareness about the vital role of natural resources in socioeconomic development. Behaviors tend to be governed by the degree to which personal values incorporate a sense of environmental stewardship. In some cases, this is related to the level of exposure to environmental awareness efforts (for example within schools or via the mass media) or the degree to which it is instilled within the home. In other cases it may be imposed due to formal requirements within the work or business culture. Given the problems associated with poor land management practices in St. Vincent, the population requires continued sensitization of the risks posed by land degradation, and means must be sought to demonstrate how change in behaviors at both the personal and institutional levels can redound to positive environmental benefits. A greater understanding of the linkages between economic development and protection of the environment will result in greater action to conserve and manage natural resources in a more sustainable manner. Education, training and awareness initiatives would provide an opportunity for NGOs, CBOs, the private sector and civil society in general to better contribute to the management and sustainable use of our natural resources.
- 93. Technological and Knowledge: There has been rather limited investment in technology to combat the problems of land degradation in St. Vincent. While there has been support to farmers through the Soil Conservation Unit and the Forestry Department in the area of soil conservation, introduction to appropriate technologies to systematically assess, mitigate and

monitor land degradation has been lacking. Among the challenges faced is absence of efficient access to information on the state of land resources and the environment in the country to facilitate national level planning. A land resources information system based on GIS technology that is accessible to technical and policy level professionals has been identified as a pressing need. Such a system will greatly enhance harmonized and coordinated planning efforts by all agencies concerned with land management

- 94. Insufficient Capacity: Besides the technologies themselves, capacities within State and non-state agencies and other stakeholders will need to be strengthened to ensure sustainability of technological applications. Under previous project-driven initiatives in St. Vincent and the Grenadines (and other Caribbean states), personnel from various state and non-state agencies, community-based organizations, farmers and other stakeholders have been exposed to technological applications that are of relevance to sustainable land management; these have ranged from demonstration of land management techniques to application of information technology to facilitate decision-making. However, once these "special projects" come to an end the status-quo resumes with little semblance of continuity of the initiative. A key barrier in many cases is the lack in effort to institutionalize these initiatives into the business plans of agencies and organizations from a human resource development perspective. Personnel who may have benefited from capacity-building themselves are often not sufficiently empowered to become resource providers, and there is generally little attempt at creating the environment that warrants active demand of skills attained in real-world application. This is manifested in low emphasis on technical in-house human resource development using trainer-of-trainer approaches.
- 95. The relatively high turnover rate of skilled technical personnel in government agencies in particular, is of concern as once persons obtain valued skill sets they tend to seek alternative, more lucrative employment, in many cases within the private sector. A general perception is that the mandate for human resource capacity-building in technical areas (such as SLM) lies with the state. As a result, expertise that may reside in the private sector (in this case, the civil and environmental engineering fraternities) is often overlooked as a potential ally in building overall national human resource capacities for SLM. There are generally only weak attempts to solicit active engagement of private sector partners in HR development.

PART II: PROJECT STRATEGY - PROJECT DESCRIPTION

Baseline course of action

Local Initiatives

- 96. A National Action Plan (NAP) to advance national obligations under the UNCCD in a systematic, effective and efficient manner is currently being developed. This programme would allow SVG to take a more comprehensive approach to general environmental management, paying special attention to the question of prevention and control of land degradation. The NAP seeks to increase awareness by all stakeholders on the issues of land degradation, serve as a guide in the execution of investments in SLM and foster greater synergies at the national level in the implementation of the other sustainable development conventions. The NAP will be finalized for submission to Cabinet for approval within the first half of 2008 and is to be implemented with the assistance of all stakeholders including Government, private sector, NGOs, CBOs and civil society. The elements of the NAP will be mainstreamed into the national development process. Recognizing the fact that full implementation of the NAP cannot be achieved unless funding is obtained, there is need to ensure that resources at a national, regional and international level are mobilized. The development of a Medium Term Investment plan will define financing needs for donor consideration. The LDC-SIDS Portfolio Project will serve to catalyze the implementation of SLM practices as elaborated under the NAP, by removing critical capacity barriers and creating the enabling environment so that SLM can become adequately mainstreamed into all relevant national policies that govern development and utilization of land resources in the country.
- 97. Under the framework of the St. Georges Declaration of Principles of Environmental Sustainability, in 2004 St. Vincent and the Grenadines published their National Environment Management Strategy (NEMS) and Action Plan. The Strategy and Plan are guided by 17 principles and within each, strategic elements, indicative activities and lead partners are elaborated. While all the principles and strategic directions are of direct relevance to SLM, Principle 11 relating to sustainable use of natural resources underpins many of the elements that are aligned to the UNCCD National Action Plan Most closely allied and speaks of mainstreaming conservation and management of natural resources within development planning at all stages and levels. It is against this backdrop that the GOSVG has been framing initiatives in the environment.
- 98. The Physical Planning Section (MOHPP) prepared a draft National Physical Development Plan (NPDP) in 2001 that defined policy guidelines with respect to land allocation and development in SVG. The process was never brought to conclusion although a tentative deadline for completion was set for 2006. The activity is pending.
- 99. The Integrated Forestry Management Programme (IFMP) is an initiative spearheaded by the Forestry Department to foster a participatory and integrated approach to forest management and watershed resource conservation. The programme has a mandate to foster

partnerships with the utility companies (namely the Central Water and Sewage Authority and the St. Vincent Electricity Services) and water resource users, and the assist in the development of alternative livelihood for persons involved in forest-degrading activities.

- 100. The main objective of the IFMP is the sustainable management of forest resources thereby ensuring protection of the nation's water supplies, eco-tourism potential and biodiversity, whilst at the same time, protecting the livelihoods of other forest resource users. One component addresses alternative livelihoods for "forest farmers" looking at economically viable alternatives such as eco-tourism, agro-forestry (high-value, fruit tree intercropping) and non-timber forest produce (NTFPs) for craft and other processed products. Re-forestation and re-planting of river banks with stabilizing vegetation are also incorporated in the programme. Farmers will benefit from training in soil conservation practices and development of ecotourism projects. It is hoped that these activities will reduce the illegal cultivation of forest lands, particularly in critical watersheds.
- 101. The National Land Information Management Project (NALIMP), being funded under the European Development Fund (EDF) will focus capture of land titling, land management and social data. The Government recognizes the need to develop a national Land Information System (LiS) (built on a Geographic Information System platform) which will provide an adequate land information base to facilitate efficient policy formulation, planning, implementation of land management initiatives. With provision of infrastructure and capacity building to operate the systems as a decision support tool, users will have the capability to apply it to applications such as land administration, infrastructure management, facilities (utilities) management, transport planning, urban planning, poverty mapping, environmental management and forecasting among others.
- Diversification Programme. In addition to direct farmer support, the project has supported the cassava industry, the establishment of pack houses and a root-crop vacuum packing plant at Lauders, along with financial support to the hot pepper farmers. A grant facility has been established for demand-driven agricultural projects (based on business models). Should these investment proposals require specific environmental considerations, the fund is also used to meet the conduct of environmental evaluations prior to approval. Of particular note is the fact that the grant facility requires that there be evidence of secure tenure over land resources committed under the project. This forces beneficiaries of the grant programme to regularize their tenure (lease or full title) which in turn, adds value towards land titling efforts.
- 103. The STABEX 95 tranche is funding environmental management and sustainable land use. This component offers technical assistance through consultancies to assist farmers in addressing land management issues and adoption of Good Agricultural Practices (GAP).
- 104. The Soil Conservation Unit in the Ministry of Agriculture supported by the Forestry Department maintains technical assistance programme to farmers to aid in the proper management of lands under agricultural production. Farmers are assisted in the installation of runoff and crosion control measures such as bench terraces, grass barriers, contour drains,

and in the establishment of agro-forestry systems. In addition, an active riverbank stabilization programme is in place using gabion baskets.

Capacity and mainstreaming needs for SLM

- 105. The GOSVG completed its National Capacity and Self Assessment process in 2006. The assessment focused on the national capacities to participate effectively in the three Multilateral Environmental Agreement (MEAs), specifically the UNCBD, UNCCD and UNFCCC. The effort was funded by the United Nations Development Programme (UNDP).
- 106. With relevance to the UNCCD Convention, the NCSA assessment identified the following priority areas for action:
 - Increased knowledge of the value of land resources to support improved management and protective mechanisms to support sustainable land management;
 - The strengthening of agricultural extension and research services to maximize the productive value of the land;
 - The management of seasonal surface water to reduce flooding and support year-long agriculture and indigenous livelihood practices;
 - The enforcement and strengthening of legislation to reduce human activity on unstable marginal lands; and
 - Inclusion of a sustainable land management policy in the emerging National Physical Development Plan to ensure that it takes into account *inter alia* food security, water resource management and forest conservation).
- 107. Broader recommendations for mainstreaming environmental management that emerged out of the NCSA in respect of fulfillment of international obligations under the various MEAs included:
 - Rationalization of the plethora of MEAs signed by SVG in terms of commitment, contribution, benefits derived and capacity to implement;
 - Translation into law the obligations under the major MEAs (UNCBD, UNCCD, UNFCCC);
 - Upgrading of the NEAB to function as a sustainable development body with financial support and an expanded mandate;
 - Upgrading of the IMFDP with committed funding and human resource;
 - The inclusion of links between the environment, health, economy and forest/environmental services (water, electricity, livelihoods) in educational programmes/curricula in national educational institutions;
 - Raise the functional profile of the ESU in terms of its legal authority and mandate to provide required support in the context of national development and the MEAs;
 - Institution of structured capacity-building programmes through policy support in all areas (individual, institutional and systemic);

Capacity needs - Individual Level:

- 108. Capacity development and sustainable land management is not only an issue for stakeholders and resource users in the agricultural and forestry sectors. The concept of SLM is frequently overlooked in other sectors that have significant land resource impacts; most notably in the construction sector in expansion of settlements, commercial investments and supporting infrastructure. Capacity limitations are related to lack of knowledge and awareness.
- 109. In developing adequate capacities for SLM at the individual level the following needs must be addressed:
 - Training on sustainable land management (soil / water conservation techniques that
 require relatively low financial and human resource input) in sectors that heavily impact
 land resources (agriculture, construction, mining, etc) for technical officers within
 advisory agencies, local resource users, NGOs and CBOs;
 - Training for farmers, land developers and other community-based stakeholders on simple monitoring measures to assess and report on land degradation;
 - Training (project development and management) for NGOs and CBOs representing local resource users to facilitate greater access to available funding from grant programmes (e.g. GEF Small Grants Programme) in the areas of natural resource management/SLM;
 - Studies related to Knowledge, Attitude and Practices (KAP) to develop effective public education and outreach programmes;
 - Awareness-raising for the general public, schools, and other key stakeholders on key issues relating to causes and remedial measures to combat land degradation;
 - Strengthened mechanisms for communicating environmental information related SLM to ensure all stakeholders have ready access to current information to make informed decisions;
 - Promotion of stakeholder forums (including the private sector, local, national and international entities) to share knowledge of relevance to SLM and foster participation and commitment of the Vincentian population in decision-making processes; and,
 - Capacities for identifying and promoting sustainable, economically and/or financially viable alternatives to marijuana cultivation.

Capacity needs - Institutional Level:

- 110. The institutions in SVG with mandates for land management are generally weak in terms of resource capacity and are not adequately financed to operate and maintain monitoring systems, carry out enforcement, conduct research or sustain outreach programmes.
- 111. Community-based groups in SVG have been contributing in small ways to SLM through local management of related projects, which have been typically funded by the GEF/Small Grants Programme. The NGO community however needs to be strengthened in order to effectively conceptualize, develop and implement environmental projects in SVG.

- 112. In developing the adequate capacity for SLM at the institutional level the following πeeds must be addressed:
 - An effective integrated sustainable development coordinating mechanism with clearly
 defined duties, limits and linkages to allow for active involvement of all stakeholders
 (both public and private sectors), NGOs, civil society and local communities;
 - Technical capacity to identify and monitor existing and potential land degradation threats;
 - Technical capacity to design effective actions to control and mitigate problems associated with land degradation and facilitate access to appropriate technology;
 - Investment in research capacity;
 - Investment in database development (inclusive of spatial information systems) and their maintenance;
 - Technical capacity in support of integration of economic analysis in land resource planning / development and in design of appropriate fiscal incentive frameworks in support of SLM.

Mainstreaming Needs:

- 113. Sustainable land management tends to be related to Government responsibility in the agricultural and forest sectors and is generally not considered in other productive sectors on account of the fact that it is not institutionalized within development processes. Business and legal processes that govern other sectors (tourism, housing, commercial and industrial) with respect to development investments need to be analyzed with a view to ensure that compliance with the principles of SLM are incorporated. The NAP must be considered as the guiding framework in this regard.
- 114. While there is a fairly extensive range of legislative instruments that speak to environmental issues, there is need to review the various pieces of legislation to evaluate the degree to which SLM considerations are integrated and effected in the context of regulation and institutional capacities.
- 115. The following are mainstreaming needs specific to sustainable land management:
 - Appropriate legal and institutional structures and mechanisms that integrate development
 policy formulation, planning and management in the context of climate change mitigation
 strategies, the NBSAP, NAP and other strategies designed to reduce deforestation and
 land degradation within a holistic framework;
 - Creation of a harmonized framework policy for SLM: the National Action Plan needs to be ratified to provide the basis for integration of SLM within wider development policy instruments;
 - The mandates of core agencies will need to be rationalized and streamlined with respect
 to policy development and planning for SLM. This will need to be supported by revision
 and adoption of new legislative and regulatory instruments;
 - Identification and empowerment of a lead State institution for coordination of SLM;
 - Identification of funding needs and development of strategies for funding targeted capacity development, on-the-ground investment, or private sector incentives for SLM;

 Capacity building and institutional strengthening of National Focal Point and related agencies for sustainable land management and to meet UNCCD obligations and create a more proactive role for the National Steering Committee for UNCCD that policy advisory level.

Knowledge Management Needs:

- 116. The following are needs related to knowledge management:
 - A MEAs clearinghouse/database easily accessible to government ministries, departments and agencies to ensure information integration from these MEAs into sustainable development policy formulation process.
 - A Land Resource Information System to be used to aid SLM planning and monitoring or land degradation (data should include land cover derived from remote sensing, land tenure, lease information, land resource inventories, zoning plans, etc.). Capacities to effectively utilize this tool needs to be developed within relevant user agencies;
 - Monitoring and evaluation systems to assess and report on land degradation.

Project rationale and objective

- 117. The overall goal of the project is to promote effective Sustainable Land Management in St. Vincent and the Grenadines. The project will contribute towards achieving the following long term goal: "The sustainable management of natural resources in SVG is achieved, through improved land management practices that will contribute to the protection of biodiversity and the preservation of ecosystem goods and services, for the economic and social benefit of all the people living in SVG".
- 118. The project will strengthen capacity for sustainable land management in St. Vincent and the Grenadines. The project objective is as follows: To strengthen and/or develop capacities for sustainable land management in relevant government ministries, the private sector, and civil society organizations, and to mainstream sustainable land management into national development planning.
 - Outcome 1: The project is the national level slate of actions under the UNDP/GEF LDC and SIDS Targeted Portfolio Approach for Capacity Development and Mainstreaming of Sustainable Land Management. The expected outcomes of this project are consistent with those of the global Portfolio Project, specifically:
 - Outcome 2: Individual and institutional capacities for SLM will be enhanced through

 (1) stakeholder training on SLM principles through workshops, seminars and technical exchange visits,
 (2) awareness raising activities around relevant national, regional, and international environmental events and
 (3) enhancement of national institutional structures and functions to better address SLM.

- Outcome 3: Systemic capacity building and mainstreaming of SLM principles through (1) timely completion of high quality NAPs (2) integration of SLM principles and NAP priorities into national development strategies to achieve the Millennium Development Goals and (3) a Medium-term Investment Plan for SLM will be developed.
- Outcome 4: Enhanced technical support SLM planning and project execution through: (1) dissemination and utilization of knowledge products (tools, guidelines and manuals for capacity development and mainstreaming on selected topics in SLM), (2) facilitation of access to global and regional knowledge networks and communities of practice, linked to existing networks, such as CAPNET, CPF, etc.
- 119. GEF's timely funding for the baseline activities of this project will contribute towards maintenance of key ecosystem services and functions on which the country's continued development depends. It will also provide for poverty alleviation by guaranteeing improved livelihood and employment for some stakeholders, it will curtail threats of further degradation of natural resources, assist in implementing management models that can be extended to other sites, and secure a viable future for the concerned communities. As far as possible Government will include strategies derived from this Project into the work plans of relevant Ministries/Departments.
- 120. Without the GEF alternative, the status quo would prevail. Individual, institutional, and system capacities would increase to a degree based on existing efforts, but not enough to spread SLM concerns to all productive sectors and to mainstream it within national development and economic development plans. There would be continued overlap and multiplicity of planning structures, based on the multiple conventions and sectors, that would uneconomical and ineffective with respect to the implementing of SLM programs. There would be no framework to target investments arranged through bi or multi-lateral sources, leading to inadequate levels of investment in SLM. The land degradation issues would gradually increase as there would be no mechanism in place to deal effectively with the financial, capacity and mainstreaming barriers which would persist.
- 121. The GEF funding is essential to catalyse actions needed to integrate sustainable land management into the national planning framework as well as to build capacity within key institutions and organizations. The persistence of the capacity, mainstreaming, and financial barriers would limit the development of sustainable land management and therefore allow the land degradation processes described earlier to continue. Land degradation will compromise multiple ecosystem services and functions, with consequent loss of soil productivity, degradation of water resources, degradation of habitat quality (terrestrial and marine), and would contribute to global GHGs (through the loss of carbon capture potential as a result of deforestation). In the absence of this intervention it can be anticipated that erosion, and consequent sedimentation of rivers and waterways will increase the propensity for flooding and cause siltation of offshore marine habitats. Pollution from land-based activities that also degrade lands will result in loss of land productivity and directly impact watershed and coastal waters. If not managed, these adverse outcomes will likely compromise the country's long-term economic growth and development.

Expected project outcomes, and outputs

- 122. The Project will have 5 outcomes and 21 outputs as follows:
- 123. Outcome 1: SLM mainstreamed into national development policies, plans and regulatory frameworks. Total cost: US\$103,000 GEF request: US\$55,000 Co-financing: US\$48,000 (GOSVG: US\$18,000; EU: US\$12,000; FAO: US\$8,000; Global Mechanism: US10,000)
 - Output 1.1: Planning and policy documents for integration of SLM into macro-economic policies and regulatory frameworks of SVG
 - Output 1.2: National Physical Development Plan, NEMS, and relevant national environmental legislation incorporating SLM
 - Output 1.3: Revised national legislative and regulatory instruments that incorporate principles of SLM
 - Output 1.4: Cabinet-approved final NAP document
- 124. Outcome 2: Individual and institutional capacities for SLM developed. Total cost: US\$538,260; GEF US\$231,000: Co-financing: US\$307,260 (GOSVG: US\$77,260; EU US\$65,000; CWSA/VINLEC US\$165,000)
 - Output 2.1: Trained technical staff from the Forestry Department and Soil Conservation
 Unit and NGOs actively engaged in providing technical support and policy guidance on
 SLM to stakeholders
 - Output 2.2: Trained farmers⁴ and other resource users within construction, commercial, tourism sectors) practicing SLM
 - Output 2.3: Public education and awareness strategy and support materials on SLM issues developed
 - Output 2.4: Strengthened support agencies, specifically the MoHE and the MAFF, have resource capacity to render required support to SLM
 - Output 2.5: A sustainable development inter-agency coordination mechanism for SLM established
- 125. Outcome 3: Capacities for knowledge management in support of SLM developed. Total cost: US\$955,500; GEF request: US\$86,500; Co-financing: US\$869,000 (GOSVG: US\$154,000; EU: US\$715,000)
 - Output 3.1: Computerized Land Resources Information System (LRIS) within the MFP set up
 - Output 3.2: Information databases on land use, land tenure, land degradation, land zoning for St. Vincent and the Grenadines (within LRIS) established
 - Output 3.3: Monitoring and evaluation system for state of environment assessments developed

⁴ This includes local level capacities in identifying and adopting sustainable, economically and financially viable alternatives to illegal marijuana cultivation in upper watershed areas.

- Output 3.4: Technical staff trained in analytical applications for decision making to support SLM planning
- Output 3.5: Technical staff (Physical Planning, Surveys and Lands, other core agencies) trained in operation, maintenance and information-access of the LRIS
- 126. Outcome 4: Investment planning & resource mobilization for implementation of SLM interventions elaborated. Total cost: US\$42,000; GEF request: US\$25,000; Cofinancing: US\$17,000 (GOSVG)
 - Output 4.1: Investment plans in key economic sectors (agriculture, tourism, construction, commercial) incorporate priority actions for SLM as defined in NAP
 - Output 4.2: Major sector incentive regimes that incorporate SLM
 - Output 4.3: Payment for Environmental Services (PES) regime developed and effected
 - Output 4.4: Strategy for donor resource mobilization implemented
- 127. Outcome 5: Adaptive Management and Learning. Total cost: US\$224,000; GEF request: US\$87,500; Co-financing: US\$136,500 (GOSVG)
 - Output 5.1. Project implemented in a cost-effective manner in accordance with agreed work plans and budgets
 - Output 5.2. Monitoring and Evaluation Plan provides inputs for robust adaptive management
 - Output 5.3. Lessons learned from the project captured and disseminated
- 128. Key assumptions and possible risks to the success of the project include:
 - Government Ministries and other high level decision-makers, including planning authorities, will provide continued support for the integration of SLM into national development plans and strategies:.
 - Government, private sector and other key stakeholders will contribute the financial
 and human resources necessary to maintain the effort beyond the life of the project,
 the SLM monitoring and evaluation systems to be fully developed with project
 assistance;
 - The private sector and resource users understand and appreciate the importance of SLM, and their role in supporting the mainstreaming of SLM into productive processes and decisions;
 - Various institutions will be willing to collaborate on integrated approaches to sustainable land management and on sharing access to land information systems.
 - The investment climate remains favourable;
 - Government commits to providing continued funding for maintenance of the LRIS system;
 - Staff turn-over rates will not affect personnel trained in SLM through the project; and,
 - Resource users and private sector will understand the need for SLM approaches and be supportive of project objective.

Global and local benefits

Global Benefits

- 129. In terms of global benefits, the SVG project will contribute to knowledge-sharing on mainstreaming of SLM in SIDS, contribute to the global pool of ecosystem function. Some of the direct benefits include:
 - Cross-sector integration of sustainable land management into plans, policies, strategies, programs, funding mechanisms and multi-sector stakeholder groups;
 - Maintenance of the structure and functions of global ecological systems;
 - Enhanced biodiversity conservation due to reduced deforestation and reduced sedimentation in lagoons and improved health of coral reefs; and,
 - Enhanced carbon sequestration in mitigation of the impacts of global warming on climate change through improved capacities for sustainable agriculture and reduced deforestation.
- 130. These benefits will assist in meeting the country's commitment to the Millennium Development Goals (MDGs), specifically in the areas of environmental sustainability and poverty alleviation.

Local Benefits

- 131. At the national level the implementation of this MSP will contribute significantly to the national goal of alleviation of poverty especially among the country's poorest indigenous communities through the adaptation and use of sustainable land management practices. It will enhance coordination and streamline a number of processes related to SLM especially in the major economic and productive sectors such agriculture, tourism, industry and commerce.
- 132. GEF's contribution will also enable St. Vincent and the Grenadines to address an important barrier to effective land management by creating individual, institutional and systemic capacity in this field. The project will strengthen institutional and human resource capacity to improve sustainable land management planning and implementation. It will also enable SVG to improve and strengthen policy, regulatory and economic incentive frameworks to facilitate wider adoption of sustainable land management practices across sectors and at the community and national levels which will eventually safeguard economic benefits.
- 133. The project will also address the negative outcomes associated with the predominantly sector-driven approach to land development planning in St. Vincent and the Grenadines. Emphasis will be placed on development of integrated cross-sectoral mechanisms, along with enhancement of requisite systemic, institutional and individual capacities that will facilitate land management planning from a holistic "ecosystem services" perspective. The ecosystem services conceptual framework for sustainable land management seeks to ensure that

development considerations take stock of implications of development on flow of benefits from land resources to all stakeholders, and make the necessary compensations to minimize adverse outcomes.

Linkages to IA activities and programs

- 134. UNDP is currently completing a Country Programme Action Plan (CPAP) for St. Vincent and the Grenadines. The CPAP takes cognizance of government's commitment to sustainable land management as reflected in the Integrated Forest Management Programme with links to this project.
- 135. The UNDP National Capacity Self Assessment Project completed in late-2006, provided St. Vincent and the Grenadines the opportunity to conduct a thorough self-assessment and analysis of national capacity needs, priorities and constraints with respect to efforts at meeting global environmental management objectives. The NCSA process evaluated the relevant activities and outputs of the National Biodiversity Strategy and Action Plan (NBSAP), the emerging National Climate Change Policy, and the National Action Plan to Combat Desertification. This assessment provided valuable information with regards to capacity building needs as it relates to Land Degradation and SLM, and these findings will be used to guide the capacity building component of this targeted portfolio project.

Regional initiatives

- 136. St. Vincent and the Grenadines is a participating state of the Sustainable Management of the Shared Marine Resources of the Caribbean Large Marine Ecosystem (CLME) and Adjacent Regions. The project is being executed by UNDP. Co-executing agencies are UNESCO-Intergovernmental Oceanographic Commission. The project is in the PDF-B stage. Full funding of this 5-year project is estimated at US\$7 million. The overall objective of the project is the sustainable management of the shared living marine resources of the Caribbean LMB and adjacent areas through an integrated management approach that will meet the WSSD target for sustainable fisheries. The full project is expected to commence by 2008.
- Watershed and Coastal Areas Management (IWCAM) project being implemented jointly by the UNDP and UNEP and executed by the Caribbean Environmental Health Institute (CEHI) and UNEP-Caribbean Environment Programme, Regional Coordinating Unit (Car/RCU). This five-year project aims to strengthen the capacity of the participating countries to implement an integrated approach to the management of watersheds and coastal areas, with the overall goal of enhancing the capacity of the countries to manage their aquatic resources and ecosystems in a sustainable manner. The Project was launched in the first half of 2006 and implementation is underway. SVG is expected to benefit from the regional-level components of the project, specifically (a) Development of IWCAM Process, Stress Reduction and Environmental Status Indicators, (b) Policy, Legislation and Institutional Reform and (c) Regional and National Capacity Building and Sustainability. The focal point for this project is the Environmental Services Unit.

- 138. The country is a participant to a project titled Preventing Land Degradation in Small Island Ecosystems in the Caribbean through Sustainable Land Management. The Project, in its PDF-B Phase, is being executed jointly by CBHI, and the Office of Sustainable Development and Environment of the Organisation of American States (OAS) and is supported by the Global Environment Facility (GBF). This project aims to build local and regional capacity to support sustainable land management and develop pilot demonstration activities on SLM to address land degradation at the community level. The project also seeks to address the problems of land degradation, in particular deforestation and loss of ecosystem goods and services, especially endemic species. The project will promote the improvement of land management practices, institutional arrangements, policies and incentives aimed at mitigating land degradation and preserving the functioning of fragile and unique ecosystems of Participating Countries. Finally the project will contribute to the harmonization of SLM priorities to combat desertification identified in the National Action Plans (NAPs) as well as in National Biodiversity Strategies and Action Plans (NBSAPs) pursuant to the UN Convention on Combating Desertification (UNCCD) and the Convention on Biological Diversity (CBD) respectively.
- 139. This one-year phase of the project commenced in September 2005 and St. Vincent and the Grenadines is in the process of preparation of its national component. The full regional project brief will be submitted to the GEF Council for consideration by the end of 2006. The project funding is expected to be US \$6 million and is anticipated to commence by 2008. The focal point for this project is the Environmental Services Unit.
- 140. The Mainstreaming Adaptation to Climate Change (MACC) Project is a four year (2003 2007) Global Environmental Facility (GEF)-funded Project for the Caribbean region. MACC is implemented by the World Bank, with funding of US\$5 million from GEF. The project will build capacity within the CARICOM Small Island Developing States (SIDS) and Low-Lying States. The participating countries include: Antigua & Barbuda; the Bahamas; Barbados; Belize; Dominica; Grenada; Guyana; Jamaica; St. Kitts and Nevis; St. Lucia; St. Vincent & the Grenadines; and Trinidad & Tobago. The objective is to develop Stage II adaptation strategics and measures (as defined by the Conference of Partics to the UNFCCC) through the mainstreaming of adaptation into the general planning process of the countries in the region. The component on mainstreaming adaptation to climate change in national development planning and public and private sector strategies will focus on the integration of climate change concerns into planning and practices of highly vulnerable sectors such as tourism, water, fisheries and agriculture, and the line agencies that support them.
- 141. The Special Programme for Adaptation to Climate Change (SPACC) Demonstration Project was submitted to the GEF for funding. The SPACC is a Stage II Adaptation Project under the UNFCC. Stage II adaptation Projects include projects that: (a) propose an adjustment in national or human systems in response to actual or expected climatic stimuli or their effects that moderates harm and exploits beneficial opportunities; and (b) increases resilience to adverse impacts of Climate Change on vulnerable countries, sectors and communities. The project will attempt to contribute to adapting to climate change and climate variability by building resilience in ecosystems in the environment. The full project

is anticipated to be funded at an estimated US\$ 6.6 million and run over 4 years. The anticipated start date is 2007.

Food and Agriculture Organization initiatives

- 142. A Regional training workshop on Land Degradation Assessment Methods is scheduled for 2007. This workshop will seek to build capacity within technical, allied organizations and stakeholder groups in core FAO land degradation assessment methodologies. This initiative will be complementary to the works already being undertaken under the UNCCD in establishing and monitoring indicators of desertification and land degradation. The participating countries are Antigua and Barbuda, Barbados, Belize, Bahamas, Cuba, Dominica, Dominican Republic, Grenada, Guyana, Haiti, Jamaica, St. Kitts and Nevis, St. Lucia, St. Vincent and the Grenadines, Suriname, Trinidad and Tobago.
- 143. The National Forest Programme Facility is lending support to design of national forestry policy and mainstreaming into broader policy frameworks over a three-year period. It is currently in the second year of implementation. CANARI is to implement this initiative on behalf of the FAO. Participating countries include Barbados, Dominica, St. Kitts and Nevis, St. Lucia, St. Vincent and the Grenadines, Trinidad and Tobago

Stakeholder Involvement Plan

- 144. To ensure a participatory and integrated approach, the involvement of a wide cross-section of stakeholders is necessary. The key stakeholders for this project will include, but not limited to, relevant Government Ministries, statutory bodies, the private sector, civil society organizations, NGOs and CBOs and the media. Other possible stakeholders are experts in the areas of agriculture, energy, natural resource management, education, trade, poverty eradication, biodiversity, climate change, forests, marine and coastal management and national development planning.
- 145. The Ministry of Health and the Environment is the focal point for the UNCCD and is responsible for the development of the NAP, and will assume the lead for this initiative. Stakeholder roles in this initiative are outlined in Table 5.

Table 5. Key Stakeholders and envisaged roles.

Stakeholder Group		Capacity or Mainstreaming Intervention
Environmental Services Unit,	Project Executing	Project management, Awareness-raising
MOHE	Agency and	
	Coordinator of the	
	PSC; technical advisory	
Environmental Health	PSC member,	Technical inputs on environmental quality
Department, MOHE	Technical advisor to	monitoring; recipient of targeted skills
	PSC; beneficiary	training and awareness building

Stakeholder Group	Role	Capacity of Mainstreaming Intervention
Ministry of Agriculture	PSC member;	Technical inputs on food security, research
	Technical advisor to	and soil conservation; evaluation of
	PSC; beneficiary	technology for agriculture, data provider;
		recipient of targeted training and awareness
71	DOC I	building.
Forestry Division, MAFF	PSC member;	Technical inputs on management of forests,
	Technical advisor to	wildlife and watersheds; recipient of
Dhysical Diamine MOLIDD	PSC; beneficiary	targeted training and awareness building
Physical Planning, MOHPP	PSC member; Technical advisor to	Technical inputs on national development planning, data provision; recipient of
	PSC; beneficiary	targeted training and awareness building
Surveys and Lands	Beneficiary; PSC	Advisory in land tenure and administration
Department, MOHPP	member(s)	matters; data provision; Recipient of
Bepartment, Worth	memoraj	targeted skills training and awareness
		building
Ministry of Transport and	Technical advisor to	Technical inputs on policy guidance for
Works	PSC; PSC member	housing and land use; recipient of targeted
1 2 3 3		skills training and awareness building
Ministry of Education	Beneficiary; Technical	Advisory in developing training ,material and
	advisor to PSC	dissemination avenues; Recipient of
		targeted skills training and awareness
l'		building
Ministry of Rural	Beneficiary; Technical	Advisory in development, promotion and
Transformation	advisor to PSC	execution of community outreach; Recipient
		of targeted skills training and awareness
		building
Ministry of Science and	Beneficiary; Technical	Advisory in development and utilization of
Technology	advisor to PSC	knowledge products; Recipient of targeted
		skills training and awareness building
Ministry of Legal Affairs	PSC member;	Advisory in guiding legislative and
	Technical advisor to	regulatory reform
	PSC	
National Emergency	PSC member;	Technical inputs on national response
Management Office	Technical advisor to	strategies and guide discussion on zoning;
	PSC; beneficiary	recipient of targeted training and awareness
		building
Meteorological Office	Technical advisor to	Data provider and analysis; recipient of
	PSC; beneficiary	awareness building
Central Statistics Office	Technical advisor to	Data provider and analysis; recipient of
Charter I Western and Co	PSC; beneficiary	awareness building
Central Water and Sewage	Beneficiary	Data provision; Recipient of targeted skills
Authority .	Danafiaian.	training and awareness building
St. Vincent Electricity	Beneficiary	Data provision; Recipient of targeted skills
Services		training and awareness building
Solid Waste Management	Beneficiary	Data provision; Recipient of targeted skills
Authority		training and awareness building

Stakeholder, Group		Capacity or Mainstreaming Intervention
National Farmers Union	Beneficiary; PSC	Recipient of targeted skills training and
	member(s	awareness building
Banana Growers Association	Beneficiary; PSC	Recipient of targeted skills training and
	member(s)	awareness building
4H Youth Groups; National	Beneficiary; PSC	Recipient of targeted skills training and
Youth Council	member(s)	awareness building
Community Based	Beneficiary; PSC	Recipient of targeted skills training and
Organizations/NGOs	member(s)	awareness building
Media	Beneficiary	Recipient of awareness building

Financial Plan

Streamlined Incremental Costs Assessment

146. This project will secure GEF funding to the tune of US\$500,000 to mainstream and build capacity for sustainable land management in St. Vincent and the Grenadines. These funds will be complemented with other financing sourced from the Government of St. Vincent and the Grenadines, the European Union, CWSA, VINLEC and the Global Mechanism for the UNCCD.

Mainstreaming baseline activities

- 147. The EU STABEX 95-funded Agricultural Diversification Programme valued at US\$ 1,866,300 seeks to increase income and improve standard of living especially in rural communities through a series of interventions designed *inter-alia* to improve environmental management and sustainable land use, improve farm infrastructure (including badly deteriorate road networks that contribute to land degradation), enhance the legislative and institutional framework to foster commercialization of the agricultural sector.
- 148. Of relevance to this MSP, the project will deal with land tenure arrangements for beneficiaries under the programme. As part of the requirements for provision of assistance, the beneficiaries must have secure title to the lands they are to utilize for the enterprise. The project will therefore contribute to regularizing land tenure arrangements among rural entrepreneurs through the appropriate land administrative mechanisms. In addition, the project will seek to mainstream the good agricultural practices, and other sustainable resource management practices with the commercial agricultural trade environment through development of appropriate regulatory instruments.
- 149. Approximately US\$638,500 is being made available for the components related to improving environmental management and sustainable land use and improvement of the institutional and legislative framework for the agricultural sector (to include land tenure arrangements). Of this amount it is anticipated that co-financing will amount to US\$12,000.
- 150. Under the National Forest Programme Facility, the FAO will be co-financing the development and strengthening of the national forestry policy which is to be mainstreamed into the broader national development framework. The Caribbean Natural Resources Institute (CANARI) is the executing agency for this initiative. St. Vincent and the Grenadines will have access to approximately US\$8.000 (proportional allocation) in donor contribution to undertake relevant activities over the next two years. The other participating countries are Barbados, Dominica, St. Kitts and Nevis, St. Lucia and Trinidad and Tobago. The entire amount will be considered co-financing for this project component.
- 151. The National Action Programme (NAP) for Land Degradation. St. Vincent and the Grenadines is finalizing its NAP under a joint work programme of the UNCCD Secretariat

and the Global Mechanism. A total of <u>US\$10,000</u> is considered co-financing for this process. This will be contributed by the GOSVG.

152. The GOSVG will contribute at total of <u>US\$18,000</u> as in-kind contributions in facilitating the undertaking the legislative and policy reviews.

Capacity building baseline activities

- 153. The EU STABEX 96-97-funded Agricultural Diversification Programme valued at US\$2,327,700 also seeks to increase income and improve standard of living especially in rural communities through a series of interventions designed to realize the introduction of, and compliance with relevant international statutory and trade standards and requirements, improve market information generation, expand creation of agricultural cooperatives and increase investment in the sector.
- 154. In the context of environmental aspects, the project (following the STABEX 95 tranche) will encourage and support production practices and technologies that minimize careless use and misuse of toxic pesticides and improper disposal of non-biodegradable materials through the creation of the appropriate policy frameworks. It will also promote cultivation techniques which can reduce soil erosion, pollution of streams and rivers, deforestation and poor land use. The project will promote "Good Agricultural Practices" (GAP), including improved worker health and safety practices and will foster the growth of commercially viable and environmentally sustainable agricultural and rural industries and enterprises.
- 155. A total of US\$203,703 will be contributed by the EU to the component related to improving production quality standards in agriculture which focuses on capacity-building among farmers towards implementing good agricultural and environmental practices. An estimated US\$65,000 will be considered as co-financing to this MSP.
- 156. The GOSVG makes an annual allocation of approximately US\$106,333 to support the programme of the Soil Conservation Unit in the Ministry of Agriculture. The SCU provides technical and advisory services in promotion and implementation of improved soil conservation measures in SVG. Of this investment an estimated contribution of <u>US\$77,260</u> over three years will be considered co-financing to this MSP.
- 157. The Integrated Forestry Management Programme (IFMP) is designed to halt the decline in forest resources through a participatory management approach to ensure that forested areas are managed in a sustainable manner. Under Cabinet directive the Central Water and Sewage Authority and St. Vincent Electricity Services each contribute US\$27,500 to this programme annually. The key activities under the programme include:
 - Development of coordinated approaches involving all stakeholders for watershed interventions;
 - Educating the general public on the conservation of forest resources;
 - Development of viable alternative livelihood opportunities for vulnerable rural groups which includes marijuana farmers;
 - Source funding for forest conservation activities.

158. The entire three-year contribution of <u>US\$165,000</u> from CWSA and VINLEC will be considered co-financing to this project.

Knowledge management baseline activities

- 159. The National Land Information Management Project (NALIMP), which is funded under the European Development Fund (EDF) STABEX 94 allocation and from contributions from the Government of St. Vincent and the Grenadines, is focusing on regularizing the land titling system, development of a land information and management database and development of requisite capacities to administer and information. The land information system is being developed around a GIS platform which will improve the efficiency of provision of data towards effective policy formulation, planning and decision making. The total cost of the project is US\$1,271,111 of which US\$985,185 is European Union contribution and US\$285,926 as GOSVG contribution. Specific activities being, and to be undertaken include the purchase of computer hardware and software (valued at US\$63,000) and procurement of acrial photography (US\$650,000). The project commenced in November 2004 and is expected to end in February 2008.
- 160. The EU co-financing contribution to the project is estimated at <u>US\$715,000</u>.
- 161. The government in-kind co-financing contribution estimated at <u>US\$154,000</u> is being drawn from the Ministry of Health and Environment, the Ministry of Agriculture, Forestry and Fisheries and the Ministry of Finance and Planning. The contributions are in the form of:
 - a. Project staff (to be partly financed by the GOSVG and ancillary staff;
 - b. Office and meeting facilities, transportation;
 - c. Land use database development (personnel time);
 - Data acquisition for land use zone mapping (personnel time).

Resource Mobilization

162. The GOSVG will make in-kind co-financing contributions to Output 4 on sustainable financing in the amount of <u>US\$17,000</u>.

Project management and adaptive learning

163. The GOSVG will contribute a total of <u>US\$136,500</u> in co-financing to the project management component in augmentation of project staff salaries, and monitoring and evaluation.

The Project Budget is presented as Table 6.

Table 6. Project Budget

Component:	GER	Co-M	nance	Total
		Gov't Co-finance	Other Co-finance	
Mainstreaming	55,000	18,000	30,000	103,000
Capacity Development	231,000	77,260	230,000	538,260
Knowledge Management	86,500	154,000	715,000	955,500
Medium Term Investment Plan				
and Resource Mobilization	25,000	17,000	. 0	42,000
Project Management	49,500	132,500	0	182,000
Monitoring and Evaluation	38,000	4,000	0	42,000
PDF-A	15,000			15,000
TOTAL MSP	500,000	402,760	975,000	1,877,760

Table 7. Detailed description of estimated co-financing sources

Co-financing Sources		****** ******************************	wasan wa ka	
Name of Co- financier (source)	Classification	Type*	Amount (US\$)	Status*
GOSVG	Government	In kind	402,760	Confirmed
European Union	Multilateral	Cash	792,000	Confirmed
CWSA		Cash	82,500	Confirmed
VINLEC		Cash	82,500	Confirmed
FAO	Multilateral	Cash	8,000	Confirmed
Global Mechanism		Cash	10,000	Confirmed
Sub-Total Co-financi	ng		1,377,760	<u>- " : </u>

^{*}Classification = government, NGO, multilateral, bilateral

Status = committed, confirmed, under negotiation

Type = in kind or cash

Table 8 Project management Budget/cost

Сомроней	Eyimgled cohsultani weeks	GEF(\$)		Project loid Ø
Personnel*				
Local consultants*	156	49,500	111,000	160,500
International consultants*	. 0	0	0	0
Office facilities, equipment, vehicles and communications		0	21,500	21,500
Travel		0	0	0
Miscellaneous		0	. 0	0
Total		49,500	132,500	182,000

^{*} Local and International consultants in this table are those who are hired for functions related to the management of project. For those consultants who are hired to do a special task, they would be referred to as consultants providing technical assistance. The average daily rates for local consultants hired for project management are as follows: Project Manager \$120; Administrative assistant \$35; Technical Assistant \$51.

Table 9 Consultants Working for Technical Assistance Components:

SIV S COMBRITATIO 11 OF RUIT	Z EDI I COMILIENZA	issistance Con	rponents.	
Component	Estimated consultant yyeeks	GER(S)	Cyler sources (\$)	Project lotal (\$)
Personnel				
Local consultants	171	87,500	123,750	211,250
International consultants	121	87,000	154,000	241,000
Total	292	174,500	277,750	452,250

Budget Notes

- a. Locally recruited consultants will provide support for project management.
- Travel: No separate budget lines are anticipated. Travel expenses associated with external consultants will be accounted for within consultant fees,
- c. Office expenditures: These will be in-kind contribution by the GoSVG. The PMU will be established within the Environmental Services Unit, Ministry of Health and Environment.
- d. Consultants: contracted both individually and through existing technical organizations and NGOs, include:
 - 1. Policy specialist (local) Outcome 1: Policy mainstreaming
 - 2. Legal (taxation) specialists (local) Outcome 1: Legislative and regulatory mainstreaming
 - SLM Technical specialists/trainers (local and international): Outcome 2: Capacity building for best practices in SLM
 - 4. *Institutional analyst* (local) Outcome 2: Institutional analysis to determine best institutional arrangements to support SLM
 - Communications specialist (local) Outcome 2: Awareness-raising strategy development and execution
 - 6. Production services (local) Outcome 2: Awareness-raising materials production
 - 7. IT/Database Management Specialist (local) Outcome 3: Development and appropriate information management systems for data archival and information dissemination
 - 8. Land Information Systems Specialist (local and international) Outcome 3: Development of the functional basis for the land information system

- 9. **SLM Technical specialists** (local and international) Outcome 3: Land degradation assessment methods for monitoring and database population
- 10. **Policy / finance specialists** (local and international) Outcome 4: Development of appropriate financial mechanisms for SLM
- 11. Auditor (local) Outcome 5: Carry out audits of the project
- 12. *Project Evaluator* (international) Outcome 5: evaluation project execution; mid-term progress, final evaluation

NOTE: the international consultant fees account for 18% of the overall GEF allocation (US\$500,000). This is due to the fact that the expertise required, particularly with respect to capacity-building (Outcome 2), development of knowledge management systems (Outcome 3) and formulation of payment for environmental services schemes (Outcome 4), is largely resident outside of the country. It must be noted however that local consultancy services will be employed as far as local expertise is available.

- e. Contractual services individual: These are additional short-term services provided by individuals in support of main activities either by consultants or by the PCU. Such services will include, but not limited to, conduct of surveys, conduct of research, preparation of documentation, etc.
- f. Contractual services Company: These are additional services rendered by specialized organizations. These services will include, but not limited to, conduct of surveys, conduct of research, preparation of documentation, equipment installation and service.
- g. Supplies: Materials and other consumables
- h. Information technology equipment: Costs associated with procurement and installation
- Rental & Maintenance-premises: It is anticipated that several meetings and training workshops will be held across the country and the budget is reflective of the costs associated with hosting of these meetings. This includes the venue rental and catering for participants.
- j. Rental of information technology equipment:
- k. Professional services: These services will include but not limited to media production, advisory, facilitation, etc.
- I. Audio, visual and printing production costs: Costs associated with multiplication of resource materials.

PART III: MANAGEMENT ARRANGEMENTS PROJECT IMPLEMENTATION PROCESS

Institutional framework and project implementation arrangements

- 164. General Framework: The project will be implemented over a period of three years. The SLM-MSP will be managed using standard UNDP NEX modality. The National Executing Agency (NEA) for the project will be the Ministry of Health and the Environment. The Environmental Services Coordinator (and GEF Focal Point), will have supervisory oversight of the Project as Project Director (PD). The project will hire a full-time Project Manager, an Administrative Assistant and a Technical Assistant that will constitute the core of a Project Management Unit (PMU). The Project Manager will be responsible for the day-to-day running of the project.
- Committee to guide the work of the Project Management Unit. The National Environmental Advisory Board is a Cabinet-appointed body with the mandate of advising the Minister of Health and the Environment on matters pertaining to the environment (depending on the need additional representatives will be co-opted as relevant to this MSP). Since the National Environmental Advisory Board serves as Steering Committee for all environmental projects and the Environmental Services Unit house these projects, building synergies is a natural consequence. The fact that members of the advisory board are senior persons and decision makers within their respective Ministry or agency; they are well placed to facilitate the sharing of information, expertise and resources. It is therefore expected that all of the GEF supported initiatives namely the NCSA, Second National Communication of the UNCCD, and SLM will share resources in such a way as to gain multiplied benefits, avoid duplication and overlap and accrue maximum environmental benefits locally and globally.

166. The Project Steering Committee will consists of:

- a. The Environmental Services Coordinator (Chairman); Ministry of Health and the Environment
- b. The Chief Environmental Health Officer; Ministry of Health and the Environment
- c. The Town Planner; Ministry of Physical Planning
- d. The Chief Engineer; Ministry of Transport and Works
- e. The Chief Agricultural Officer; Ministry of Agriculture, Forestry and Fisheries
- f. The Director of Fisheries; Ministry of Agriculture, Forestry and Fisheries
- g. The Director of Forestry; Ministry of Agriculture, Forestry and Fisheries
- h. The Community Development Officer; Ministry of Rural Transformation
- i. The Solicitor General; Ministry of Legal Affairs
- j. Farmer organization representative (not represented on the NEAB)
- k. A selected member of the NGO community
- 1. The President of the National Youth Council
- m. UNDP representative

167. The Caribbean Environmental Health Institute (CEHI) will provide technical back-stopping to the project. The Inter-American Institute for Cooperation on Agriculture (IICA) has an office in St. Vincent and is currently involved in issues of agriculture, forestry and rural development in this country. IICA will also assist in technical back-stopping.

1. 19. 4

168. During the inception stages of this project, the work plan will be reviewed and fine-tuned where necessary. Activities will be arranged along a time line to allow logical and sequential buildup. Each phase of the project will build upon the preceding one and will provide opportunities for synergies with other initiatives.

Implementation Arrangements.

- 169. UNDP through its office in Barbados will serve as the Implementing Agency. The project will follow the UNDP National Execution (NEX) modality UNDP. The SLM-MSP will utilize Direct Payment Request modality for funds disbursement to ensure greater financial accountability and transparency. UNDP-Barbados will act to ensure that all implementation activities comply with policies outlined in UNDP's Programming and Financial manuals and are in line with UNDP GEF procedures. Where petty cash is needed for office support or similar activities, UNDP will advance funds for a three-month period. At the end of the three-month period, the PMU will submit justification for expenses and the funds spent will be renewed by UNDP. The Government will provide the Resident Representative with certified periodic financial reports and open its accounts to certified auditors in keeping with UNDP and GEF requirements. The project will comply with UNDP's monitoring, evaluation and reporting requirements as spelled out in the UNDP Programming Manual. The PIU PM will have lead responsibility for reporting requirements to UNDP.
- 170. In accordance with standard UNDP procedures, all resources and equipment gained through project support remain the property of UNDP until project closure when a decision will be taken as to how to dispose of these resources.
- 171. UNDP-Barbados will also act to provide management oversight and is ultimately responsible for project monitoring, evaluation, timely reporting by the PMU and ensuring the submission of annual audits to UNDP HQ. The regional Coordination Unit in Panama will provide technical backstopping, UNDP GEF policy advice and trouble shooting and advisory services as necessary.
- 172. Mechanisms will be developed to ensure that the project receives the maximum level of recognition, commitment, support and involvement at the highest level of Government. Agreements will be made between co-financing and partner institutions to ensure full commitment and assure that the objectives of the Project are met
- 173. In the case of substantial revisions of the project document, the UNDP Representative in Barbados is authorized to effect in writing the following types of revision, provided that he has verified the agreement thereto by the UNDP- GEF unit and is assured in writing, with signatures, that the Executing Agency, project Director and PSC have no objection to the proposed changes:

- a. Revision of, or addition to any of the annexes to the project document;
- Revisions which do not involve significant changes in the immediate objectives, outcomes of the project, but are caused by the rearrangement of the inputs already agreed to or by cost increases due to inflation;
- Mandatory annual revisions which re-phase the delivery of agreed project inputs or increased expert or other costs due to inflation or take into account agency expenditure flexibility; and
- d. Inclusion of additional annexes and attachments only as set out here in this project Document.
- e. Any modification of project outputs has to be approved by the UNDP-GEF; any
 modification of project outcomes has to be submitted for approval to the GEF
 Secretariat.
- 174. In case of minor budgetary revisions, the following will require only the approval and signature of the UNDP Resident Representative:
 - a. Compulsory annual revisions, reflecting the real expenses of the previous year, duly certified by the national counterpart, and the reprogramming of unused funds for subsequent years, based on the delivery of inputs as agreed upon in this Project Document.
 - b. Revisions that do not entail significant changes in the immediate objectives, outcomes or outputs of the project, but that result from a redistribution of the inputs agreed upon, or are due to increase expenses caused by inflation.

The substantial or budgetary revisions will be prepared by the UNDP and the PMU, in accordance with the requirements of the project itself.

175. All financial and other partners will be given due recognition. In order to accord proper acknowledgement to GEF for providing funding, "a GEF logo should appear alongside the UNDP logo on all relevant GEF Project documentation and publications, including among others, project hardware and vehicles purchased with GEF funds. Any citation on publications regarding Projects funded by GEF should also accord proper acknowledgement to GEF".

176. Responsibilities by Outcome (lead agencies)

Commence

- Outcome 1: Mainstreaming of national policies: Ministry of Finance and Economic Planning; Ministry of Health and the Environment;
- Outcome 2: Individual and institutional resource capacity for SLM: Ministry of Health and Environment, Ministry of Agriculture
- Outcome 3: Knowledge management for SLM: Ministry of Physical Planning, Ministry of Agriculture;
- Outcome 4: Medium Term Investment Plan and its Resource Mobilization: Ministry of Finance and Economic Planning
- Outcome 5: Adaptive management: Ministry fo Health and Environment

PART IV: MONITORING AND EVALUATION

MONITORING AND EVALUATION PLAN

- 177. Project monitoring and evaluation will be conducted in accordance with established UNDP and GEF procedures for MSPs under the SLM Portfolio Project and will be provided by the project team and the UNDP Country Office with support from UNDP/GEF Global Support Programme and includes the following elements.
- 178. The Logical Framework Matrix (attached) provides performance and impact indicators for project implementation along with their corresponding means of verification. These indicators have been derived from the Resource Kit for Monitoring, Evaluation, and Reporting on GEF/UNDP supported Sustainable Land Management Medium-Sized Projects in LDC and SIDS countries. The baseline situation presented in this document also utilizes these indicators.
- 179. Additional baseline information will be documented by the ESU and submitted to the UNDP Barbados-Eastern Caribbean States (ECS) Country Office and Project Steering Committee using the National MSP Annual Project Review Form in which all 'compulsory' and 'optional' questions and indicators will be completed by 1 July 2007 and updated by that date each year. The Form provides a basis for the annual review of project progress, achievements and weaknesses, for planning future activities, and to obtain lessons learned to inform adaptive management processes. It also supports UNDP Barbados-ECS Country Office-wide reporting and planning. For the optional indicators, the ESU will select the most appropriate indicators for the project and include these in the form. Those indicators included in the Logical Framework Matrix are compulsory and will not be modified. Once completed, the Review form will be forwarded to the UNDP CO which will then forward to the GSU latest by 16 July.
- 180. The ESU will work with the GSU and the UNDP Barbados-ECS Country Office to complete two annual surveys that each respond to two of the compulsory indicators, which are (a) a compulsory indicator at the Objective level of public awareness regarding sustainable land management; and (b) a compulsory indicator for Portfolio Outcome 1 that requires a survey of a group of land users to determine the percentage that is satisfied with available technical support,
- 181. These surveys will be implemented with funding included in this MSP project budget.

Monitoring Responsibilities, Events and Communication

182. A detailed schedule of project review meetings will be developed by the ESU in consultation with project implementation partners and stakeholder representatives and incorporated in the Project Inception Report. The schedule will include (i) tentative time frames for Tripartite Reviews, Project Coordination Committee Meetings, (or relevant

advisory and/or coordination mechanisms) and (ii) project related Monitoring and Evaluation activities (see Indicative Monitoring and Evaluation Budget, Table 10).

1.1.1.11.

- 183. Day to Day Monitoring of Implementation Process will be the responsibility of the Project Support Unit, operating out of the ESU and based on the project's Annual Work Plan and its indicators. The ESU will inform the UNDP Barbados-ECS Country Office of any delays or difficulties faced during implementation so that the appropriate support or corrective measures can be adopted in a timely fashion.
- 184. Periodic Monitoring of Implementation Process will be undertaken by the UNDP Barbados-ECS Country Office through quarterly meetings with the project proponent, or more frequently as deemed necessary. This will allow parties to take stock and troubleshoot any problems pertaining to the project in a timely fashion to ensure smooth implementation of project activities. The Project Coordinator in conjunction with the UNDP-GEF extended team will be responsible for the preparation and submission of the following reports that form part of the monitoring process.
- An Inception Report (IR) will be prepared immediately following the Inception Workshop and submitted within 3 months from the start of project implementation. It will include a detailed First Year/Annual Work Plan divided in quarterly time frames detailing the activities and progress indicators that will guide implementation during the first year of the project. This Work Plan would include the dates of specific field visits, support missions from the UNDP Barbados-ECS Country Office, or the Regional Coordinating Unit (RCU) or consultants, as well as time frames for meetings of the Project Steering Committee. The report will also include the detailed project budget for the first full year of implementation, prepared on the basis of the Annual Work Plan, and including any monitoring and evaluation requirements to effectively measure project performance during the targeted 12-month time frame. The Inception Report will include a more detailed narrative on the institutional roles, responsibilities, coordinating actions, and feedback mechanisms of project related partners. in addition, a section will be included on progress to date on project establishment and startup activities and an update of any changed external conditions that may affect project implementation. When finalized, the report will be circulated to project counterparts who will be given a period of one calendar month in which to respond to comments or queries. Prior to this circulation of the IR, the UNDP Barbados-ECS Country Office and the UNDP-GEF's Regional Coordinating Unit will review the document.
- 186. Quarterly Operational Reports: Short reports outlining main updates in the project progress will be provided quarterly to the local UNDP Country Office and the UNDP-GBF regional office by the project team.
- 187. Technical Reports will be scheduled as part of the Inception Report, the project team will prepare a draft Reports List, detailing the technical reports that are expected to be prepared on key areas of activity during the course of the Project, and tentative due dates. Where necessary/applicable, this Reports List will be revised and updated, and included in subsequent Annual Progress Reports (APRs). Where necessary, Technical Reports will be prepared by external consultants and will be comprehensive with specialized analyses of

clearly defined areas of research within the framework of the project and its sites. These technical reports will represent, as appropriate, the project's substantive contribution to specific areas, and will be used in efforts to disseminate relevant information and best practices at local, national and international levels. Information from reports will be shared with the CCD focal point and Project Steering Committee.

Annual Project Report (APR) and Project Implementation Review (PIR)

- 188. The APR is a UNDP requirement and part of UNDP's Country Office central oversight, monitoring and project management. It is a self-assessment report by project management to the Country Office and provides CO input to the reporting process and the ROAR (Results Oriented Annual Report), as well as forming a key input to the Tripartite Project Review. The PIR is an annual monitoring process mandated by the GEF. It has become an essential management and monitoring tool for project managers and offers the main vehicle for extracting lessons from ongoing projects. These two reporting requirements are so similar in input, purpose and timing that they have now been amalgamated into a single Report.
- 189. An APR/PIR is prepared on an annual basis following the first 12 months of project implementation and prior to the Tripartite Project Review. The purpose of the APR/PIR is to reflect progress achieved in meeting the project's Annual Work Plan and assess performance of the project in contributing to intended outcomes through outputs and partnership work. The APR/PIR is discussed in the TPR so that the resultant report represents a document that has been agreed upon by all of the primary stakeholders.
- 190. A standard format/template for the APR/PIR is provided by UNDP GEF. This includes the following:
- An analysis of project performance over the reporting period, including outputs produced and, where possible, information on the status of the outcome
- The constraints experienced in the progress towards results and the reasons for these
- The three (at most) major constraints to achievement of results
- Annual Work Plans and related expenditure reports
- Lessons learned
- Clear recommendations for future orientation in addressing key problems in lack of progress
- 191. The UNDP/GEF M&E Unit will analyse the individual APR/PIRs by focal area, theme and region for common issues/results and lessons. The Reports are also valuable for the Independent Evaluators who can utilise them to identify any changes in project structure, indicators, work-plan, etc. and view a past history of delivery and assessment.

Mid Term and Final Evaluation

192. The project will be subject to two independent external evaluations. An independent external *Mid-Term Evaluation* (MTE) will be undertaken 18 months after project initiation. The focus of the MTE will be to make recommendations that will assist in adaptive management of the project and enable the PM to better achieve the project objective and

outcomes during the remaining life of the project. The Final Evaluation will take place three months before the project is operationally closed, prior to the terminal tripartite review meeting, and will focus on determining progress being made towards the achievement of outcomes and will identify effectiveness, efficiency and timeliness of project implementation; highlight issues requiring decisions and actions; and present initial lesions learned about project design, implementation and management. The final evaluation will also look at impact and sustainability of results, including the contribution to capacity development and the achievement of global environmental goals.

Audits

er at the second

193. The Government of St. Vincent and the Grenadines will provide the UNDP Resident Representative with certified periodic financial statements, and with an annual audit of the financial statements relating to the status of UNDP (including GEF) funds according to the established procedures set out in the Programming and Finance manuals. The Audit will be conducted by the Office of the Auditor General of the Government of St. Vincent and the Grenadines, or by a commercial auditor engaged by the Government. The project foresees an audit to be conducted at the end of the project by a recognized national firm.

Adaptive Management

- 194. Lessons learnt will be continuously extracted from the MSP Project. Lessons will be disseminated through the ESU. Among the mechanisms to be used will be inter-Agency MoUs, incorporation into Annual Work Plans and through capacity development and training initiatives. As well, there will be the sharing of information between projects, stakeholders and policy representatives as an effective measure of mainstreaming. There is an opportunity during the implementation of the MSP for review of the implementation of the NAP and to take into consideration the lessons learnt from the MSP.
- 195. The lessons learnt from the MSP through evaluations will be incorporated into implementation of the MSP. In addition to the monitoring, evaluation and feedback mechanisms already identified, the Project Steering Committee will review progress on a quarterly basis, identifying lessons learnt and discuss project progress with the involvement of wider stakeholder audience as necessary. The ideas and lessons learnt will be incorporated into the management of the project and further implementation process by the Project Steering Committee with adjustments to the Work Plan as required.

Table 10: Monitoring and Evaluation (M&E) Plan

	Responsible Party (1880)	Budget	(Time Kraine
Inception Report	Project Implementation Team	None	At project start-up
Annual Progress Report	The National Executing Agency	None	By June each year
(PIR) and GEF Project	(MHE/PMU), Project Team, UNDP		
Implementation Report	Country Office, UNDP/GEF Task		
	Manager		
Tripartite meeting and	National Executing Agency, Project	None	Each year on receipt of

report (TPR)	Team, UNDP Country Office,		the APR
	UNDP/GEF Task Manager		
Mid-term External	National Executing Agency, Project	\$13,000	Middle of year 2 of
Evaluation	Team, UNDP Country Office, UNDP		project implementation
	headquarters, UNDP Task Manager		
Final External	National Executing Agency, UNDP	\$18,000	At end of project
Evaluation	Country Office, UNDP/GEF Task		implementation,
	Manager, UNDP/GEF Headquarters,		-
	Project Team		
Terminal Report	UNDP Country Office, UNDP/GEF	None	At least one month
	Task Manager, Project Team		before end of project
Audit	National Executing Agency, UNDP	\$2,500	Yearly
	Country Office, Project Team	(\$833	,
		per year)	
Surveys (2)	Project Management Unit,	\$2,000	Two surveys, annually
- · ·	UNDP/GEF RCU, UNDP/GEF Task		Ţ
	Manager, UNDP CO, Project Team		
Lessons learnt	UNDP-GEF, GEFSEC, Project Team	\$2,500	For duration of project
Total		\$38,000	

RESPONSE TO GEF SECRETARIAT REVIEW

Provide a concise response to all points raised by GEF Secretariat after first submission (if any).

GEFSEC Comment	Response	Location where document was revised
	·	

SECTION II: STRATEGIC RESULTS FRAMEWORK

6-12-15 NO. 4

Table 11: Project Logical Framework

Risks and Assumptions	rotection of Care	Continued political support for integrating SLM into national development planning			Senior policy and planning authorities are motivated to facilitate the process of integration of SLM considerations in sustainable development; high level political
Sources of verification	ат м. В. Сопте бице то вые т т. В. С.	Published revised legislative and policy instruments in agency reports and in National Gazette	Survey results of agency and other stakeholders	Cabinet decision published in national Gazette	Revised Plaming and policy documents. (accompanied by relevant SLM economic analyses)
<u>larget</u>	saan adood ay yo oo na yo oo oo oo aa	SLM considerations are incorporated into relevant legislative, policy and regulatory frameworks by end of Y3	Capacity and knowledge management completed by of Y3	NAP completed by mid Y1	Incorporation of SLM into macro-economic policies and planning (via best practices/guidelines for SLM integration) completed by end Y1
Objectively verifiable indicators Baseline	hieved through unarrowed for or the economic and social be	SLM not mainstreamed at the systemic level resulting in ineffective management of land resources	Low level of capacity within agencies with land management mandates to effectively manage land resources	NAP did not exist	Guidelines for incorporating SLM into macro-economic policies do not exist; limited capacity to effect mainstreaming process
Objectiv	Contract and the presentation of expression of the second of the people and contract of the people than a 1915	Best practices and guidelines for SLM are widely disseminated and used in national development planning, agricultural practices and forestry management by Y3	Reduced rate of land degradation in identified critical areas with improvement to ecosystem productivity and sustainability of ecological functions at the national level in response to enhanced capacities for SLM by Y3	NAP formulation completed and approved by Cabinet of Ministers	The Ministries of Health and the Environment and Agriculture Forestry and Fisheries use SLM guidelines and best practices based on principles of holistic ecosystem services and landscape management to support physical and economic development planning, and formulating macro-economic policies
Project Strategy	Control of the Contro	Objecture of the project first content and or sussimple and particular of the content and of the particular of the particular of the particular of the particular of the particular of the particular of the particular of the particular of the particular of the particular of the particular of the particular of the parti	So year community in the community of th		Controller Store Francisco Control Francisco Cont

			Project Strategy
NAP for UNCCD completed and approved by Cabinet by mid Y1	All national legislation regarding land management and planning incorporates principles of SLM by mid Y3	National Physical Development Plan, NEMS contain specific sections on SLM by end of Y2	Objectively verifiable indicator Baseline Baseline
NAP is not completed	Most legislative and regulatory instruments do not incorporate SLM	Most policy instruments do not incorporate specific elements of SLM	Objectively verifiable indicators Cator Baseline
Final NAP approved, published and disseminated to all relevant stakeholders by mid Y1	Incorporation of SLM into key legislative instruments completed by mid X3	Integration of SLM into National Physical Development Plan, NEMS completed by end of Y2	iatget
National Action Programme document; Cabinet decisions are published on various media	Gazetted new and/or amended legislation	Revised National Physical Development Plan, NEMS documents	Source of:
		secured and Funds are mobilized;	ORNE, and

							·			_																
Assumptions	There is stakeholder	consensus for, and	buy-in to the	process and	willingness to	participate		Continued political	support for	integrating SLM	into national	development	planning		Staff turnover does	not undermine	training efforts		The appropriate	environment and	incentives are	provided to	resource persons to	facilitate continued	provision of	services.
Somregof verification	Two major published	guidelines (soil	conservation and	drainage for	agriculture and urban	development; soil	nutrient management)	and a core training	manual for resource	personnel on SLM	•	Agency reports	(training programme	reports; record of	technical services	rendered).	•	Stakeholder survey to	indicate that training	is being applied on	the ground	ı				
Some coff Resident Earget Retification Assumptions	At least 25 officers	within Forestry	Department, Soil	Conservation Unit, and	other non-gov't	agencies trained in	various technical areas	of SLM by end Y3.	At least 6 core persons	will be trained at	advanced level to be	trainer of trainers by	end Y2													
Objectively verificial emberture	Inadequate trained	personnel in SLM;		provide minimal level of	conservation education on	SLM to farmers and other	stakeholders																			
Objective	Increase in number of adequately	trained technical staff in SLM;	increase in contact frequency by	technical staff from Forestry	Department, Soil Conservation Unit	(MAFF) and NGOs in provision of	technical support and policy	guidance on SLM to stakeholders by	end Y3																	
PoliceStaticg	Outcome 2. first admit	inclustrational capacities	The special developed of the second		· 特在企業制度的機能及影響的					が明確ない。	· · · · · · · · · · · · · · · · · · ·	が 100mm 10									10000000000000000000000000000000000000		文· 10 年 10 年 10 日 10 日 10 日 10 日 10 日 10 日			

						Project Strategy
Informed general public on SLM through development and execution of a Public Education and Outreach strategy				construction, commercial, and tourism sectors) that have modified means of economic livelihoods to incorporate SLM principles	Indicator: Increase in the number of farmers and other resource users (within	
Traditional methods of Public education and outreach has been ad hoc with limited success;. Population has a low level of awareness of SLM issues				resource users	SLM practices are not adopted by farmers and	Objectively-verifiable indicators
PEO strategy developed and implemented by end Y3	At least 25 farmers develop an alternative livelihood by end Y3	At least two national consultations with marijuana cultivators to identify economically viable alternatives by end Y2	by end Y3 Good agricultural practices adopted by 50 % of farmers trained in SVG by end Y3	key economic sector groups (agriculture, construction, tourism, commercial) targeting at least 360 completed	大約 海 高	
PEO Strategy document. M & E report			Stakeholder survey to indicate that training is being applied on the ground	reports proceedings, training and public awareness material, Annual Reports of MAFF	1:50(24/54)	Somewhol
					Assaulphons	(Racks and

	· · · · · · · · · · · · · · · · · · ·	·····	A. T.
Redesand			The institutions willing to collaborate on integrated approaches to sustainable land management and to share access to land information.
Source of Verification	New/revised staffing structures, Revised agency mandates and mission statements within MAFF and MoHE; budgetary allocations by 2009	Cabinet Memorandum; Memoranda of Understanding between agencies	Consultant reports; MOUs or appropriate instruments establishing terms and conditions for data exchange
Target	Revised agency TORs/ mission statements / visions that incorporate SLM considerations; Staff compliment of MAFF augmented and budget expanded by end Y3	Coordinating mechanism through the NEAB formally established by end Y3	Computerized land information system completed by end Y3
ectively verifiable indicators Target Verification Assumptions	Low level of investment within agencies for support to SLM	Agency (state and non- state) mandates and mechanisms for effective coordination for SLM poorly defined; no formal arrangements for inclusion of NGOs and private sector in land management	Central land information system does not exist; Spatial information systems (GIS) with limited datasets exist in MFP but not oriented to SLM decision making
Objective Indication	Lead agencies with SLM responsibilities, specifically MAFF and MoHE have resource capacity to render required support for implementing SLM practices and requirements.	Effective inter-agency coordination mechanism for SLM is defined between MoHE, MFP, MAFF, and CBOs guided by tools and guidelines.	Computerized Land Resources Information System (LRIS) established within the National GIS Unit (MFP) and accessible to users via intra and internet exchange protocols
Project Stratic Florida			Controller

άŅ

The street control of the street of the broken property	če coozu, cnov knapýce bákur n	. I	es esser se u su
			Project Strates
Technical staff in MFP and MAFF are developing spatial information products for decision making based on agency and stakeholder requirements for SLM planning	Monitoring and evaluation system for state of environment assessment in SVG is operational and information used to update LRIS in SLM planning	Information on land use, land tenure, land degradation, land zoning in SVG readily available to policy planners, technical departments and land users in implementing SLM through an integrated Land Resources Information System (LRIS)	Objects
Very limited capacity in application of spatial information systems to sustainable land management planning	M&E systems on state of land degradation does not exist	Land use and land degradation data is outdated compromising effective decision making and planning; Land ownership information (spatial) not readily available for land use planning; no comprehensive land zoning information to guide planning	Objectively verifiable indicators. Theoline
At least 6 officers in MFP and MAFF trained in the use of land information systems and specific applications to support SLM in development planning across various sectors by end Y3; At least 2 training of trainers workshops held by mid Y3.	M&E protocol for land degradation elaborated based on the UNCCD benchmarks and indicators established by end Y2	Relevant spatial/attribute datasets (land use, land tenure, land degradation, land zoning) compiled by end Y3	Tage
Spatial planning methodologies; training reports;	Consultant reports; Land degradation monitoring programme; GIS data outputs	Spatial data sets; Consultant reports; Planning/development application documentation; MTR, PMU project reports, TAG Government resource allocation in Estimate of Expenditure (commitment to continued funding for maintenance of the system)	Somresof.
			A min poor

اً ن

Resistant Neumanions		Investment climate remains favourable; political commitment continues Private sector understands importance of SLM and is willing and	committed to supporting mainstreaming of SLM into productive processes and decisions	
Sources of	Published guidelines and metadata standards for system maintenance; information sharing policy; training module for operators; training reports	Sector Investment plans of government agencies and private sector organizations identifying projects; government budgefary allocation; Consultant reports	Gazetted new/revised incentive regimes	Cabinet (gazetted) decision; Ministry of Finance budget estimates (institutional and financial mechanisms)
Tark	At least 6 officers in MFP and MAFF trained by end Y3	SLM investment plans completed by end of Y2	Incentive instruments approved by Ministry of Finance by end Y3	Proposal for a Payment for Environmental Services (PES) regime developed and approved by mid Y3
ectively yerifizhte indicators	No guidelines exist for management of spatial information systems	Sector investment plans do not exist	No incentive regimes to encourage investment in SLM exist	No fiduciary mechanisms exist for funding SLM-related interventions; low priority afforded to national investment in SLM
objective and and a second	Technical staff in MFP and MAFF are using guidelines for operation, maintenance and information-sharing of the LRIS	The investment plans in key economic sectors (agriculture, tourism, construction, commercial) incorporate priority actions for SLM as defined in NAP	Major sector incentive regimes that include protocols for fiscal development incentives reviewed and amended to include incentives for SLM	Payment for Environmental Services (PES) regime developed and effected
PojectiStaten		Objection of the control of the cont		

Do Selfa de ling		Outcome 5 Adaptive Promanagement and Fearning est	Sun Do	Projectivaniem
Documented lessons from project implementation	Project implementation guided by monitoring and evaluation programme	Project Management Unit established and effective	Strategy developed to facilitate the mobilisation of resources from Donors.	Indianor Objectiv
None	None	None	No funds committed for SLM initiatives	Objectively-verifiable indicators Minange Baseine
Lessons learnt documentation incorporated into annual progress report	M+E benchmarks and targets realized	PMU is operational within 1 month of Project start-up.	Donor round meeting convened and commitment obtained by end-Y3	Larget
Quarterly Operational and Annual project progress reports	Quarterly Operational and Annual project progress reports; Published annual M+E evaluations; Revised Annual work plans (based on findings of M+E)	Annual project progress reports Annual workplans	Meeting reports; commitment documentation	Source of: Vertugation
				ASSUMPTION OF THE PROPERTY OF

Table 12: Activity Schedule

ō	CEASURE TO THE PERSON OF THE P		ļ								38-8-71					
	1.1.1 Host two national strategic planning workshops on policy mainstreaming	1.1.2 Formulate SLM integration strategy within key policy and regulatory framework documentation	1.1.3 Review consultation for radification of outputs	1.2.1 Review of draft NPDP to include principles of	SLM in relevant areas such as Land Use Planning, Agriculture, Forestry, etc	1.2.2 Host National workshop to review and finalize draft NPDP	1.3.1 Review OECS framework and other national efforts on environmental legislation	1.3.2 Develop draft SLM-supportive legislative instruments (strengthen existing legislation and/or develop new instruments)	1.3.3 Host national workshop to ratify proposed amendments and new proposals	1.4.1 Conduct stakeholder workshops to obtain inputs for NAP development.	1.4.2 Identify projects at local level to address problems of land degradation in SVG.	2.1.1 Design training manuals on SLM	2.1.2 Mass produce and disseminate training manuals to relevant resource agencies, organizations	2.1.3 Train-the-trainers workshop on SLM techniques for at least 6 resource persons (Soil Conservation Unit, Forestry Department and other resource agencies)	2.2.1 Design of training material on SLM for resource users	2.2.2 Production and dissemination of training materials to relevant stakeholders
	1.1: Planning and policy documents for integration of	SLM into macro-economic policies and regulatory frameworks of SVG		1.2: National Physical	Development Plan, NEMS, and relevant national environmental	legislation incorporating SLM	1.3: Revised national legislative and regulatory instruments that	incorporate principles of SLM		1.4: Cabinet-approved final NAP document		2.1: Trained technical staff from	the Forestry Department and Soil Conservation Unit and NGOs actively encoured in	providing technical support and policy guidance on SLM to stakeholders	2.2. Trained farmers and other resource users within	construction, commercial, tourism sectors) practicing SLM

		2.5: A sustainable development inter-agency coordination mechanism for SLM established	support to SLM	and the MAFF have resource capacity to render required	2.4 Strengthened support				developed	awareness strategy and support materials on SLM issues	2.3: Public education and		x				
2.5.3 Establishment of a SLM coordinating mechanism	2.5.2 Formally re-constitute the NEAB with strengthened mandate	2.5.1 Host consultation to Review and revise membership of National Environmental Advisory Board (NEAB).	2.4.3 Realignment of Staff (augmenting if needed) and revision of budgetary provisions	2.4.2 Undertake Strategic Visioning / Planning Exercise for relevant agency(ies) to revise mandates	2.4.1 Undertake capacity needs assessment	2.3.6 Implement PEO Strategy for SLM	2.3.5 PEO materials mass produced and disseminated to all stakeholders	2.3.4 Design relevant PEO materials for all stakeholders on SLM	2.3.3 Design a Public Education and Outreach strategy for SLM	2.3.2 Conduct KAP survey on SLM in SVG	2.3.1 Develop survey instrument for KAP survey.	2.2.6 Conduct focus training activities with marijuana cultivators facilitate development and adoption alternative livelihood activities.	2.2.5 Conduct viability study for alternative livelihood options for illicit marijuana cultivators	2.2.4 Conduct two national consultations with marijuana cultivators to identify economically viable alternatives	management practices (including GAPs) and soil conservation measures.	2.2.3 Conduct at least 12 training workshops for at least 360 farmers and other resource users on best land	不是一个人,我们就是一个人的,我们就是一个人的,我们就是一个人的,我们就是一个人的,我们就是一个人的,我们就是一个人的,我们就是一个人的,我们就是一个人的,我们
																WXI	文
																	C
	10000																
													i				

		* * * *
Output		4 62
3.1: Computerized Land Resources Information System	3.1.1 Assess existing GIS capability to make recommendations for developing an integrated LRIS.	
(LRIS) within National GIS Unit	3.1.2 Procure hardware and software systems for LRIS	
ger up	3.1.3 Install LRIS within the National GIS unit	
3.2: Information databases on land use, land tenure, land	3.2.1 Consolidate all sparial data and relevant non-spatial datasets to populate the LRIS	
Vincent and the Grenadines (within LRIS) established	3.2.2 Develop and publish metadata for all data	
3.3: Monitoring and evaluation system for state of environment assessments developed	3.3.1 Design a land degradation assessment framework for SVG (based on UNCCD B&Is and Project M&E Toolkit)	
•	3.3.2 Train technical officers and select stakeholders in use of methodology through at least 4 training activities	
3.4: Technical staff trained in analytical applications for decision making to support SLM	3.4.1 Conduct train-the trainer's workshops for relevant staff at GIS unit, forestry and agriculture on use of integrated LRIS	
planning	3.4.2 Conduct workshop on use of the integrated LRIS for other stakeholders	
3.5: Trained technical staff (Physical Planning, Surveys and	3.5.1 Conduct at least 3 training workshops for system technical operators	
Lands, other core agencies) on operation, maintenance and information-access of the LRIS	3.5.2 Develop training material (including system management protocols)	M/0
 Investment plans in key economic sectors (agriculture, 	4.1.1 Host national workshop on financing for SLM projects	
tourism, construction, commercial) incorporate priority	4.1.2 Develop a costed SLM Investment Plan including brief concept papers for priority investments	
NAP	4.1.3 Host national workshops on financing for SLM projects	
4.2: Major sector incentive regimes that incorporate SLM	4.2.1 Review existing fiscal incentive frameworks in SVG and design appropriate measures to integrate SLM	

5.3. Lessons learned from the 5.3.1 Document production and dissemination project captured and disseminated	5.2.3 Evaluations (Mid and Final)	Plan provides inputs for robust 52.2 Surveys of stakeholders	5.2. Monitoring and Evaluation 5.2.1 Annual review meetings	5.1.3 Bi-annual meetings of the PSC	accordance with agreed work 5.1.2 Inception meeting	5.1 Decision implemented in a S.1.1 Reconitment of PMT staff and office.	4.3: Strategy for donor resource 4.3.1 Convene donor forum - sourcing of investments mobilization implemented for SLM	operation	developed and enected 4.3.2 Convene stable holder reviews for ratification and		4.3: Payment for Environmental 4.3.1 Undertake an evaluation of existing	4.2.3 Establish incentive programme to assist farmers and other resource users in adopting alternative livelihood activities	review proposals
on							vestments	E CONTROL DE LA	fication and	is far of M		ist farmers	ži sadops io
								<i>V</i> ,000					

Table 13: Summary Budget and Co-financing

MWARDED ROOM OF CALL		l Mainstreat	indan kana Nineanisniin	nable Cando	ylanagement	Silii -
Vincent and the Grenadines GEF Outcome/ Atlas Activity	#PIMS 3416 Responsible Party	Source of Funds	Amount USS	Amount USS (Year 2)	Amgunt USS	Amount USS (Fotal)
Outcome 1: SLM	GOSVG	GEF	37,500	14,000	3,500	55,000
mainstreamed into		GOSVG	11,000	4,500	2,500	18,000
national development		EU	6,000	6,000	0	12,000
policies, plans and		FAO	8,000	0	0	8,000
regulatory frameworks.		GM	10,000	0	0	10,000
		Sub-total	72,500	32,500	6,000	111,000
Outcome 2: Individual	GOSVG	GEF	55,000	105,000	71,000	231,000
and institutional	33313	GOSVG	36,000	21,760	19,500	77,260
capacities for SLM		EU	0	36,000	29,000	65,000
developed		CWSA /VINLEC	55,000	55,000	55,000	165,000
		Sub-total	146,000	217,760	174,500	538,260
Outcome 3: Capacities	GOSVG	GEF	17,000	52,500	17,000	86,500
for knowledge		GOSVG	20,000	77,000	57,000	154,000
management in support of		EU	713,000	0	2,000	715,000
SLM developed		Sub-total	750,000	129,500	76,000	955,500
Outcome 4: Investment	GOSVG	GEF	0	16,000	9,000	25,000
planning & resource	· · · · · · · · · · · · · · · · · · ·	GOSVG	0	16,000	1,000	17,000
mobilization for implementation of SLM interventions elaborated		Sub-total	0	32,000	10,000	42,000
Outcome 5: Adaptive	GOSVG	GEF	17,333	31,334	38,833	87,500
management and		GOSVG	44,168	48,167	44,165	136,500
learning (includes M&E)		Sub-total	61,501	79,501	82,998	224,000
Total GEF			126,833	218,834	139,333	485,000
Total Other (GOSVG in-kind and other co- financing)			903,168	264,427	210,165	1,377,760
PDF-A	ĺ	GEF			··	15,000
TOTAL PROJECT	· · ·		1,030,001	483,261	349,498	1,877,760

SECTION III: ADDITIONAL INFORMATION

PART 1: GEF Operational focal point endorsement letter (See separate file)
Part II: Co-Financing Letters (See separate file)
Part III: Detailed Information (See separate file)

Annex 1 Total Budget and Work Plan

Award ID:	00040742
- TANK 6	PIMS 3416 Saint Vincent and the Grenadines - Capacity building and Mainstreaming of Sustainable Land Management in
Awaru Inie:	Saint Vincent and the Grenadines
Business Unit:	BRB10
	PIMS 3416 Saint Vincent and the Grenadines - Capacity building and Mainstreaming of Sustainable Land Management in
Project 1 lile:	Saint Vincent and the Grenadines
Project ID:	00046250
Implementing Partner (Executing Agency) MINISTRY OF HEALTH AND ENVIRONMENT	MINISTRY OF HEALTH AND ENVIRONMENT

	d1; d2	4	80	j	^ k	-	学品企業	d3	d3;d4	95;d6	ρū		¥	1	
0	17,500	17,500	6,000	2,000	4,000	8,000	.25,000	28,000	43,750	75,000	19,500	7,500	21,000	36,250	231,000
0	√ 1,250	0	7,000	0	0	√ 1,250	3,500	0000	√ 12,500	~ 22,500	√ 7,000	× 2,500	5,000	11,500	77,966
0	6,250 √ 6,250 √ 6,250 √ 6,250 √ 6,250 √ 6,250 € 7	$\sim 2,500$	7 1,500	200	200	2,750	37,500 14,000	<u>√ 12,000 </u>	v 16,250 V	35,000	000'6 ^	3,000	12,000	17,750	105,000
0	√10,000	√ 15,000	3,500	1,500	> 3,500	× 4,000	37,500	00009	15,000	V 17,500	√ 3,500 \	2,000	√ 4,000 √	7,000	55,000
International Consultants	Local Consultants	Contractual services - Company	Supplies	Rental& Maintenance-premises	Professional Services	Audio Visual&Print prod costs	Total Outcome 1	International Consultants	Local Consultants	Contractual services - Company	Supplies	Rental& Maintenance-premises	Professional Services	Audio Visual&Print prod costs	Total Outcome 2
71200	√ 71300	√ 72100	72500	73100	74100	74200		71200	71300	72100	72500	73100	74100	74200	
GEF			<u>-</u>												
			•				が 表示が 次の 次の					İ			
GoSVG							対的を含める	GoSVG							
OUTCOME 1: SLM	mainstreamed into national	development policies, plans and	regulatory frameworks	-	Nati. Dear Paleur		k	OUTCOME 2:	Individual and institutional	capacities for SLM developed			(A) 6 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		1, 2, 0;

	**************************************			#XXXX	PROBLETING AND THE SECOND SECO		(1) (1) (1) (1) (1) (1) (1) (1) (1) (1)	次 · · · · · · · · · · · · · · · · · · ·	· · · · · · · · · · · · · · · · · · ·
					Total Management 2 - 22, 54, 54			Oneve	Outcome in the Logframe) $p_{J,\sigma}$
e,B	49,500	16,500	16,500	16,500		71400	CEF		(This is not a to appear as an
					Contractual services - Indiv.			GoSVG	Project management unit
	38,000	22,333	833 14,834 22,335 38,000	833	Total Outcome 5				Adaptive management and learning (includes M&E) $g_{x}F_{yy}$
co 7	7,000	4,333	1,834	833	Contractual services - Company	72100			EVALUATION COMPACK &
d12 :	31,000	18,000	V 13,000	0	International Consultants	71200	GEF	GasVG	MONITORING, LEARNING,
	23.0	9,000 25,000	16,000		Total Outcome 4		は、多数のでは、	2000年代の大学の大学の大学の大学の大学の大学の大学の大学の大学の大学の大学の大学の大学の	6, 5
_	3,000	1,000	2,000	0	Audio Visual&Print prod costs	74200	1		
⊁'	1,500	< 500	1,000	0	Professional Services	74100	ı		, j
ф	1,000	< 500	× 500	Q.	Rental& Maintenance-premises	73100	,		in plane and cic.
ng	1,750	750	1,000	Q.	Supplies	72500			of STM Thereendon's elaborated
>= ,	2,250	< 500	1,750	0	Contractual services - Company	72100			mobilization for implementation
01 P	7,500	√ 3,750	√ 3,750	Q	Local Consultants	71300			Investment planning & resource
01P	8,000	2,000	< 6,000	0	International Consultants	71200	GEF	GoSVG	OUTCOME 4:
***	17,000: 52,500 17,000 - 86,500	15,000	57,500	17,000	Total Outcome 3	東京の東京の東京の東京の東京の東京の東京の東京の東京の東京の東京の東京の東京の東			47.3
-	8,000	1,250	√ 2,750	4,000	Audio Visual&Print prod costs	74200	_		
፟	3,750	√ 500	2,000	\ 1,250	Professional Services	74100	-		
_ .	2,000	0	~ 2,000	0	Equip	73300	ı		6
					Rental & Maint of Info Tech		ı		
"	7,500	≥ 2,500 :	∨ 3,000 l	2,000	Rental& Maintenance-premises	73100			
ь	10,000	0	\ 10,000	0	Equipment	72800	•		1. 2.
ŋ	į		,	ļ	Information Technology			_	ひきょ アイナリー こうしゅう
rq	4.500	√ 500	2.000	2,000	Supplies	72500			developed
щ	12,000	√ 500	\sim 10,000 $[$	· 1,500	Contractual services - Company	72100			management in support of SLM
d7;d8;d9	18,750	> 3,750	√ 8,750	~ 6,250	Local Consultants	71300			Capacities for knowledge
d8;d9	20,000	₹ 8,000	\ 12,000 ;	0	International Consultants	71200	GEF	GoSVG	OUTCOME 3:
		24/2	7000	27.70					

Budget Notes

909 6

- a. Locally recruited consultants will provide support for project management.
- b. Travel: No separate budget lines are anticipated. Travel expenses associated with external consultants will be accounted for within consultant fees.
- c. Office expenditures: These will be in-kind contribution by the GoSVG. The PMU will be established within the Environmental Services Unit, Ministry of Health and Environment.
- d. Consultants: contracted both individually and through existing technical organizations and NGOs, include:
 - 1. Policy specialist (local) Outcome 1: Policy mainstreaming
 - 2. Legal (taxation) specialists (local) Outcome 1: Legislative and regulatory mainstreaming
 - 3. SLM Technical specialists/trainers (local and international): Outcome 2: Capacity building for best practices in SLM
 - 4. Institutional analyst (local) Outcome 2: Institutional analysis to determine best institutional arrangements to support SLMi
 - Communications specialist (local) Outcome 2: Awareness-raising strategy development and execution
 - 6. Production services (local) Outcome 2: Awareness-raising materials production
 - 7. IT/Database Management Specialist (local) Outcome 3: Development and appropriate information management systems for data archival and information dissemination
 - 8. Land Information Systems Specialist (local and international) Outcome 3: Development of the functional basis for the land information system
 - 9. SLM Technical specialists (local and international) Outcome 3: Land degradation assessment methods for monitoring and database population
 - Policy / finance specialists (local and international) Outcome 4: Development of appropriate financial mechanisms for SLM
 - 11. Auditor (local) Outcome 5: Carry out audits of the project
 - Project Evaluator (international) Outcome 5: evaluation project execution; mid-term progress, final evaluation

NOTE: the international consultant fees account for 18% of the overall GEF allocation (US\$500,000). This is due to the fact that the expertise required, particularly with respect to capacity-building (Outcome 2), development of knowledge management systems (Outcome 3) and formulation of payment for environmental services schemes (Outcome 4), is largely resident outside of the country. It must be noted however that local consultancy services will be employed as far as local expertise is available.

- e. Contractual services individual: These are additional short-term services provided by individuals in support of main activities either by consultants or by the PCU. Such services will include, but not limited to, conduct of surveys, conduct of research, preparation of documentation, etc.
- f. Contractual services Company: These are additional services rendered by specialized organizations. These services will include, but not limited to, conduct of surveys, conduct of research, preparation of documentation, equipment installation and service.
- g. Supplies: Materials and other consumables
- h. Information technology equipment: Costs associated with procurement and installation
- Rental & Maintenance-premises: It is anticipated that several meetings and training workshops will be held across the country and the budget is reflective of the costs associated with hosting of these meetings. This includes the venue rental and catering for participants.
- j. Rental of information technology equipment:
- k. Professional services: These services will include but not limited to media production, advisory, facilitation, etc.
- I. Audio, visual and printing production costs: Costs associated with multiplication of resource materials.
- m. The amount shown is only for GEP funding as the Total Budget and Work Plan is an internal UNDP document and only reflects GEF funds or funds that are administered by UNDP. Co-financing in the amount of \$136,500 is also available for project management and will include the hiring of a small project staff and maintaining operation of an office dedicated to the project

3 10 17 3

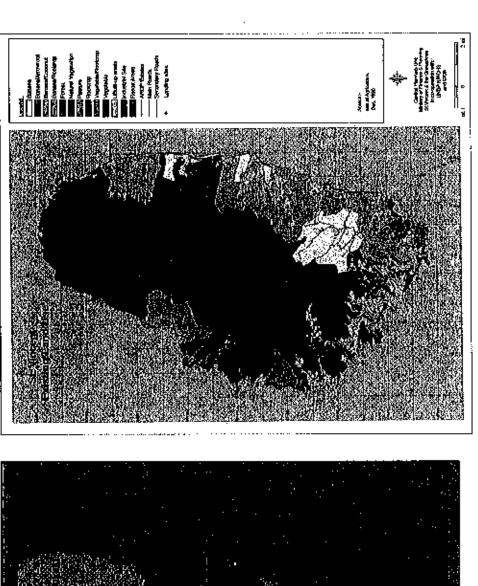
Summary of Funds: 5

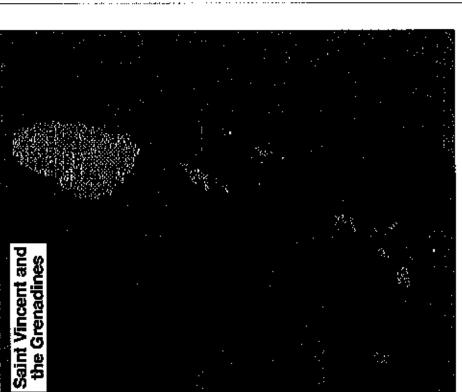
SCURCE	Year 1	Year 2	Year 3	at Totals
GEF	126,833	218,834	139,333	485,000
GoSVG	111,168	167,427	124,165	402,760
BU	719,000	42,000	31,000	792,000
CWSA /VINLEC	55,000	55,000	55,00Ö	165,000
FAO	8,000	0	Ö	8,000
GM	10,000	0	0	10,000
PDF-A				15,000
TOTAL	1,030,001	483,261	349,498	1,877,760

⁵ Summary table should include all other co-financing (cash and in-kind) that is not passing through UNDP.

 $C_{1} = C_{1} > C_{2} = 0$

St. Vincent and the Grenadines geography and Land Use (mainland, 1996) Аппех 2





77

.

··

SIGNATURE PAGE

Country: St. Vincent and the Grenadines

A strong sustainable environmental management system in place supported by UNDP-GEF.
Sustainable land management linked to poverty reduction, MYFF Service Line 3.4
Land use policies and plans developed and made available.
FAO, UNDP-GEF
СЕНІ
Total Budget \$1,862,760 ach GEF Trust Fund \$485,000
Allocated resources: \$1,377,760 O EU \$792,000 O CWSA \$82,500 O VINLEC \$82,500 O FAO \$8,000 O Global Mechanism \$10,000 In kind contributions: • Government \$402,760

rreed by (Government))
reed by (Implementing partner/Executing agendy)
rediktioner

	i t	
·		
· . • ·		