Additional Annex 13: Environmental Assessment OECS COUNTRIES: OECS Protected Areas and Associated Alternative Livelihood

Introduction

The objective of the annex is to identify possible adverse impacts associated with the Parks and Protected Area and Alternative Livelihoods Project (OPAAL) and incorporate relevant mitigation measures in the project's design and implementation. In addition, given the "demand-driven" nature of the project, some specific areas and respective project interventions will not be confirmed until project implementation. In response, an environmental management plan (EMP) has been developed which will ensure that potential future adverse impacts will be identified and addressed through one or more environmental safeguards which also have been incorporated into project design (Attachment 1).

Project Description

The Eastern Caribbean region is endowed with a rich biodiversity which, in combination with its isolation within the Caribbean Sea, has resulted in relatively high rates of national and regional endemism. Despite the significance of the region's endowment, there have been reductions in both its quantity and quality over historical time. Major threats include: direct exploitation, habitat modification or loss, water quality and quantity conflicts, and increased erosion and downstream sedimentation. Underlying sources contributing to these threats include poorly planned development, inappropriate agricultural practices, discharge of untreated industrial/urban effluent, non-sustainable exploitation of natural resources, and unmanaged tourism impacts. With respect to the development and management of protected areas (PAs) in the region, specific constraints which impede the development and implementation of effective responses to these threats include: an inadequate policy and legal framework, weak institutions, low public awareness, limited community participation in PA management tasks, and lack of alternative livelihoods for communities living in proximity to PAs.

The development objective of OPAAL is to strengthen national and regional capacities in the sound management of protected areas (PAs) in support of the sustainable economic development of Small Island Developing States SIDS in the Organization of Eastern Caribbean States (OECS) sub-region¹ through: (i) the strengthening of existing and creation of new PAs; and (ii) providing environmentally sustainable economic opportunities for communities living in the surrounding areas. This will be accomplished by: (i) improving the relevant legal, policy and institutional arrangements (collectively termed institutional framework) in the participating OECS countries; (ii) establishing or strengthening a number of pilot PA's including providing support for the development of new and alternative livelihoods for communities living in proximity to these sites; and (iii) improving institutional capacity to manage PAs in the region.

The project's principal outcomes will include: (i) a harmonized, updated and comprehensive legal and institutional frameworks supporting national systems of protected areas; (ii) establishment of new or strengthening of existing pilot PAs; (iii) development of environmentally compatible economic opportunities in communities neighboring the proposed PAs; and (iv) increased public awareness of the importance of biodiversity conservation and protected area management in the sustainable economic development of SIDS.

OPAAL is a five year project with a total estimated budget of US\$ 6.8 million (without contingencies) of which GEF is providing US\$ 3.5 million as a grant. The project's executing agency will be the Secretariat

of the Organization of Eastern Caribbean States (OECS) through its Environment and Sustainable Development Unit (ESDU). The project has four components: (i) PA Policy, Legal, and Institutional Arrangements, (ii) Protected Areas and Associated Alternative and New Livelihoods, (iii) Building Capacity for Biodiversity Conservation and PA Management and Increasing Environmental Awareness, and (iv) Project Management, M & E, and Information Dissemination. Project-supported activities are divided between regional/national (legal reviews, studies, capacity building, updating of PA system plans, environmental education, project management) and site specific (development and implementation of PA management plans and associated alternative livelihood activities situated in proximity to project-supported PAs) activities.

As a consequence of weak national institutional capacities in many of the PMS, only three sites were fully prepared for the Project Brief. These are: (i) North Sound Islands National Park (Antigua/Barbuda), (ii) Pointe Sable National Park (St. Lucia), and (iii) Tobago Cays Marine Park (St. Vincent & the Grenadines). In addition, there are a number of secondary sites that have been identified for possible future project support. Final site selection and sub-project preparation for the latter sites will depend on the progress achieved in building national capacity in the project's first years of implementation together with further expressions of interest from PMS supporting their respective sites. These are: (i) Cades Bay Marine Reserve (Antigua & Barbuda), (ii) Cabrits National Park (Dominica), (iii) North East Coast Archipelago Marine Protected Area (Grenada) (iv) Molinere/Beausejour Marine Protected Area and Multi-Zone Management System (Grenada), and (v) the Central Forest Protected Area (Nevis & St. Kitts).

For more detail on the project's components/activities and sites, refer to Annexes 2 and 11, respectively.

Methodology

Although the project is intended to have positive environmental impact through supporting biodiversity conservation, it was considered important that all activities undergo specific screening and follow-up assessment, if needed, during preparation to ensure that project design is consistent with overall project goals. The screening process included reviewing each project subcomponent for environmental impact. This was facilitated by applying the OECS Environment and Sustainable Development Unit's environmental assessment checklist (in the project file)². For all PA sites (primary and secondary), the screening process included a review of the available documentation. In addition, visits were completed to all sites³. Where potential adverse impacts were identified, stakeholders were consulted for their suggestions on possible mitigation measures, the latter which were incorporated into project design. Finally, a monitoring and evaluation system for compliance was developed for the project. A separate social impact assessment was conducted with results presented in Annex 14.

Environmental assessment requirements associated with development activities in most of the PMS is articulated in existing planning legislation. Generally, this legislation stipulates EIA requirements by category of project and its potential for environmental impact. Where necessary and applicable, the requirements of the EIA legislation in each of the PMC's will be applied. In addition, the various mechanisms for environmental impact assessments developed for the region by the OECS-ESDU will be utilized as there is no EIA legislation specific to PAs in the region.

Results

Assessment of impacts by project component.

The results of the screening process are presented in Matrix 1.

<u>Component 1. Policy, Legal and Institutional Frameworks for PAs</u>. In Component 1, the review of existing and preparation of draft national protected area systems policies, and related legal and institutional arrangements will be supported. This activity does not have any negative impact on the environment.

<u>Component 2. Protected Areas Management and Associated Livelihoods</u>. Under this component, the PA Management sub-component will support activities to establish or strengthen protected areas and increase their effectiveness in conserving biodiversity of global importance. However, despite the largely positive environmental impacts to be achieved under this sub-component, infrastructure development such as visitor and interpretive centers, trail development, viewing platforms, floating jetties and portable toilets. The specific nature and location of the activities implemented under this sub-component would be identified in the management plans of the protected areas.

The Alternative Sustainable Livelihood sub-component will support a limited number of sustainable-use activities for the communities living in and around the PAs. It is estimated that at least 3 livelihood opportunities (small scale environmentally sustainable economic activities) will be implemented in the buffer zones and/or the PA core areas. Productive investments with potential adverse impacts might include eco-tourism projects, sustainable economic use of flora and fauna, small-scale hunting and resource extraction and agricultural production (including livestock production). As these are demand-driven activities, they have yet to be identified. Proposed activities will be screened for environmental impacts during their preparation and appropriate mitigation measures incorporated into project design. This process will be facilitated by ESDU's existing Small Project Facility (SPF) guidelines and approval process which will be modified to conform with the project's conservation objectives and findings stemming from the social and environmental impact assessments.

<u>Component 3. Building Capacity for Biodiversity Conservation and PA Management and Increasing</u> <u>Environmental Awarness.</u> The main activities supported under this component will involve increasing capacity for biodiversity conservation and enhancement of protected area management through education, training and awareness building. Technical staff and communities will be trained to mitigate any environmental impacts caused by use and management of the protected area. These activities will not have any negative impact on the environment.

<u>Component 4. Project Management, M&E and Information Dissemination.</u> The project's final component includes support for project management by the OECS ESDU, monitoring and evaluation of the project and information dissemination. As the project management unit, ESDU will ensure that prior to the undertaking of these activities that environmental considerations are fully integrated into the development and management of the protected areas. Regular monitoring and evaluation activities will ensure that any unforeseen environmental impacts will be identified and mitigated as appropriate. These activities will not have any negative impact on the environment.

Component	Category of Environmental Impact	
	physicalecologicalhumanother environments	
Policy, Legal and Institutional	N/BN/BN/BN/B	

Matrix 1.	Results of Scoping	by Project	Component
-----------	---------------------------	------------	-----------

Frameworks for	
PAs	
PA Management	MiMiN/BMi
and Associated	
Livelihoods	
Increased Capacity	N/BN/BN/BN/B
for Conservation	
and Management	
of PA	
Project	N/BN/BN/BN/B
Management,	
M&E and	
Information	
Dissemination	
Key: N/B (none	- beneficial)
Mi (minimal)	

Mi (minimal)

Mo (moderate)

S (significant)

Assessment of impacts by project site.

The initial environmental screening indicated that the project's only potential adverse impacts would be associated with the PA Management and Associated Livelihoods Component (Matrix 1). Direct impacts to the physical environment are estimated to be minimal, particularly in light of current use. Project impacts on the ecology are also likely to be minimal, though some attention will need to be given to protection of existing threatened and/or endangered species. Project impacts on the human environment are likely to be mainly beneficial given that the project will be putting in place structures and/or systems that can accrue benefits to the communities in and adjacent to the project-supported PAs.

Subsequent to the screening process, follow-up site visits were made to both primary and secondary sites. Project-supported activities for the three fully-prepared primary PA sites are presented in Matrix 3. Similar potential adverse impacts associated with these project-supported interventions were identified in all sites. These were: (i) effects associated with increased visitation and infrastructure on threatened and/or endangered species; (ii) direct physical impacts on reefs and other environmentally-sensitive marine ecosystems associated with increased tourism; (iii) incremental discharge of solid and liquid waste also associated with increased visitation; (iv) sedimentation due to buoy and mooring placement; and (v) increased risk of introduction of exotic species associated with greater levels of visitation to the area.

Matrix 3. PA-specific Investments, Equipment, and Activities Supported Under the Project

	North Sound Islands National Park (Antigua/ Barbuda)	Pointe Sable National Park (St. Lucia)	Tobago Cays Marine Park (St. Vincent & the Grenadines)
Investments			
• <u>Infrastructure</u> buildings (rehabilitation)	х	x	x
floating pier/jetty (new)	Х	х	-

moorings (new/rehabilitation)	x	_	x
marker buoys	X	x	X
(new/rehabilitation)	Х	Х	Х
toilets	-	-	Х
trails (new)	Х	Х	Х
trails (improvement)	Х	Х	Х
signage/billboards	-	Х	-
rest stations (new)			
• Vehicles and equipment	X	х	Х
boats	Х	Х	Х
truck	Х	Х	Х
other (e.g., computers, GPS,			
SCUBA, etc.)			
SCOBA, etc.)			
0.1	v	Y	W.
Other	X	Х	Х
workshops	Х	-	-
environmental research	Х	-	-
environmental education	Х	-	-
technical assistance	х	-	х
assorted (study, web page, etc.)			

Proposed Mitigation Measures

Under component 2, the project will support the development of participatory management plans. These plans will establish the carrying capacity for the respective PA and identify mechanisms to ensure that visitor numbers are strictly controlled and maintained within acceptable limits. Infrastructure development is anticipated to be minimal in core areas and will improve management capabilities thus offsetting any negative impacts. Nevertheless, project-supported infrastructure will be constructed/rehabilitated only after management plans have been developed and approved. All infrastructure activities will have to be in accordance with management plans requiring a site analysis and environmental impact assessment. Possible negative impacts from increased tourism will be monitored carefully through an indicator/ standards/action monitoring framework such as Limits of Acceptable Change or Visitor Impact Management that would be incorporated into the management plan and general management framework. Both social and biophysical impacts would be monitored.

In addition, specific mitigation measures include:

<u>Increased risk to endangered/threatened species</u>. Zoning of areas within PAs will provide the protection of endangered (and/or threatened) species and species of special importance, as well as for their habitat, allowing for a range of compatible uses and activities at sustainable levels;

<u>Increased solid and liquid waste discharges.</u> This will be addressed through environmental education activities and the construction of toilet facilities to ensure limited sewage by-products are released into the project-supported PAs;

<u>Increased marine sedimentation</u>. Use of the "manta ray" type anchoring system for buoy and mooring placement is likely to cause only minimal damage to the (sand) substrate in which they are to be placed and the suspension of material is likely to be short-lived;

<u>Direct physical damage to reefs</u>. Enforcement of: (i) mooring and anchoring limitations to reduce physical damage to the reef structure anchors; (ii) a "look but don't touch" policy for divers, and training/awareness building for dive leaders to reduce physical damage to the reef structure by divers; and (iii) determination and strict enforcement of carrying capacity or limits of acceptable change of the PA supported by impact studies (e.g., flushing and water quality study in mooring/anchoring areas);

<u>Introduction of exotic organisms</u>. Regular monitoring and evaluation of the marine and terrestrial habitat will be necessary to take speedy action if and when necessary to mitigate against long term negative impact of the entry of these exotics.

Footnotes:

¹The OECS States are: The British Virgin Islands, Montserrat, Anguilla, St.Kitts and Nevis, Antigua and Barbuda, the Commonwealth of Dominica, St.Lucia, St.Vincent and the Grenadines, and Grenada.

²Potential adverse impacts were grouped into four categories consisting of: (i) physical, (ii) ecological, (iii) human, and (iv) other environments. Physical impacts included impacts on air and water quality, flooding, slope instability and erosion, natural hazards, etc. Ecological impacts included impacts on rare and endangered species, migratory species, introduction of new species, pests and disease vectors, etc. The human environment category focused on human-related issues and included relocation of residents, conflicts with other users, competition for natural resources, employment, services and utilities, etc. Other environmental concerns included issues specific to the project that were not covered by the checklist. This includes marine and coastal systems; wave and current regimes, sediments transport, etc.

In the case of the Pt. Sable site, great reliance was placed on The Nature Conservancy (TNC) biophysical analysis of the proposed PA sites using the Conservation Site Planning process which was developed for the earlier national GEF project (see the project file). In the Tobago Cay PA, the site visit also included snorkelling around the Cays to ground-truth the documented information on the status of the reefs, primarily sources from the 1988 OAS supported study (also in the project file); aspects related to terrestrial resources of the Cays were also confirmed.

Attachment 1: Environmental Management Plan

Introduction

OPAAL is expected to generate significant positive environmental benefits through the establishment of effective management systems to conserve the natural integrity and biodiversity of the participating member states (PMS), while providing opportunities for income generation for communities in and around the protected areas. The project will not support activities that could seriously harm the environment and so most project environmental impacts will be positive. Nevertheless, given that some PAs to be supported under the project and associated activities have yet to be specified, existing and additional mitigation measures have been specified and included in its design. These will ensure that the necessary procedures and resources are in place *a priori* to the final preparation and implementation of relevant activities and where necessary, appropriate mitigation and monitoring measures incorporated.

Approved PA <u>management plans</u>, a requirement prior to project fund disbursement to support any on-site PA activities, will provide the necessary framework to identify infrastructure works to be financed and to assess whether proposed smallscale, environmentally sustainable development activities are compatible with conservation criteria. The appropriate national agencies in the PMS will approve these plans and ensure that the proposed sustainable use activities adhere to their requirements. Infrastructure related activities are expected to be small-scale. An initial screening for potential environmental impacts associated with the design, construction and use of the infrastructure using ESDU environmental guidelines) and the identification of measures to mitigate the impacts identified will be undertaken by ESDU project management staff and/or through technical consultants, as required. An <u>environmental assessment</u> will be conducted, as needed.

Where private entities will be responsible for specific activities financed under the project (e.g., refurbishment or construction of PA infrastructure such as visitor centers, marked trails, and signage and/or eco-tourism activities), relevant safeguards will be specified and become part of their <u>contractual</u> <u>obligations</u>. The appropriate national agencies in the PMS will be responsible for the inclusion of mitigation measures in contracts and enforcing compliance with environmental mitigation measures.

The project will support extensive monitoring efforts at the overall project level and intensive <u>environmental monitoring</u> in pilot areas. The project will also assist community institutions to conduct their own monitoring of environmental impact as an essential element of the management approach supported under Component 2. A monitoring and evaluation program including for example, indicators, on changes in land and other resource uses and ecosystem health, as well as species indicators, will be incorporated into PA management plans. The monitoring system will be designed to give early warning of major environmental degradation or change to managers of protected areas to permit mitigating actions.

<u>Guidelines, technical assistance and environmental review and clearance</u> by OECS-ESDU will ensure that the sub-projects supported under the Sustainable Livelihoods sub-component avoid adverse environmental impacts. Specifically, environmental screening procedures and mitigation requirements and procedures will be included in the project design and operational manual. To simplify the screening process, the operational manual will include a categorization of subprojects or activities and a standard list of mitigation measures where necessary.

<u>Training workshops</u> will be held with managers and staff of the protected areas supported under the project to improve their capacity to evaluate environmental impact, implement the management plans and design mitigation measures. They will also be given the opportunity to improve on the checklist/matrix of activities that will require environmental assessments and activities that should not be permitted, as well as the methods for implementing the checklists/matrix to ensure that the rules reflect the practical need in the field.

	Management Plan Conformity	National EA Procedures	Contractual Obligations	Environmental Monitoring
Component 2. Protected Areas and Associated Alternative & Livelihoods				
2.1. Establishing/Strengthening PAs Infrastructural development	X	Х	Х	x
2.2. Supporting Alternative and New Livelihood Opportunities	X	x	х	х

Matrix 2. Measures to Mitigate Possible Impacts in Secondary PAs

Additional Annex 14: Social Assessment and Public Participation OECS COUNTRIES: OECS Protected Areas and Associated Alternative Livelihood

Introduction

The **development objective** of the project is to strengthen national and regional capacities in the sound management of protected areas (PAs) in support of the sustainable economic development of Small Island Developing States SIDS in the Organization of Eastern Caribbean States (OECS) sub-region. The six OECS States included in the project are: St.Kitts and Nevis, Antigua and Barbuda, the Commonwealth of Dominica, St.Lucia, St.Vincent and the Grenadines, and Grenada. OECS States not included in the project are: The British Virgin Islands, Montserrat, and Anguilla. region through: (i) the strengthening of existing and creation of new protected areas (PAs); and (ii) providing environmentally sustainable economic opportunities for communities living in the surrounding areas. This will be accomplished by: (i) improving the relevant legal, policy and institutional arrangements (collectively termed institutional framework) in the participating OECS countries; (ii) establishing or strengthening a number of pilot PAs including providing support for the development of sustainable livelihoods for communities living in proximity to these sites; and (iii) improving institutional capacity to manage PAs in the region. The principal project outcomes will be: (i) common, updated and comprehensive institutional frameworks supporting national systems of protected areas; (ii) establishment of new or strengthening of existing pilot PAs; (iii) development and enhancement of environmentally compatible economic opportunities in communities neighboring the proposed PAs; and (iv) increased public awareness of the importance of biodiversity conservation and protected area management in the sustainable economic development of SIDS.

The **global objective** of the project is to contribute to the conservation of biodiversity of global importance in the OECS region by removing barriers to the effective management of PAs, and to increase the involvement of civil society and the private sector in the planning, management and sustainable use of these areas. The end-goal of the program is to create an integrated system of protected areas among the OECS Member States which will protect and conserve ecologically-sustainable, representative samples of the region's rich biodiversity endowment, while creating sustainable livelihoods for communities in and around these protected areas.

In order to ensure that the prospective communities in and around the targeted sites benefit meaningfully from this project intervention, a social assessment was undertaken during project preparation. The objectives of the social assessment with respect to the three pre-selected PA sites Pre-selected PA sites include (1) Point Sable, St. Lucia; (2) Tobago Cays, St. Vincent and the Grenadines; and (3) North Sound Islands, Antigua and Barbuda. were to: (i) carry out a stakeholder analysis; (ii) carry out consultations with stakeholders; (iii) describe baseline socio-economic conditions with an emphasis on natural resource use issues; (iv) evaluate social criteria for site pre-selection; and (v) identify key issues for the human communities (both opportunities and potential conflicts or problems) to contribute to site specific action plans to be developed under the project. Social criteria for site pre-selection included: (a) degree of local support for the PA; (b) relatively well-defined land tenure and use or access rights; (c) ensure no physical resettlement; (d) socio-cultural values of the proposed site; and (e) educational value of proposed site (see Annex 11 PA Selection Criteria and Site Profiles for more detail). The other objectives of the social assessment were to: (i) define the steps for carrying out social assessments during project implementation for other PAs to be developed under the project; (ii) define participatory processes during project implementation; (iii) provide insights for the design of the Alternative Livelihoods sub-component; and (iv) formulate a Process Framework for the project for potential nonphysical displacement (see Attachment 1). The project will not involve or affect indigenous people, and will not cause involuntary resettlement.

Regional Context

The OECS is a grouping of nine states of the Eastern Caribbean established in 1981 of which six are included in the project: St. Kitts and Nevis, Antigua and Barbuda, the Commonwealth of Dominica, St. Lucia, St. Vincent and the Grenadines, and Grenada. The economies of the region Based on information from the 2000 OESC Human Development Report. (with the exception of Montserrat and Anguilla) have been experiencing downward trends during the 1990s characterized by annual growth rates averaging 4.5 percent. The vulnerability of the OECS economies is characterized by issues such as: the decline in agriculture and agricultural exports, changes in commodity agreements for agricultural exports, problems in attaining greater diversification in OECS exports, transportation problems, and human resource development. The economies of the sub-region are in transition and there are special challenges posed by liberalization and current trading arrangements.

Unemployment is a major challenge facing the OECS countries. Although the importance of agriculture since 1996 has steadily declined, the sector remains a significant employer (23 percent) in the Windward Islands. The OECS economies have been restructured away from agriculture and manufacturing towards the provision of services. According to the Eastern Caribbean Central Bank (ECCB) Annual Statistical Digest 2001, for the period 2001, the sectoral composition of the Gross Domestic product were as follows: the Windward islands recorded 11.9% (agriculture), 20.3% (trade), 17% (government), 10.1% (construction), and 7.3% (manufacturing); in comparison, the Leeward islands recorded 3.4% (agriculture), 11.3% (trade), 20.7% (government), 16.6% (construction), and 4.5% (manufacturing). Tourism is of great importance throughout the region (contributing between a third to a half of GDP in most of the OECS countries). It is a priority sector targeted for further development throughout the region often with significant reliance and effects on natural resources. Poverty levels in the OECS persist at unacceptably high rates coupled with on-going structural inequalities in the areas of education, health, and employment opportunities. The Gini Coefficients for the sub-region indicate a significant level of inequality ranging from .044 in St. Kitts-Nevis to a high of .056 in St. Vincent and the Grenadines (Gary, a footnote needs to be included to explain this to the layman). The Gini coefficient is a measure of the degree of concentration or conversely, equality of a variable. The coefficient ranges between zero where there is no concentration (i.e., perfect equality) and one where there is total concentration (perfect inequality).

In addition to the above structural issues, the small size of the Eastern Caribbean Islands and their related ecosystems create substantial risks for local habitats and the species they feed and shelter. The biological resources of the region are under great pressure from a diversity of development-related activities. The lack of integrated planning mechanisms in the region has been identified as a major cause for the "one-sided" approach to national development. This lack of connectivity between economy and environment, the ecological fragility of the islands, and the vulnerability to natural hazards require the OECS states to maximize sustainable development initiatives and investment opportunities in order to maintain their natural resource base. Another issue is that of inadequate legislation covering conservation and the dispersed institutional and administrative arrangements for coordinating environmental initiatives.

The present project represents a significant first step in fostering a number of critical common elements, which over time could evolve into an integrated regional system. These include: (i) promoting the development of a common or similar institutional framework governing protected areas, (ii) the strengthening of institutions with shared mandates, and (iii) supporting regional training and public awareness of the importance of conserving the region's biodiversity. The programmatic approach has the additional advantage of providing the goal, context and roadmap leading to goal achievement that will guide interventions over the next 15 years.

Stakeholder Participation

Participation during project preparation

The original project proposal developed by the St. Lucia National Trust (May 2002) focused only on St. Lucia and was developed through a series of consultations over three years involving local and national St. Lucian stakeholders. In October 2002, the project was reformulated to become a regional project and it was considered vital that the regionalized project required a similar consultative process to collectively determine the objectives, elements and outputs, to secure broader buy-in and ownership, and to obtain important baseline information to help define project components. During a workshop on the regional project held in November 2002, a comprehensive matrix of critical stakeholders representing local, national and regional protected area interests was developed which served to guide subsequent consultations. These included among others, for example: (i) regional and international agencies such as the OECS Secretariat, the Caribbean Environmental Health Institute (CEHI), United Nations Environment Program- Regional Coordination Unit (UNEP-RCU) and the Caribbean Conservation Association (CCA); (ii) national Ministers and relevant agencies in each of the countries; NGOs; and (iii) site-specific constituencies such as fishermen, farmers, dive operators, tour operators, local associations and others.

A series of workshops, meetings, consultations and field visits was carried out from November 2002 through October 2003. These consultations contributed to the current design of the project as well as the selection of the first three target PAs as well as raising awareness among stakeholders of the multiplicity of issues surrounding areas of critical biodiversity on the islands. The stakeholder groupings and the general populace in the region concur on the need to protect these areas and discussions with them revealed a willingness to comply with new management systems. Local interviews and consultations revealed strong concerns with natural resource preservation, controlling pollution and other destructive practices, and interest in improving livelihoods, further detailed in the site specific assessments. A broad regional stakeholder workshop to solicit feedback on the project design is scheduled to be held in November 2003 as a means of ensuring that PMS inputs are consolidated into the project document, and that consensus on national considerations, project elements and provisions is secured.

Participation during project implementation

Participatory processes have been thoroughly integrated into the project design. Some of the methods that will be used by the project include stakeholder analysis and social assessments to be carried out to prepare new PA sites to be developed under the project; development of local action plans for each PA to help determine local priorities for activities that might be eligible for financing under the project that could include among others, opportunities for support for alternative livelihood subprojects, technical assistance, training opportunities and involvement in PA co-management plans.

The project's <u>Component 2</u>, Protected Areas and Associated Alternative Livelihood Opportunities, includes a subcomponent to facilitate and finance sustainable livelihood subprojects with communities living in and around the targeted PAs. It is anticipated that this subcomponent would be supported by the existing OECS Small Project Facility (SPF). A project specific operational manual detailing application criteria and procedures is currently being developed. In addition, other subcomponents of Component 2 would finance the social assessments for new sites preparation, preparation and implementation of management plans, and periodic stakeholder workshops.

In addition, <u>Component 3, Capacity Building for Conservation Planning and Management</u> will include a subcomponent for technical assistance and training opportunities in support of development for future sustainable livelihood activities.

When **new sites** are being prepared under Component 2, the following processes, in the sequence identified below, will be employed. Step one would be to identify stakeholders and carry out a participatory social assessment focusing primarily on the communities that potentially might be affected by the establishment of the protected area with the goal of assessing the social criteria for site selection (see Annex 11) and identifying stakeholder concerns. Step two would be to develop action plans in consultation with stakeholders that would clarify potential benefits and methods by which the local communities might be involved in project activities, preliminary identification and prioritization of potential alternative livelihood subprojects, and clarification of institutional and organizational arrangements. These actions plans would also provide input for and guide local involvement in the development of the PA management plans.

Participatory monitoring and evaluation will be used at the project level in Components 1 and 3, and at the site level in Component 2 to undertake assessments of project activities, policy interventions and institutional arrangements.

Site Specific Social Assessments

Site specific social assessments were carried out for: (i) proposed North Sound Islands National Park (Antigua and Barbuda); (ii) the proposed Point Sable National Park (St. Lucia); and (iii) the Tobago Cays National Marine Reserve (St. Vincent and the Grenadines). The St. Lucia site social assessment was carried out by The Nature Conservancy in collaboration with the Point Sable Park Steering Committee, the St. Lucia National Trust Southern Office and communities. The Tobago Cays National Marine Reserve (St. Vincent and the Grenadines) and the proposed North Sound Islands National Park (Antigua and Barbuda) social assessments were carried out by OECS-ESDU in collaboration with the Tobago Cays Management Park Board and the Environmental Awareness Group respectively, and communities. Methods included secondary data review, interviews and consultations with a broad spectrum of stakeholders including government agencies, local organizations and community members. These are summarized below. Further related detailed information on the selection criteria and site profiles can be found in Annexes 11 and 12.

Site specific social assessment for North Sound Islands National Park (proposed), Antigua and Barbuda

<u>Introduction and site description.</u> Antigua and Barbuda is located in the middle of the Leeward island chain in the Eastern Caribbean. The islands are the largest of the English speaking Leeward Islands, encompassing 280 km2 and 161 km2, respectively.

The proposed site is the 3,100 ha North Sound Island National Park (NSINP) and consists of six uninhabited islands: Great Bird Island, Little Bird Island, Redhead Island, Rabbit's Island, Great Exchange Island and Little Exchange Island. Together they comprise some of Antigua's most pristine natural resources: a cluster of limestone islands and the surrounding coastal and marine ecosystems including mangroves, coral reefs sea grass beds, rocky shores, sandy beaches coastal vegetation and dry scrubland vegetation. The total area covers 30 mi2 northeast of the mainland of Antigua and is refuge to many species of rare and unique endemic flora and fauna (some of which no longer exist on the mainland). For example, several traditionally used medicinal plants that have become rare on the mainland are still abundant on the islands. The area also contains artifacts from the Arawak indigenous people from the pre-colonial era. The marine ecosystem of the area provide nurseries for fish, couch, lobster and other species. The great beauty and protected reefs of the proposed site make it a prime tourist destination. Several of the offshore islands boast pristine and underdeveloped white sand beaches which are appreciated greatly by both tourist and local recreational users.

Through the NGO Environmental Awareness Group (EAG), and the Antiguan Racer Conservation Project (ARCP) a lot of work in the North Sound has been done with regard to protecting the

endangered racer snake, conservation of indigenous flora and fauna and public awareness. As a consequence of this work, the ARCP has gradually transformed into a broader Offshore Island Conservation Programme (OICP). The goal of the OICP is to conserve indigenous and globally significant populations of flora and fauna of the offshore islands, and to promote the sustainable use of the resources.

In September 1999, EAG held a workshop for tour operators to increase awareness of the tour operators for conservation and management. In August 2000, another workshop was held for recreational users of the area.

<u>Baseline social conditions.</u> The six offshore islands of the proposed NSIPA are uninhabited but are widely used to support tourism, and tourist-related activities, fisheries and local recreational activities. The communities on mainland Antigua within a few kilometers of the PA are the most intensive users. These are Seatons, Parham, Willikies, and Glanvilles with a total population of about 2,000 persons. Key features of natural resource use include diving, anchorage, fishing (mainly recreational), bathing, swimming, snorkeling, picnics, and day tours. Local institutions include one NGO (EAG) and three churches.

Among human pressures on the environment, current fishing practices are placing too much pressure on near-shores stocks. Anchoring by tour operators and "ghost"fish traps are taking a toll on the coral reefs. Recreational activities on island beaches are another major source of environmental stress. It is estimated that the area receives over 20,000 visitors per year including local recreational tourists.

With respect to land tenure, the Government owns the six islands proposed for inclusion in the PA. Other offshore islands are mostly privately owned hence will not be included within the PA until ownership transfer will be negotiated.

Local stakeholder issues. Local stakeholders consulted included a broad cross-section of stakeholders ranging from representatives of the National Parks Authority, Fisheries and Forestry Divisions to fishermen, tour operators, recreational users and the private sector, among others. The social assessment clearly identified a high level of interest and commitment to the proposed PA. The main concerns highlighted included need to: (i) protect the reefs from damage (such as from anchors, divers, snorkelers and fish pots); (ii) implement a protected area (including, among others, demarcation buoys, new signage, employment of a park warden, better law enforcement and establishing user fees); (iii) control illegal types of fishing (though fishing grounds are mostly outside the proposed park); and (iv) improve management of solid and liquid wastes. There were also interests expressed in alternative livelihood options, specialized training, and recreational uses.

<u>Lessons learned</u>. The environmental organizations working here have recognized the importance of community involvement and have supported public awareness efforts. As a result, there appeared to be strong interest in further establishment of a protected area. There are clear needs for an updated management plan, institutional strengthening of the National Parks authority, and greater involvement of local populations and NGOs in PA management.

Site specific social assessment for Point Sable National Park (proposed), St. Lucia

<u>Introduction and Site Description.</u> St. Lucia is a small island economy with a population of approximately 159,000, and a growth rate of 1.6 per cent. The majority of the population is concentrated in the capital city of Castries and in the northern towns and villages of the island. The island's economy is based on a few agricultural products for export but is also undergoing a structural transformation to

services as the main growth sector with tourism playing an increasingly important role.

The proposed 250 hectare Pointe Sable National Park is located on the southeast coast of St. Lucia. The PA spans four coastal ecosystem types: coral reefs, mangroves (including the largest remaining stand of coastal mangrove forest in St. Lucia), sea grass beds; offshore islands and a sandbank; a representative sample of tropical Caribbean island coastal ecosystems in a relatively intact state. St. Lucia's largest mangrove and longest fringing coral reef are found in this area. An overall management strategy would amalgamate several existing protected areas including five marine reserves, several nature reserves, the recently declared RAMSAR site at the Mankote mangrove, historic sites and a national landmark with other as yet undeclared natural and historic sites into one management unit, the Pointe Sable Protected Area.

<u>Baseline Social Conditions</u>. The populations that are or would be potentially affected by the proposed protected area reside around the inland and coastline communities of the Eastern and Southern areas of the town of Vieux-Fort. Permanent human population within the PA is negligible. A total of seven communities with a combined population of about 14,000 people constitute this area including: Belle Vue,. Beausejour, Moule-A-Chique, Retraite, Pierrot, Cacoa/Vige. The communities have access to schools, hospitals and health centers and a significant number of households already have piped water.

While these communities are located outside the limits of the proposed protected area, natural resource uses are many and competing including timber harvesting for charcoal production, fishing, crab hunting, sea moss cultivation, community based tourism, agricultural production, and recreational activities. The major natural resource users in the region are: charcoal producers; fishermen (some of whom are involved in crab hunting and sea egg cultivation); sea moss farmers in the Savanne Bay area; watersports users (scuba divers/snorklers); livestock farmers; and restaurateurs.

The Mankote Mangrove with four distinct types of mangroves, covers an area of approximately 63 acres and it is the largest area of mangroves on the island. In the early 1980s, there was an effort made to protect the area by giving the community a stake in managing and protecting the resources within the mangroves and the community-based Aupicon Charcoal and Agricultural Producers Group (ACAPG) was established which produces charcoal on a sustainable basis.

The Savannes Bay is highly utilized for fishing and to a lesser extent for sea moss production. In 2002, according to statistical data for the Department of Fisheries (DOF), there were 362 licensed fishermen, and five sea moss cultivators in the Vieux-Fort area.

The economy of the region is primarily agricultural, and the area is considered to be one of the largest fishing communities on the island, with expanding service and tourism sectors. However, during the social assessment process, it was noted that in the Vieux-Fort area, tourism has not been able to attract the scale of investments needed for the sector to be an integral component of the southern region's economic base.

Some surrounding communities have spearheaded eco-tourism efforts with incipient infrastructure development (bird watching tower and trails) and guided tours in the community in order to supplement their incomes. Visitation to these eco-tourism sites, while minimal at the present time, would likely increase significantly after designation as a protected area, promotion of the tourism product, and as nature based tourism opportunities are developed under the project. The government's policy is to create and strengthen economic opportunities at the local level through heritage tourism. The Point Sable protected area proposal would help reduce pressure on other areas such as reef dive sites and, also increase local community revenues by providing recreational alternatives in new areas.

The majority of the land in the area is tenured under the Government of St. Lucia (GOSL), but vested in the statutory bodies of the St. Lucia Air and Sea Port Authority and The National Development Corporation (NDC). The NDC has ownership over most of the land within the park. Over the years, the Pointe Sable Beach has been opened to conservation groups and many developmental agencies have initiated sustainable activities within the area. It is anticipated that legally binding agreements such as land trust arrangements or conservation lease agreements will be negotiated as part of project implementation. The National Trust, Department of Planning, Department of Forest and Lands, and the National Conservation Authority together have the legal authority and power to deal adequately with the various techniques and instruments for land use conservation.

Local Stakeholder Issues. Local stakeholders consulted included community representatives and pertinent government agencies (e.g. Forestry Department, Fisheries Department and others). The main local concerns highlighted by the social assessment in relation to the proposed protected area included interests in ensuring local involvement in co-management of the proposed protected area; protecting the mangroves; ensuring livelihoods from charcoal production, sea moss cultivation and fishing; and promoting recreational uses in the area and eco-tourism. There appears to be a high level of local support for the proposed PA. Other concerns included ambiguities about land tenure status in some areas, dumping of garbage and waste in rivers, mangroves and the sea; and use of agrochemicals. The assessment noted some distrust of government information on environmental issues and that some farmers' land management practices were based on erroneous assumptions such as that land clearing increases fertility.

Lessons Learned. The previous experience of the establishment of the Aupicon Charcoal and Agricultural Producers Group (ACAPG) in the Mankote mangroves is highly instructive for the current project. Lessons learned include the importance of strong involvement of national resource management agencies, in this case the DOF. Second, DOF granted exclusive rights to the ACAPG to harvest in the mangrove. This improved the morale of the group and also provided a mandate for protecting the mangrove from outside harvesters. The other lesson learned from the Mankote experience is that of local participation. It is noteworthy that when the need for protecting the mangrove was first recognized, there was no organized local stakeholder group to work with, yet the proposal to formally involve the economic and socially marginalized charcoal producers was controversial, and was largely based on three considerations: (i) their knowledge of the ecology of the mangrove was extensive and would be necessary for developing strategies for protection and regeneration, (ii) their stake in the protection of the mangrove was too large to be ignored, and (iii) the failure to involve them could have resulted in their active resistance to the project. This experience therefore suggests that in attempting to involve local organizations in managing mangroves or other harvested resources, consideration should be given to (i) the nature of their interests in the area's management, (ii) tangible potential benefits as balanced against costs, (iii) the likelihood of the organization being able to participate over an extended timeframe, and (iv) attention to technical assistance and other support the local organization may require.

A second case in the south of St. Lucia that provides lessons for participatory management involves the work carried out by the DOF in sea urchin management. According to the DOF, after a period of closure brought about by excessive harvesting of sea urchins, a new participatory system of sea urchin management was adopted in order to curb previous overexploitation of this resource. This new system involved the issuing of harvest permits to persons who have completed a number of requirements and who have also agreed to harvest under certain conditions specified by the department (e.g. assisting in the annual pre-harvest monitoring and assessment of the sea urchin resource; participating in meetings to assess previous harvests; etc.). What has occurred is the involvement of licensed harvesters in surveillance of the harvest area and demonstrates that (i) such involvement of a user group can play an

important role in ensuring sustainable exploitation; (ii) this system of co-management will work under conditions where the user community has sole access, proximity to the resource, and where the resource is sufficiently small to be managed by the group; and (iii) such approaches require joint negotiations and development of a system with the involvement of all relevant parties.

Site specific social assessment for Tobago Cays National Marine Reserve, St. Vincent and the Grenadines

Introduction and Site Description. St. Vincent and the Grenadines is a small Eastern Caribbean island state consisting of 30 inlets and Cays, which have a total land area of 345 km2. The island of St. Vincent has 84 km of coastline and a central mountainous terrain (rising to an elevation of 1234m at its highest peak, La Soufriere Volcano) running north-south with numerous valleys that drain into the narrow coastal belt. The Grenadines consist of Bequia, Mustique, Canouan, Mayreau, Union Island, Palm Island, Mayreau, Petit St. Vincent and the Tobago Cays. The Grenadines are much smaller and less rugged than St. Vincent, with white sandy beaches due to coral-reef deposition. The population of St. Vincent and the Grenadines is approximately 115,460 people, with more than 90 percent located on St. Vincent; 27.7 percent live in the capital of Kingstown and its environs. St. Vincent and the Grenadines is heavily dependent on agriculture which continues to employ over 40 % of the workforce. The 2002 agriculture census showed 6,871 persons in root crop and banana cultivation.

The overall area of the Tobago Cays Marine Park is rectangular in shape with a total area of 1,400 ha. The marine area includes the Tobago Cays, five small uninhabited islands (Petit Rameau, Petit Bateau, Jamesby, Baradal and Petit Tobac), that enclose a sand bottom lagoon and the island of Mayreau. A 1995 survey indicates that some 14,000 yacht people, 25,000 charter-boat day trippers and 10,000 cruise-ship passengers visit the Tobago Cays per year.

The Government of St. Vincent and the Grenadines (GOSVG) began the process of establishing the Tobago Cays National Marine Reserve (TCNMR) in the 1980s designating the initial area and working on planning with the OAS. In the 1990s, the French provided technical cooperation for the marine park, a board was established, regulations promulgated and a manager hired. In 1998, the first management plan of the park was developed. In 1999 the GOSVG finalized the purchase of the area from a private party who sold on condition that the area would remain a park. The area's management plan was revised in 2000 and is not yet approved. Although considerable groundwork has already been done – including extensive community consultations and public awareness campaigns – to date the steps taken to protect, conserve and improve the natural resources of the Tobago Cays remain more on paper than in effect. In addition, much of the currently unapproved management plan remains unimplemented.

<u>Baseline social conditions.</u> The Southern Grenadines where the PA is located are small unique islands where all communities - plant, animal and human - are limited and ecologically fragile. According to the 1991 census, only about 2.7 percent of the country's population lives in the southern islands, approximately 3,000 persons (of which the labor force is about 1,300 persons). The unemployment rate is about 20 percent.

Sixty-eight per cent of the population resides on Union island which is the administrative center and the conduit for daily excursions to the Tobago Cays, Mayreau, and Palm Island. The tourism industry is the main source of income and white sandy beaches, coral reefs, sheltered waters, yachting and day excursions characterize its tourism product. Approximately 14 percent of the labor force are directly employed in tourism and about 2 percent work indirectly as vendors and craftsmen. The remainder of the labor force are involved in small-scale subsistence agriculture (mainly pigeon peas, sweet potatoes, corn and some livestock) and fishing, with others involved in construction. As early as 1980, the fishing

industry had begun to experience difficulties for reasons such as the decline in fish catch (most of the fish were sedentary), limited fishing technology, and inadequate market intelligence. Consequently, most fishermen complement their incomes usually in tourism related activities.

Direct natural resource users of the PA include fishermen who dive for lobsters and conch and indirect users are primarily ship peddlers or boat boys (who sell fruits, vegetables and seafood and other commodities to the yachtsmen and also act as agents for grocery shops on Union Island and Mayreau). Other indirect users are local craftspeople, souvenir and t-shirt peddlers and itinerant hair-braiders. There are also expatriate resource users and these include: yacht operators of which some 3,000 anchor in the lagoon annually; day-charters which are organized and operated mainly by foreign nationals to Palm Island, Mayreau and the Tobago Cays; and cruise ships.

The socio-cultural patterns of the Southern Grenadines are similar to the wider OECS region. The family structure is matrifocal related in part to male migration to other parts of the region and North America. The levels of support for many families are precarious and dependent on limited economic opportunities and shifting conjugal alliances. Southern Grenadines are mainly of African descent with a very small but economically powerful white population. Expatriates own most of the high-end hotels. Social stratification in the **region, especially in small rural** communities, is complex and entails more than wealth as color, education, reputation and respectability, and tastes are factored in. Major social institutions include the Tobago Cays NMR Board, Tourist Board, lending institutions, NGOs (such as Union Island Association for Ecological Protection (UIAP), Union Island Eco-tourism Movement (UIEM), Roots Connection Culture Club, Lions Club of Union) as well as churches.

Local stakeholder issues. Local stakeholders consulted included a broad cross-section of inhabitants and users from representatives of the Mayreau Environmental Development Board and TCNMR Park Board to yacht owners and dive operators to fishermen and boat taxi operators, among others. The main local concerns highlighted by the social assessment in relation to the proposed protected area included: (i) interests in protecting and regulating the Cays and its reefs as well interest in demarcation, zoning, user fees, and education and training on the ecological and economic values of the natural resources; (ii) earning livelihoods from the use of the Cays (e.g., vendoring; and enhancing the water taxi - boat boy – business) and reducing conflicts between yachts and taxis and between taxis; (iii) conducting day-tours to the Cays; (iv) reducing illegal fishing by locals and visitors (such as spear fishing or off-season); (v) managing liquid wastes and garbage; and (vi) recreational uses. There are also concerns expressed about boat overcrowding and boat safety (including theft).

<u>Lessons learned.</u> The barriers to the effective management of the Tobago Cays over the past 15 years were created by the absence of a system to ensure accountability at the various levels of management. The development of three management plans that were not implemented signals deficiencies within the Tobago Cays Board to ensure effective execution of recommendations. In addition, the absence of empowerment to enforce Board decisions, the disconnection between Board decisions and their implementation, and insufficient involvement of all stakeholders in the decision-making and implementation process contributed to the lack of progress to date.

The expressed opinion of many stakeholders was that new endeavors should build upon previous initiatives, yet should be more effective, particularly in terms of building stakeholder ownership, accountability, and conflict resolution processes. In recognition of the aforementioned difficulties encountered in past efforts, and to ensure success, this project will incorporate the following lessons: (i) the importance of a proper management system with broad stakeholder support, involvement, and accountability; (ii) the need for an on-site manager; (iii) a framework to ensure timely execution of recommendations (cited as problematic in the past); and (iv) the need for an extensive public awareness

campaign to distinguish the project from previous efforts.

Attachment 1: Process Framework for Mitigating Potential Livelihood Impacts

Project Summary.

The objective of the OECS Parks and Protected Area and Associated Livelihoods Project is to contribute to the conservation of biodiversity of global importance in the OECS region by removing barriers to effective management of protected areas and to increase the involvement of civil society and private sector in the planning, management and sustainable use of these areas.

No Physical Displacement.

During project implementation there will be no involuntary physical displacement or resettlement of persons from the selected protected areas being supported under the project.

Potential Impacts on Livelihoods.

Overall the project is expected to improve livelihood opportunities throughout the project areas in particular by identifying and supporting sustainable livelihood subprojects for low-income neighboring communities, and by local involvement in PA management as well as expected additional or improved opportunities from park management and nature-related tourism.

However, some livelihood activities could potentially be impacted due, for example, to the limiting of fishing areas through zoning, limiting fish catches or restricting certain fishing and agricultural practices in sensitive areas. It should be noted that some restrictions currently exist in the proposed areas but are not regularly enforced because of capacity issues. This Process Framework outlines the criteria and procedures that the project will follow to ensure that eligible, affected persons are assisted in their efforts to restore or improve their livelihoods in a manner that maintains the environmental integrity of the proposed PAs. These criteria and procedures would be detailed in the Management Plans to be developed for the PAs. In all such cases, the project would address the livelihood issues of affected populations in a manner which is fair, just, and in accordance with local laws, as well as consistent with the World Bank's Safeguard Policies on Involuntary Resettlement (OP 4.12) and Natural Habitats (OP 4.04).

Targeting.

The project activities for mitigating potential nonphysical displacement would target local low-income communities that neighbor and use natural resources in the PAs that have been selected for project support.

Protected Area Establishment and Management.

During project preparation considerable efforts went into biophysical and participatory social assessments of the three pre-selected PAs. Through a collaborative process the following issues were evaluated: (i) geographic and habitat classification; (ii) the conservation status of marine and estuarine flora and fauna and their ecological relationships with the physical environment; (iii) history and development of the proposed protected area; (iv) current human use and development; (v) the extent to which ecosystems and species of conservation concern can survive under existing levels of human use and disturbance, and (vi) potential land tenure or use rights issues. New sites to be developed under the project will also undergo biophysical and social assessments prior to being selected for project support.

The project approach is that local commitment and participation is vital to the successful implementation of PAs. The three site specific social assessments already carried out indicated broad local support for establishing the pre-selected PAs with a concomitant interest in local involvement and improving livelihoods that are environmentally sustainable.

Component 2, Protected Areas and Associated Alternative Livelihood Opportunities, would finance a series of activities that would permit a thorough understanding of human uses of PA resources, identify any specific adverse effects on livelihoods, develop mitigation strategies, plan and implement alternative livelihood activities, and address any identified conflicts. In addition, the project would support the active involvement of local communities in the formulation of the protected area management plans as described below.

The process for area declaration and zoning will include the following elements:

- A review of pertinent biophysical/social data including any management plans that may exist in order to identify opportunities and limitations within the protected area sites as well as the need to collect any additional data which would be undertaken at each site during project year one and two;
- **Formulation of an action plan** with local communities at each PA site that would help define the types of local activities in relation to the protected area that the project may support, including, among others, opportunities for support for new or alternative livelihood subprojects (compatible with project objectives), technical assistance, training opportunities and involvement in possible PA co-management plans, where relevant;
- During project year one **additional analysis of potential livelihood limitations** would be carried out to identify specific impacts on resource users such as fisherman and agriculturists who may be impacted through project activities. This process would involve an analysis of existing practices, proposed project activities, conflicts and potential remedial actions;
- **Broad stakeholder participation and public consultation,** to develop and review proposed area boundaries, zoning schemes and permitted uses would be the guiding principle for all planning;
- **Physical demarcation** of proposed protected areas as well as all zoning would be developed in a participatory manner through broad based stakeholder participation. This would be part of the process of preparing the proposed management plans. Stakeholders would include relevant government agencies, NGOs, resource users, local community members and landowners. Notices for meetings would be announced and proposed areas and zoning demarcations would be published.
- **Mitigation measures** in cases where livelihoods have clearly been compromised by the project, these would be linked to the Project's Alternative Livelihood subcomponent and focus primarily on assistance in the development of new or alternative livelihoods that would improve the economic condition of affected people. Alternatives could include: (i) training and employment opportunities such as tour guiding, park ranger and warden patrol; (ii) training for agriculturists to improve planting techniques, pesticide use, as well as product development and marketing; and (iii) subprojects such as sustainable sea moss harvesting or sustainable charcoal production, among others.
- **Enforcement** of new restrictions as a result of zoning would be the responsibility of the PA Manager, the relevant government agencies and/or the co-management committees which may be established to oversee the proposed areas. No new restrictions that can be demonstrated to restrict legitimate livelihood activities would be enforced until mitigation measures have been developed and mechanisms for their implementation exist.
- An analysis of potential conflicts based on current and past resource use patterns whether legal or not; the project would build upon lessons learned at the Soufriere Marine Managed Area for conflict

resolution. Conflict resolution will be addressed through a thorough assessment that would include an identification of the nature of the conflicts and the stakeholders involved. Stakeholders would be afforded the opportunity to participate in the resolution of conflicts.

Implementation.

Project implementation will be carried out under the direction of the OECS-ESDU with guidance from the Policy Steering Committee. On the ground activities may be carried out by a variety of implementing agencies including government agencies working in the area, subcontractors, NGOs, community groups or consultants, with the National Technical Advisory Committees playing an advisory role. The Site Implementing Agencies would have direct responsibility of identifying conflict issues in the field and scheduling resolution activities. All incidents would be carefully documented following a protocol established by the OECS-ESDU. This would facilitate monitoring and evaluation while providing a level of project accountability.

Monitoring and evaluation

The monitoring and evaluation of the Process Framework implementation would be included as part of the overall Project M & E activities and the results will be made available for all stakeholders. In addition, beneficiary assessments will be undertaken yearly beginning in year two by the OECS-ESDU Field Officer and included in the material presented during review missions.

Attachment 2: Cultural Property

The three pre-selected protected areas to be supported under the project include several historical sites and one includes small archeological findings. Future sites to be supported may also be found to include culturally important or historical or archeological sites. The management plans to be developed for all protected areas under the project would include regulations and procedures for the appropriate protection and preservation of these cultural properties consistent with World Bank Operational Policy Note 11.03, Cultural Property.

Additional Annex 15: Implementation Arrangements OECS COUNTRIES: OECS Protected Areas and Associated Alternative Livelihood

Project Implementation: Roles and Responsibilities

The OECS Protected Areas and Alternative Livelihoods (OPAAL) Project is a multilateral project between six (6) OECS Participating Member States (PMS), the Global Environmental Facility (GEF) and the World Bank (WB). The World Bank represents the GEF while the OECS Secretariat represents the OECS PMS. The OECS Secretariat has delegated this responsibility to the Organization's Environment and Sustainable Development Unit (ESDU). The Organization of American States (OAS) and the *Fond Français de l'Environment Mondial* (FFEM) will provide sources of co-financing. OPAAL is a partnership project in which the World Bank, the OECS Secretariat, the Member States and the co-financiers will work collaboratively and in cooperation to deliver stated outputs of the Project. The roles and responsibilities of these parties are explained in detail below.

World Bank

The responsibilities of the World Bank will be to: (i) oversee all project procurement; (ii) monitor the implementation of the Project through supervisory missions and information contained in various reports and plans; and (iii) be accountable for the management of GEF resources and approval of any changes to the scope, budget and schedule of the OPAAL Project.

OECS Secretariat

The OECS Secretariat will be the Executing Agency on behalf of the participating Member States and will provide direction to its Environment and Sustainable Development Unit (ESDU), which has been designated the Project's "Implementation Unit" in matters pertaining to environmental management and sustainable development. The Secretariat's project responsibilities/tasks will be subsequently delegated to the ESDU. These are the following: (i) co-ordination, participation and assistance to national implementation coordination entities (NICEs), both local and in OECS PMS, in project workshops, meetings and implementation of project activities; (ii) identification and priortorization of needs of PMS and communication of OECS PMS' priorities; (iii) coordination of project activities with participating PMS; (iv) implementation of specific tasks in accordance with annual work plans and budgets; (v) coordination and assistance in mobilizing scheduled contributions of OECS PMS to the Project, including trainees, counterparts, in-country temporary office space, and transport; and (vi) promotion of the Project.

These responsibilities will be achieved through the provision of: (i) a full time professional officer dedicated to the Project (the project manager); (ii) office space and related office equipment for use by project staff; (iii) technical services by the Unit's other function managers; (iv) additional consultation and advisory services of senior management personnel to the Project; and (v) administrative services to the Project, including secretarial support, accounting, reception, travel and meeting arrangements, network management, photocopying, and messenger and driver services.

The Head of ESDU will function as the Project Director.

OECS Participating Member States

Specific responsibilities of each PMS will include the following: (i) identification of sites for the establishment of protected areas; (ii) provision of national staff to collaborate and coordinate project activities at the local site and national levels; (iii) identification and provision of trainees; (iv) provision and funding of counterpart personnel salaries, local administrative and other expenses in-kind; (v) provision of temporary office and meetings space in addition to reasonable use of office equipment during periodic visits by project personnel; (vi) provision of ground transportation of project personnel and equipment to project sites; (vii) provision to project personnel of information and reports related to the project; (viii) participation, co-operation and support in and to the Project and its team; and (ix) commitment to adopt and apply recommended policies, legislation, institutional arrangements, and best practices, as developed through the Project.

FFEM

International support for this project in the form of co-financing is also secured through the FFEM. The experience of the French in support of marine PAs in the region is enshrined in success stories such as the SMMA, and these experiences will serve to guide investments in other selected marine PAs. The FFEM has indicated that support is being provided for marine PA's only, and will ensure that investments are targeted at: (i) support for the policy and legal components of PA management, (ii) site-specific investments, and (iii) provision of support for sustainable livelihoods. Funding for overall project management will also be supported.

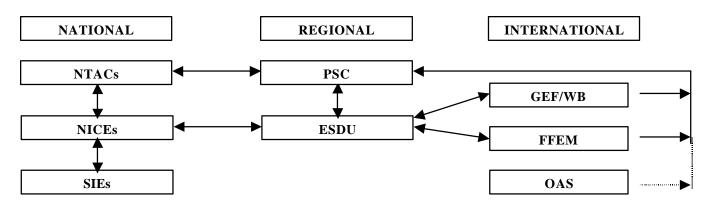
OAS

The OAS has been a longstanding partner in St. Lucia's development efforts and their participation in this project allows OAS and the Government of St. Lucia (GOSL) to build on past technical assistance and sustainable development projects. OAS support for the sustainable development objective highlighted in OPAAL came to the fore with their prominent support for the initial St. Lucia project. OAS has decided in favor of a later disbursement of funds to St. Lucia in order to coincide with the onset of implementation of the GEF/ World Bank Wider project. OAS funds, which are specific to St. Lucia, will be allocated to all project components.

Project Organization

The project will be undertaken by the OECS Secretariat through the ESDU operating out of its office in Saint Lucia. All staff of the Unit will be involved, as necessary and appropriate, in the implementation of the Project. The ESDU, with project funds will hire a project coordinator, a protected areas specialist, a communications officer, and an administrative assistant, to undertake project coordination and implementation. The project coordinator will report directly to the head of ESDU, who will also be the project director, and will collaborate closely with the Unit's other function managers. The protected areas specialist will function as the field manager and will report to the head of unit, through the project coordinator. The communications specialist will work in the functional unit responsible for Education, Training and Awareness (ETA). The administrative assistant will work in the functional unit responsible for Corporate Services (CS). All project supported staff will report directly to the project coordinator. The existing function manager for ESDU's Sustainable Livelihoods will assist the project coordinator in the implementation of all activities pertaining to alternative livelihoods, while the function manager for Environmental Planning and Management (EPM) will assist the project coordinator in the implementation of Component 1 (policy, legal and institutional reform). Figure 1 identifies the proposed organizational structure of the project.

Figure 1. Project Implementation



The regional approach provides for greater aid effectiveness through economies of scale and achieves increased synergies in areas where resources, both human and financial, are limited. The regional approach can also coordinate more effectively the dissemination and replication of lessons learned during implementation of country-specific components. Furthermore, this approach fosters a competitive environment between countries, providing benchmarks that inspire greater performance on a national level. Finally, such an approach will also facilitate greater regional compliance on international treaty issues, such as the Biodiversity Convention through the Project.

The ESDU has provided key regional leadership that has galvanized regional coordination and consistency in approaches to environmental management. The development and subsequent adoption of the St. George's Declaration of Principles for Environmental Sustainability in the OECS (SGD) by all Member States is testimony to the role played by the ESDU in guiding environmental management in the region. Further, the reporting requirements of the SGD serve to inform the region on the status of improvements in environmental management at the national level, in addition to the performance of the international and regional development partners in their support to OECS Member States towards attaining the goals enshrined in the SGD. Given the scope of work and the mix of skills required to execute the various elements of the project, the ESDU with its proven record of achievements with other donor funded projects, is best placed to provide the coordination, and guide the regional and national activities, and to secure common approaches to PA management.

The ESDU has gained valuable experience in international procurement and disbursement procedures through its implementation of a number of programs/projects. These include: (i) the Coastal and Watershed Management Project funded by DFID; (ii) the Environment and Capacity Development Project (ENCAPD) funded by CIDA; (iii) the Environment and Coastal Resources Project (ENCORE) funded by USAID; (iv) the Management of Natural Resources in the OECS funded by the GTZ; and (v) the Solid and Ship Generated Waste Management Project funded by the WB/GEF. The projects totaled approximately EC\$ 30,000,000 and spanned the last 13 years. As a result, the ESDU is in a position to provide critical guidance to the PMSs on Bank procedures and procurement to ensure timely and efficient implementation of project components.

The ESDU is also best placed to mobilize other specialized expertise to assist in the delivery of outputs. It is planned that such resources, which will be contracted to perform required services, will complement the activities and skills of the ESDU team. Consultants will report to the ESDU according to specific reporting requirements included in the contracts under which their services will be performed. Local, regional and international consultants will be utilized on the project.

The ESDU will maintain project oversight and will ensure regional coordination and consistency,

undertake project implementation, develop harmonized strategies, coordinate annual work and procurement plans, coordinate the production of technical reports, facilitate exchanges between the National Implementing and Coordinating Entities or NICE (see below), coordinate technical assistance and organize project workshops. The ESDU will also be responsible for procurement and disbursement, financial management and the provision of grants to NICE to undertake local site activities. ESDU will also maintain oversight on the legal arrangements for the management of biodiversity at the regional and national levels.

Project Oversight and Interagency Coordination:

Project Steering Committee

A Project Steering Committee (PSC) will be created. Its responsibilities will be to: (i) approve the operational manual, annual work plans and associated budgets; (ii) monitor the project's progress; and (iii) review and analyze and provide guidance to the ESDU on project issues during the course of project implementation. Membership on the PSC will comprise: (i) two PMSs (rotated annually), (ii) the OECS Secretariat as chair of the PSC and (iii) ESDU professional staff (4) who will be *ex-officio* members. The representation from each PMS will comprise: (i) the Head of the Parks and Protected Areas Unit where appropriate; and (ii) the ESDU National Technical Focal Point who is also the most senior technical officer in the Ministry of Environment. The PSC will meet twice a year.

World Bank

While the Bank will be reviewing the project through review missions, a full-scale review of the progress in project implementation will be undertaken around (month) of each year. An (independent consultant will be contracted to review project execution and review the execution of specific components immediately preceding the second annual review. The outcomes of this review would be discussed at a workshop (PSC?), where recommendations will be developed for the remaining period.

National Technical Advisory Committee (NTAC)

At the national level, the project will be monitored through a National Technical Advisory Committee (NTAC) that will be established in each PMS. The NTACs will be inter-sectoral, inter-agency bodies that will include representatives of public and private bodies, including NGOs, involved in environmental management in general and biodiversity management, in particular. The NTACs will: (i) provide technical and policy advice to the National Implementing and Coordinating Entities (NICEs); (ii) review workplans and budgets; and (iii) approve management plans and projects to be financed through the Small Projects Facility. Participating Member States will be encouraged to use the National Biodiversity Committees as the NTACs for the Project (see Table 1 below for illustrative examples of NTAC composition).

National Implementing and Coordinating Entities (NICE)

The National Implementing and Coordinating Entities (NICE) will function as the project implementing body at the national level and will have the responsibility for preparing annual work plans and budgets and implement local site activities in collaboration with the Site Implementing Entities or SIE (see below). The NICE will also be responsible for the day-to-day management of the project and will liaise directly with the ESDU on matters relating to activity implementation.

The NICE will be the lead entity with the legal mandate for the management of protected areas in each

PMS. In all instances these entities are fully established and functioning and are adequately staffed, except in the case of St. Vincent and the Grenadines where the staffing component of the newly established Beaches, Parks and Rivers Authority will be informed by an already commissioned study on the range of functions of that entity. All NICE will install a national coordinator who will be directly responsible for project coordination and implementation. The National Coordinator will report directly to the Permanent Secretary of the same Ministry through the Head of the respective NICE. The activities of the National Coordinator will also be supported by other national agencies with related mandates.

Site Implementing Agencies (SIE)

At the site of a project-supported PA, Site Implementing Entities (SIEs) will be set up specifically to undertake the day-to-day management. The SIE will be constituted of representatives from community groups living in and around the PA, and of appropriate public sector and relevant private sector agencies. The SIE will advise the NICE on the implementation of site activities and will implement activities in collaboration with the NICE. The SIE will participate in the NTAC and will participate actively in Project Components 2 and 3.

The SIE will be instituted under the existing appropriate legislation and it is envisaged that such a co-management arrangement will facilitate the joint management of resources in a site, serving also to reduce conflicts over the use of these resources while working to strengthen existing community organizations through the involvement of the latter in site management activities.

The management of the above-mentioned institutions requires the need for sustained regional and long-term coordination in the area of biodiversity management. It is contemplated that the creation of a network of focal agencies for PA management in the OECS will be entertained as a mechanism for the sharing of experiences, for ensuring the sustainability of PA management, for enhancing the public sensitization of the importance and need for protected areas.

PMS	NTAC	Members
Antigua & Barbuda	National Biodiversity Committee	Dept of Agriculture
		Dept of Environment
		Ministry of Health
		Tourism Representative
		Department of Fisheries
		Environment Nevis
		NGO Community
		Physical Planning
Dominica	To be created	NGOs
		Bureau or Standards
		Community Development Agencies
		Chamber of Commerce
		Ministry of Agriculture
		Ministry of Education
		Ministry of Finance
		Media Association
		Teachers Association
		Ministry for Local Government
		Forestry Department
		Fisheries Department

Table 1: Composition of the NTACs

Grenada	National Sustainable Development Council	NGOs CBOs Bureau of Standards Port Authority Ministry of Community Development Chamber of Commerce
		Senior Citizens Ministry of Agriculture Ministry of Health Ministry of Education Ministry of Finance Forestry Department Fisheries Department
St. Kitts and Nevis	National Conservation Commission/ National Biodiversity Steering Cttee	Dept. of Agriculture Dept. of Environment Ministry of Health Ministry of Tourism Fisheries Division Department of Environment – Nevis NGO Community Ministry of Physical Planning
St. Lucia	National Biodiversity Cttee	Ministry of Agriculture Ministry of Tourism Ministry of Health Department of Agriculture Ministry of Commerce Department of Forestry St. Lucia National Trust Physical Planning Section, Ministry of Planning Sustainable Development Unit, Ministry of Planning
St. Vincent and the Grenadines	Environmental Advisory Board	Chief Engineer Youth Representative Gender Representative Town Planner Director of Forestry Director of Fisheries Chief Environmental Heath Planner Environmental Services Coordinator Director Social Services Solicitor General NGO Representative (rotational)

Table 2: Proposed National Implementation Coordination Entities (NICEs)

PMS	Proposed National Implementation Coordinating Entities (NICE)	Current Staff Levels	Coordinator	PA Legislation Guiding NICE	(
SKN	Ministry of Health and Environment - Department of Environment	7	Y	National Conservation and Environmental Protection Act (1987)	Fisheri
ANB	Ministry of Tourism and Environment– Department of Environment	8	Y	National Parks Act (1984) Marine Areas (Preservation and Enhancement) Act 1972)	Public Forestu Fisheri Wild (1919)

DOM	Ministry of Agriculture and Environment – Forestry, Wildlife and Parks Division	60	Y	National Parks and Protected Areas Act (1975)	Forestı Forestı Fisheri
SLU	Office of the Prime Minister – St. Lucia National Trust Ministry of Planning	25	Y	None	Fisheri Forest, Ordina Nation Plannii Wildlii Nation (1999)
SVG	Ministry of Tourism - Beaches, Parks and Rivers Authority	3 Under development	Y	National Parks, Beaches, and Rivers Act (2001)	<u> </u>
GND	Ministry of Agriculture – Forestry and National Parks Department	110	Y	None	Fisheri Forest, Ordina Forestı (draft)

Key: SKN (St. Kitts/Nevis); ANB (Antigua/Barbuda); DOM (Dominica); SLU (St. Lucia); SVG (St. Vincent and the Grenadines); and GND (Grenada).

Table 3: Composition of SIEs

PMS	SIE	Composition
	To be created	Government Ministries
Antigua &		Stakeholder Groups
Barbuda		Community Based Organisations
Dominica	To be created	Government Ministries
		Stakeholder Groups
		Community Based Organisations
Grenada	To be created	Livelihood representatives
		Community Stakeholders
St. Kitts and Nevis	To be created	Public Sector
		Private Sector
		Community Stakeholders
St. Lucia	Pointe Sable Advisory Committee	Aupicon Charcoal Producers Group
		Savannes Bay Fishers
		Department of Forestry
		Department of Fisheries
		National Development Corporation
		Ministry of Tourism
		Southern Tourism Development Corporation
		St. Lucia National Trust
		Caribbean Natural Resources Institute (CANARI)
		Environment and Sustainable Development Unit (Ministry of
		Planning)
		Ministry of Social Transformation
St. Vincent and the	Tobago Cays Management Board	Dept. of Fisheries
Grenadines		Hotels, Union Island
		Mayreau Environmental Development Organisation
		Ministry of Planning

Dive Industry, Union Island Ministry of Tourism Coast Guard Ministry of Legal Affairs
Ministry of Legal Affairs Ministry of Finance

Financial Management Arrangements:

General

The Project will benefit from the experiences gained by the OECS Secretariat, particularly ESDU, in the implementation and management of the OECS Solid and Ship Generated Waste Management Project that was financed by WB/GEF. The accounting staff in ESDU and the Head of Unit are very familiar with all aspects of the Bank's financial management systems and procedures, including preparation of statements of expenses, disbursement summaries and withdrawal applications. In addition, the Head of Unit has gained experience in the Bank's procurement procedures. The Unit's Function Managers are also experienced in preparing terms of reference, issuing of letters of invitation, evaluation of tenders, and in negotiating contracts.

During the project life, the ESDU staff benefited from various supervisory missions and visits from the Bank's procurement and disbursement staff. In addition, ESDU undertook regular financial audits, including audits of its internal control systems. All the recommendations of these audits have been fully implemented.

In preparation for management of the funds provided under the PDF Grant (WBTF 27935-OECS), ESDU had to fill out a questionnaire to describe in detail, the various procurement and disbursement procedures that are in place in the Unit. The Bank's Financial Analyst assigned to the Project also visited the Unit in October 2003 to undertake a review of its financial management systems and procedures.

Procedures in OECS ESDU

The finances of the Unit are managed by the Units' Accounts Clerk who reports to the Chief Finance Officer through the Head of Unit. A Senior Accounts Clerk in the Office of the Chief Finance is responsible for checking all requisition vouchers and checks and verifies bank reconciliation. The Unit also has access to all other accounting staff in the Office of the Chief Finance Office and in other Units. Two signatories, one of whom has to be from the Division of Corporate Services, sign all checks.

Financial records are stored in PeachTree accounting software, which is utilized by the entire Secretariat. These records are used to generate various schedules and monthly financial statements, and cash on hand status.

Annual audits are undertaken of all donor accounts. An internal auditor will be hired by the Secretariat in early 2004.

Procurement. Annual Procurement Plans are prepared based on annual work plans and budgets. The work plans and budgets are, in turn, prepared in collaboration with Member States and reflect the needs and demands of each Member State but within the framework of individual Project Agreements and the Unit's Second Five Year Operational Plan. The Procurement Plans identify the type of procurement

method to be used; the amount budgeted for the procurement and the time line for undertaking the procurement. Implementation of the Plan begins as soon as it is endorsed and approved by Senior Management in the OECS, in the first instance, and the donor, in the other instance.

Procurement of services and goods are based on OECS Guidelines, and where necessary on specific donor requirements. Generally, the letter of invitation, including the terms of reference, is sent out to at least 3 consultants/firms. An Evaluation Panel in the Unit undertakes the evaluation according to standard procedures and guidelines. In the case of international competitive bidding, World Bank procedures are adhered to.

A No Objection for the Terms of Reference and the Consultant/firm is sought from the donor before the contract is prepared. The contract is prepared using the OECS Boiler template; the contract with all the supporting documents are then transmitted to Legal Counsel and the Director of Corporate Services, for vetting, before being signed off by the Director General.

Each contract is filed separately in its own file, which contains all information pertinent to that contract. In addition, the technical officer responsible for the contract also keeps a working file on each contract.

Information on each of the contracts is kept in a contracts database, which is managed by the Unit's Function Manager for Corporate Services. The database tracks deliverables and payments against each contract.

Disbursement. Disbursement procedures utilized by the Unit are consistent with the Guidelines provided in the World Bank's Disbursement Handbook. Disbursements are made through requisition vouchers that are prepared by the Unit's Accountant, and checked by the Office of the Chief Finance Officer before the check is cut. All accounts managed by the Unit have two signatories. In addition, every Monday morning, the Accountant runs a statement of the cash on hand on all the bank accounts so that the Head of Unit can ascertain the availability of funds before a check is signed.

Project funds will be disbursed according to the procedures described above and in accordance with the instructions provided in the Bank's Disbursement Letter. All Project staff will be provided with key documents and the Disbursement Letter and trained in all aspects of the Bank's disbursement procedures. The Head of Unit and the Unit's accounting staff will provide this training. Additional training will be sought from the Bank.

The Bank has been provided with specimen signatures of those persons authorized to sign withdrawal application. In general the Head of Unit and the Chief Finance Officer will countersign withdrawal applications.

A US Dollar Special Account will be opened and replenishment applications for this account will be submitted at monthly intervals together with reconciled bank statements, the appropriate summary sheets, and other supporting documentation.

All procurement will be undertaken through approved procurement plans and in accordance with the Bank's procurement procedures and thresholds. Where necessary, and appropriate, expenditures incurred at the national or local site levels will be undertaken through Grant Agreements provided to the National Implementing Entity. Such expenditures will be clearly defined in the Operational Manual and the Grant Agreement between the OECS and the World Bank.

The Grant Agreements to the National Implementing and Coordinating Entities (NICEs) will follow

OECS contracting procedures described above and will be subject to prior receipt of a No Objection from the Project's Task Manager in the Bank. Payments against this Agreement will be by way of a schedule that will identify amounts disbursed against clearly defined milestones and outputs.

An institutional analysis of each NICE will be undertaken during Staff Appraisal so that the necessary mitigating measures can be implemented before the start of the Project. In addition, the Unit's Accountant's Clerk will work closely with each NICE to ensure that all procedures are consistent with the requirements of the OECS and the World Bank. Where necessary, the Account's Clerk will undertake regular supervisory missions to the NICEs. Finally, training will be sought from the World Bank for appropriate staff in the NICEs.

As public service entities, the NICE will be subject to the routine annual audit exercises conducted by governments through their Departments of Audit. Two signatories, one of whom will be the Permanent Secretary and the other the Accountant, both from the same ministry, will sign all checks. All disbursements from the ESDU will be made through existing arrangements directly to the ministries within which the NICE is located.

All disbursement s undertaken by the NICE using Project Funds will be included in ESDU's financial reports to the Bank.

Monitoring and Evaluation Arrangements:

The project will employ an adaptive management framework characterized by annual reviews and a mid-term evaluation that allows for periodic evaluation of the project plan, inputs, management processes, outputs, outcomes, and redesign process. The results of the M&E will be used as feedback for the different components of the project cycle, and will confirm the value of current practice or suggest the need for change. The Logical Framework Approach (LFA) has assured clear identification of project goals, objectives, inputs and outputs, objectively verifiable indicators, baseline measures for indicators, sources of information for measuring progress, key assumptions, and internal and external risks to the attainment of the project's objectives. Criteria associated with GEF's Strategic Priorities for the Biodiversity Focal Area will be monitored using the score card methodology (see Annex 1).. The project design is highly participatory in nature. At the national level, major stakeholders will be represented on the NTAC and the SIE. These bodies will be participate in direct implementation of appropriate project activities including M&E activities.