Hikkaduwa Restoration Task Force (HRTF):
Formation of an inter-agency committee and action plan for the restoration of Hikkaduwa, Sri Lanka, into a resilient community and sustainable coastal tourism destination.



USAID SCOTIA-SL Louis Berger Group Dr. Robert B. Powell Clemson University, USA 2007



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TABLE OF CONTENTS

INTRODUCTION	5
Sustainable Development	5
Resilience	5
USAID Sustainable Coastal Tourism in Asia-Sri Lanka Structure of Document	6 7
Structure of Document	/
EXISTING CONDITIONS: Hikkaduwa, Sri Lanka	7
Geography and Weather	8
Population and Social Characteristics:	8
Economy: Tourism and Fisheries	8
Threats and Issues	11
Institutions Responsible for Environmental Management in Hikkaduwa	13
GOALS AND OBJECTIVES:	15
METHODS/APPROACH AND RESULTS	16
Review of Documents	16
Site Visit and Rapid Assessment	17
Interagency Cooperation for the Restoration of Hikkaduwa	17
Identification of Issues, Opportunities, Barrier, and Facilitators	18
± ±	
Philippines Study Tour	18
Prioritizing Issues and Opportunities	19
Action Plan	19
Interagency pledge and committee formation	23
FUTURE ACTIVITIES	24
Develop a Formal Schedule for Future Inter-agency Meetings	24
Take Plans to Action	24
Communicate Plans and Results	25
Communicate Figure Area Results	23
CONCLUSION	25
REFERENCES	26
	20
APPENDIX 1: Hikkaduwa: Summary of Issues and Opportunities (1996-2007)	27
APPENDIX 2: Workshop 1 (June 12, 2007)	31
Issues, Opportunities, Barriers, and Facilitators	
APPENDIX 3: Philippines Study Tour and 3 rd SCOTIA-Philippines Workshop	36
111 12 12 13 1 1 mappines octacy 1 out and 3 500 111 1 mappines workshop	50
APPENDIX 4: Workshop 3 (June 26, 2007): Action Plan Development	40
APPENDIX 5: Taking Plans to Action: Developing Specific Steps and a Timeline	52

LIST of FIGURES

Figure 1: Relationship of the Themes of Sustainable Development and Community Resilience	6
Figure 2: Sri Lanka	8
Figure 3: Hikkaduwa and Galle Road	9
Figure 4: Hikkaduwa Urban Council and Marine Sanctuary	10
Figure 5: The Rough Guide to Sri Lanka	11
Figure 6: Butler's Tourism Destination Lifecycle	13
Figure 7: Objectives and steps toward building governmental capacity and restoring Hikkaduwa	18
Figure 8: Interagency pledge of coordination for the restoration of Hikkaduwa	23
LIST OF TABLES	
Table 1- Hikkaduwa: Summary of Issues	12
Table 2: List of Participants in Interagency Workshops and Philippine Study Tour	17
Table 3: Results of Workshop 2—Prioritized Issues	19
Table 4—Proposed Future Actions that Require Immediate Attention.	20

INTRODUCTION

Climate change, over-population, environmental degradation, over development, and habitat loss all potentially threaten the sustainability and quality of life in Sri Lanka. According to the United Nation's Development Programme's (UNDP) Human Development Report (2006), Sri Lanka is rated 93rd out of 177 countries in providing healthy living conditions, educational opportunities, and sustainable livelihoods (United Nations Development Programme, 2006). In response to these social and environmental challenges international development organizations such as the United States Agency for International Development (USAID), non governmental organizations (NGOs), and national governments promote sustainable development, which is defined as "development that meets the needs of the present generation without compromising the ability of future generations to meet their own needs" (World Commission on Environment and Development, 1987,45).

Sustainable Development:

The United Nations Commission on Sustainable Development suggests that sustainable development is composed of four broad themes inspired by the Brundtland definition of sustainable development. The themes of Social Capacity, Environmental Health, Economic Development and Growth, and Effective Governance are thought to be interrelated, interdependent, and all necessary to achieve sustainable development (United Nations Commission on Sustainable Development, 1996, p.21). Below is a list of the four themes of sustainable development and their abbreviated definition.

- 1 Environmental Health: Ecological Function and Aesthetic (natural and built environment)
- 2 Social Capacity and Equity: Education and access to participate in the economy
- 3 Effective Governance: Efficient and transparent governmental framework (policies, laws, regulations, and enforcement) to support environmental health, social capacity, and a healthy economy.
- 4 Economic Health: An economy that provides intergenerational opportunities and benefits

Resilience:

Although the concept of sustainable development acknowledges complexity and interconnectedness, there is no mention of the dynamism of any community, ecosystem, or economy. Because change should be thought of as inevitable, all systems must therefore be resilient, or in other words be robust enough to adapt or resist things such as climate change, tsunamis, civil unrest, the price of oil, etc. if they are to provide sustainable benefits. Resilience, which is generally applied to the study of disasters, is defined as "the capacity of a system, community, society, [institution, or environment] to adapt, [change, or resist when exposed to external forces] in order to reach and maintain an acceptable level of function and structure" (United Nations International Strategy for Disaster Reduction, 2004). The amount of resilience a system contains is determined by the degree to which a system is capable of re-organizing itself by *learning* and adapting to meet current and future chronic or acute events and challenges.

When attempting to improve the resilience of a community, USAID and the UN suggest that four interrelated themes again must be addressed: economic health, environment health, social capacity, and governance. Similar to the conceptualization of sustainable development, the interrelationship and reliance on each of these themes fully functioning must be recognized, embraced, and further strengthened if a community is to be resilient to inevitable external and internal forces (figure 1). According to a recent interagency report promulgated by USAID-Asia, each theme of resilience can be supported by the following actions (USAID, 2006):

- 1 Economic Health: Diversify (products and markets), Innovate, Manage expectations, Plan, Partner
- 2 Environmental Health: Protect diversity; Improve health and function; Mitigate impacts; Manage development; and Improve flows of traffic, energy, and resources.
- 3 Social Capacity: Educate and Train
- 4 Effective Governance: Promote partnerships and collaboration, Build capacity, Share power, Efficiently enforce, Communicate, and Foster learning within organizations



Figure 1: Relationship of the themes of Sustainable Development and Community Resilience

USAID Sustainable Coastal Tourism in Asia-Sri Lanka:

Recognizing the interrelationships between effective governance, social capacity, environmental health, and economic health for achieving sustainable development and resilience, USAID's Sustainable Coastal Tourism in Asia-Sri Lanka (SCOTIA-SL) program specifically utilizes this framework to improve the coastal and environmental management and provide and enhance a sustainable tourism economy within the town of Hikkaduwa, which lies 95 kilometers south of Colombo on the South West Coast.

Hikkaduwa, once a prosperous coastal tourism destination, now suffers from over development and resource degradation, which is thought to have detracted from the quality of life of the local residents and depressed the tourism economy. Over the last 15 years over 14 reports prepared by

local, national, and international governmental agencies, non governmental organizations (NGOs), and donor agencies have identified and described the major environmental and social issues facing the town and have prescribed a range of activities to overcome these challenges, yet little has been accomplished.

In an effort to utilize the results and recommendations of these past reports, SCOTIA-SL has facilitated the development of an inter-agency task force to restore Hikkaduwa's environment and economy. This inter-agency task force has over the course of a one week study tour to the Philippines and three workshops identified the major issues, opportunities, barriers, and facilitators to restoring Hikkaduwa into sustainable and resilient coastal community; prioritized these issues and opportunities; developed a preliminary action plan; and begun the process of formalizing the interagency task force so that the action plan can be further developed and operationalized. Ultimately this newly formed interagency task force seeks not just to identify, describe, and prescribe but to actually *ACCOMPLISH* projects in an effort to restore not only the environment and economy but also the confidence of the local people of Hikkaduwa that anything is possible through collective action by committed people.

Structure of this Document:

This report will describe the existing conditions in Hikkaduwa, outline the goals and objectives of this project, before describing the activities and resulting products. To conclude, recommendations will be made and an additional worksheet will be provided for the inter-agency task force to identify the specific steps for accomplishing each action item and when they will occur.

EXISTING CONDITIONS

Hikkaduwa, Sri Lanka:

Hikkaduwa, Sri Lanka, located 95km south of the capital of Colombo (see figure 1) in the Galle District, emerged in the 1970s as one of Sri Lanka's most popular beach tourism destinations. Thousands of international tourists annually traveled to Hikkaduwa to experience the crystal clear Indian Ocean waters, romantic beaches, and exotic and friendly Sri Lankan culture. Today Hikkaduwa is highly urbanized with extensive development along the Galle Road (A2 road) for a distance of approximately eight kilometers (see Figure 3+4). Virtually all commercial, governmental, and tourism activities occur within this corridor, while residential and agricultural activities extend eastward from the Galle Road. In addition within the Galle Road and coastal zone corridor, a commercial Fisheries Harbor exists at the northern end of the Urban Council. Hikkaduwa is also home to Sri Lanka's first Marine Sanctuary which was established in 1979 to protect the fringe coral reef which extends along the beach front and provides Hikkaduwa with a remarkable natural tourist attraction (De Silva, 1997). Finally Hikkaduwa and the nearby area offer the following attractions or activities: beach, surfing, diving, snorkeling, fishing, ecotourism, birding, and wildlife viewing (United Nations Development Programme & World Tourism Organization, 2007).

Geography and Weather:

Hikkaduwa is located in the low lying coastal zone. During the South West Monsoon period, May to November, Hikkaduwa receives a high level of rainfall. Although temperatures vary little during the year (30 degrees to 24 degrees), the monsoon season brings higher temperatures and humidity and more frequent storms and high winds which cause rough sea conditions during this period (Thomas, 2006). The dry period occurs from December to April, which brings more stable weather and sea conditions and lower humidity.



Figure 2: Sri Lanka

Population and Social Characteristics:

According to the 2001 Population Census, Hikkaduwa has approximately 111,000 people living within the Urban Council (UC) and Pradeshiya Sabhas (PS). According to W. Kariyawasam, Chairman of the UC, approximately 30,000 of these live within the UC.

Economy: Tourism and Fisheries

Tourism and fisheries are the primary economic drivers within Hikkaduwa UC. Approximately 2,000 people are directly employed in the tourism industry with another 4,000 employed in support services (EML Consultants, 2006). Subsistence and small scale commercial agriculture which produces traditional crops such as rice, coconut, fruits, and spices, dominates the PS.

Although many structures were damaged or destroyed during the 2004 Tsunami, rebuilding within the UC along the coastal zone was rapid and has matched previous building and development levels. According to the Sri Lankan Tourist Board and maps provided by the Urban Development Authority, approximately 46 hotels and guest houses currently exist and operate on the beachfront from Fisheries Harbor to the southern end of Narigama (United Nations Development Programme

& World Tourism Organization, 2007). The hotels reportedly range from five-star to one-star. Approximately 14 of the hotels are large international style hotels, while the rest offer more rustic backpacker style accommodations.

Hikkaduwa reportedly relies heavily on international tourists and in the past has not courted the domestic market due to lower potential profit margins. According to the Tourist Board Annual Statistical Report, Sri Lanka received 549,000 international tourists in 2005 which was only a 3% retraction from 2004 despite the impact of the Tsunami on infrastructure (Sri Lanka Tourist Board, 2005a). Seventy percent of these arrivals traveled to Sri Lanka for pleasure. However, despite only a slight retraction in the total number of visitors to Sri Lanka in 2005, occupancy rates for hotels along the SW coast dropped from 52.6% in 2004 to under 32% in 2005 (Sri Lanka Tourist Board, 2005a).

Although there was slight improvement in occupancy rates in 2006, according to hoteliers interviewed in 2007, they project tourism arrivals to drop dramatically from the 2005 level due to heightened security concerns and the institution of travel warnings by many international governments such as Australia, United States, England, and Germany. In June, 2007, occupancy rates at several hotels in Hikkaduwa were reportedly below 10%. This downturn in the international tourism market has had dire consequences for the economy of Hikkaduwa and the financial well-being of the population. Unemployment and poverty rates are projected to increase in the area due to the town's high reliance on the international tourism industry.

Finally, although visitation statistics are not recorded for the Marine Sanctuary in Hikkaduwa, 87% of visitors to other National Parks in Sri Lanka were domestic tourists. Despite the assumption by Hikkaduwa hoteliers that international tourists are the primary visitors to the Marine Sanctuary, visitation statistics to Sri Lanka's other National Parks suggests otherwise. In 2005 SL National Parks and other protected areas received 446,403 visitors of which 388,962 were domestic tourists (Sri Lanka Tourist Board, 2005a).



Figure 3: Hikkaduwa and Galle Road



Figure 4: Hikkaduwa Urban Council and Marine Sanctuary

Threats and Issues:

Tourism is a service industry comprised of transportation, hospitality, and support services. The tourism industry also sells more intangible elements, or in other words, the promise of certain benefits such as: rest and relaxation, culture, escape, adventure, and exotic experiences.

- 1 Tangible elements:
 - The attraction—natural environment, architecture, and activities
 - Transport systems
 - Hospitality services—accommodation, food and beverages, tours, souvenirs
 - Support services—banking, insurance, and safety and security.
- 2 Intangible elements:
 - The characteristics and benefits: rest and relaxation, culture, escape, adventure, new and different experiences.

Although Hikkaduwa was once one of the primary coastal tourism destinations in this island nation, now overdevelopment, environmental degradation, and civil unrest threaten this once vibrant and robust tourism economy. According to the "Rough Guide to Sri Lanka" (2006) Hikkaduwa now "embodies the worst aspects of the unconstrained development that has ravaged the Sri Lankan coastline... Years of unplanned building have reduced the beach to a narrow ribbon of sand while the once-beautiful Coral Sanctuary has become a circus of boats chasing traumatized fishes through a labyrinth of dead coral. And just a few yards inland, running the length of the town, the noxious Galle Road is the province of psychotic bus drivers who scream along at insane speeds, filling the ocean-fresh air with clouds of smog and making the simple act of stepping outside your guest house a potentially life-threatening experience" (Thomas, 2006, p.162).

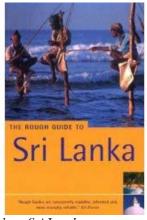


Figure 5: The Rough Guide to Sri Lanka

As this quote indicates, the general threats and issues facing Hikkaduwa and the associated tourism industry result from unplanned and unregulated development of the coastal zone, poor environmental management, and poor urban planning. According to a recent tourism assessment completed by UNDP, Hikkaduwa faces serious environmental threats, provides very low scenic quality, exhibits low urban design quality, and poor solid waste management (United Nations Development Programme & World Tourism Organization, 2007). A review of over 14 reports similarly revealed an extensive list of threats, issues, and opportunities which are organized by sustainable development theme and summarized below (TABLE 2). For a list of these reports and a complete summary of the issues, opportunities, and recommendations from these reports see Appendix 1.

HIKKADUWA				
SUSTAINABLE	ISSUES			
DEVELOPMENT THEME				
ENVIRONMENTAL	A. Poor Solid Waste Management			
HEALTH	B. Poor Water Quality from High Levels of Sediment, Sewage, and			
	Point Source Pollution			
	C. Poor Tourism/Town Environment			
	D. Ineffective Sanctuary Management			
	E. Reef Degradation			
SOCIAL CAPACITY	A. Low Level of Local Business Capacity			
	B. Lack of Alternative Sustainable Livelihoods			
	C. Lack of Environmental and Disaster Education			
GOVERNANCE	A. Lack of Interagency Coordination and Cooperation			
	B. Lack of Regulation and Enforcement of Existing Laws			
	C. Poor Understanding of Sustainable Development			
ECONOMIC HEALTH	A. Lack of Tourism Marketing Capacity			
	B. Poor Quality Tourism Product			
	C. Lack of Alternative Sustainable Livelihoods (over reliance on			
	tourism)			

Table 1- Hikkaduwa: Summary of Issues

This list of environmental, social, governance and economic issues suggests that Hikkaduwa has significant challenges to overcome if sustainability is to be achieved. Many of these issues also appear to be a result of Hikkaduwa's early success as a tourism destination. As a tourism destination becomes successful, the associated development and impacts of tourism have the potential of destroying what originally made the destination attractive. Butler in his article *The Concept of a Tourist Area Cycle of Evolution* (1980) explains the concept of tourism destination development as a process of six stages (Figure 6). The cycle begins with the exploration stage characterized by small numbers of tourists and no social or environmental impacts (Butler, 1980). The cycle progresses through involvement, development, consolidation, and then stagnation denoted by overdevelopment, resource degradation and a subsequent decline in tourism (Butler, 1980). Hikkaduwa is now in the stagnation phase of development and faces further decline and erosion without concerted efforts to restore the environment. "Tourist attractions are not infinite and timeless, but should be viewed and treated as finite and possibly nonrenewable resources" (Butler, 1980, p.11). Will the people of Sri Lanka and Hikkaduwa restore its natural and built environment or will the town suffer continued environmental and economic recession?

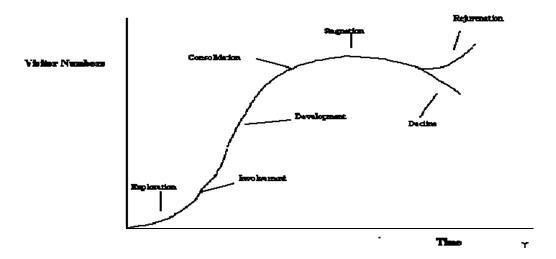


Figure 6: Butler's Tourism Destination Lifecycle

Institutions Responsible for Environmental (natural and built) Management in Hikkaduwa:

According to many of the reports reviewed, one of the major challenges to sustainability facing Hikkaduwa is effective governance. Specifically, interagency cooperation and collaboration is paramount if Hikkaduwa's environment is to be restored. In order to facilitate effective governance, the institutions that are responsible for environmental management must be identified. Below is a list of the governmental institutions that are responsible for different aspects of environmental management in Hikkaduwa:

Hikkaduwa Urban Council (UC): This is the local authority for commercial district of Hikkaduwa which is governed by elected officials including the Chairman and is responsible for the management of: water supply, solid waste, environment, storm water drainage, road maintenance, licensing of trade and businesses, land use planning, building permits, and tax collection(EML Consultants, 2005, p. 21).

Hikkaduwa Pradeshiya Sabha (PS): This is the elected local authorities that are responsible for solid waste, water supply, storm water drainage, road maintenance, licensing of businesses, and collection of taxes for the rural areas and smaller inland villages within the Hikkaduwa district.

Grama Niladhari Divisions (GND): There are 97 GNDs, which are neighbourhood or village level councils in Hikkaduwa.

Coast Conservation Department: "Responsible for formulating policy, implementing coastal protection and regulating development activities within the legal 'coastal zone' (Hikkaduwa Special Area Management and Marine Sanctuary Coordinating Committee, Coast Conservation Department, National Aquatic Resources Agency, & Coastal Resources Management Project, 1996, p. 51)

Department of Wildlife Conservation (DWLC): "Manages the Hikkaduwa Marine Sanctuary under the Flora and Fauna Protection Act" (Hikkaduwa Special Area Management and Marine Sanctuary Coordinating Committee, Coast Conservation Department, National Aquatic Resources Agency, & Coastal Resources Management Project, 1996, p. 51)

National Aquatics Resources Agency (NARA): "Conducts and coordinates research and development activities, disseminates information and provides advisory and consultancy services for marine and inland aquatic resources management" (Hikkaduwa Special Area Management and Marine Sanctuary Coordinating Committee, Coast Conservation Department, National Aquatic Resources Agency, & Coastal Resources Management Project, 1996, p. 51)

Ministry of Fisheries and Aquatic Resources Development (MFARD): "Coordinates and monitors activities relevant to fisheries including formulating policy, recommending management plans, organizing cooperative societies, implementing development projects," and managing the Hikkaduwa Fisheries Harbor (Hikkaduwa Special Area Management and Marine Sanctuary Coordinating Committee, Coast Conservation Department, National Aquatic Resources Agency, & Coastal Resources Management Project, 1996, p. 53).

Central Environmental Authority (CEA): "Specifies standards, norms, and criteria for environmental management, monitors environmental conditions, initiates research and disseminates information" (Hikkaduwa Special Area Management and Marine Sanctuary Coordinating Committee, Coast Conservation Department, National Aquatic Resources Agency, & Coastal Resources Management Project, 1996, p. 53).

Urban Development Authority (UDA): "Manages development within and outside the coastal zone, including all designated 'urban areas' within 1 km of the coast line" (Hikkaduwa Special Area Management and Marine Sanctuary Coordinating Committee, Coast Conservation Department, National Aquatic Resources Agency, & Coastal Resources Management Project, 1996, p. 53).

Sri Lanka Tourist Board (TB): "Promotes international and domestic tourism and formulates policies and guidelines" regarding tourism development and management (Hikkaduwa Special Area Management and Marine Sanctuary Coordinating Committee, Coast Conservation Department, National Aquatic Resources Agency, & Coastal Resources Management Project, 1996, p. 53)

Disaster Management Center (DMC): "Protect Human life, property and the environment from natural disaster through awareness, prevention, preparedness, mitigation and coordination. Contribute to the national objective of sustainable development through minimizing human suffering and loss and damage to the economic infrastructure by promoting and strengthening national capacities for disaster management."

Marine Pollution Prevention Authority (MPPA): Provides leadership to reduce marine pollution, manages the environment and natural resources in order to ensure national commitment for sustainable development for the benefit of the present and future generations.

Forest Department (FD): Responsible for the management of public lands and forest resources to ensure sustainable development for the benefit of the present and future generations.

Ministry of Land and Land Development (MLLD): Formulates and implements policies, plans and programmes in respect of land and land development, administers state land, provides land use planning, surveying, and resource surveys.

GOALS AND OBJECTIVES:

While the overarching goal of this project is to restore Hikkaduwa into a sustainable and resilient community, the primary goal of this project is to establish an inter-governmental committee to improve governance effectiveness by fostering governmental interagency cooperation and partnerships by engaging relevant agencies in local projects and building environmental monitoring, management and mitigation capacity. This will be accomplished by providing opportunities for agencies to interact with each other, share information, and create permanent linkages.

In addition a series of specific objectives accompany each goal. The objectives are designed to be specific, measurable, acceptable, realistic, and time-bound (SMART). In addition each objective will have a range of associated action items and specific tasks. Finally, when each objective is accomplished, the project will have progressed toward attaining each goal.

Goal 1 (G1): Establish an inter-governmental committee for the restoration of Hikkaduwa into a sustainable and resilient community.

Objective 1 **(G1:Obj1)**: Provide opportunities for government agencies to interact, share information, and create permanent linkages

Objective 2 **(G1:Obj2)**: Facilitate inter-agency partnerships and cooperation for the restoration of Hikkaduwa into a sustainable and resilient community

Objective 3 **(G1:Obj3)**: Establish a cross-agency committee for the restoration of Hikkaduwa into a sustainable and resilient community

Objective 4 **(G1:Obj4)**: Establish regular meetings of the cross-agency committee so that adaptive management can take place.

Goal 2 (G2): Restore Hikkaduwa into a sustainable and resilient community through inter-organizational cooperation and partnerships.

Objective 1 **(G2:Obj.1)**: Through an interagency participatory process, develop a prioritized list of issues and opportunities.

Objective 2 **(G2:Obj.2)**: Through an interagency participatory process, develop a preliminary action plan to address the prioritized issues and opportunities and an indication of what agency is responsible for each action item.

Objective 3 **(G2:Obj3)**: For each action item identified, develop specific steps and a timeline for accomplishing each task.

Objective 4 (G2:Obj4): Accomplish each specific step and report progress to Hikkaduwa community and stakeholder agencies.

METHODS/APPROACH AND RESULTS:

1. Review of Documents:

The first phase of this project was to identify and review all reports, management plans, or other documents that pertained to natural resource management, tourism development and the town of Hikkaduwa. After the review, a comprehensive list of issues, opportunities, and recommendations was developed and organized into the sustainable development/resilience 4 theme framework (Appendix 1). A summary of the issues can be found in Table 1. The following documents and reports were reviewed:

- Coast Conservation Department. (2004). Coastal Zone Management Plan (revised), Sri Lanka. Colombo: Ministry of Fisheries and Aquatic Resources.
- De Silva, M. W. R. N. (1997). The Hikkaduwa Marine Sanctuary: A historical background. Nugegoda, Sri Lanka
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- USAID. (2005). Organizations and activities in the coastal areas of Sri Lanka: Current programs and projects. Colombo, Sri Lanka: USAID.
- World Tourism Organization, Consulting and Audit Canada, & Centre for a Sustainable Future. (2000). Workshop on indicators for the sustainable development of tourism. Berulawa, Sri Lanka: World Tourism Organization and Sri Lanka Ministry of Tourism and Civil Aviation.

2. Site Visit and Rapid Assessment:

SCOTIA-SL team members toured Hikkaduwa UC and PS to identify the chief environmental, social, governmental, and economic threats and challenges. Rapid assessment field techniques were employed and informal interviews of critical stakeholders occurred in an effort to corroborate the results and recommendations of previous studies and reports outlined in the preliminary review of documents.

3. Interagency Cooperation for the Restoration of Hikkaduwa

In an effort to establish an inter-governmental committee for the restoration of Hikkaduwa into a sustainable and resilient community (Goal 1) and restore Hikkaduwa into a sustainable and resilient community through inter-organizational cooperation and partnerships (Goal 2), a group of 12 senior administrators (table 2) from different agencies that are responsible for the management of the Hikkaduwa environment was assembled to participate in series of workshops and a study tour to the Philippines.

	Name	Position	Agency
1	Lt.Col.D.Ekanayake	District Coordinator	Disaster Management Centre
2	Ms.A.S.C.Wilson	Asst. Director	Department of Wild Life Conservation
3	Mr.U.K.D.G.Jayasinghe	Director-NRM	Central Environment Authority
4	Mr.A.H.N.Jayasekera	General Manager	Marine Pollution Prevention Authority
5	Mr.A.D.P.C.Wijegoonawardana	Deputy Director	Min of Fisheries& Aquatic Resources
6	Mr.P.M.A.de Silva	Senior Deputy Conservator	Forest Department
		Dep. Director of	
7	Mr.Terrance Fernando	Enforcement	Urban Development Authority
8	Mr.L.B.S.B.Dayarathne	Senior Asst. Secretary	Min of Land & Land Development
9	Ms.Chamari Dissanayake	Research Officer	National Aquatic Resources Agency
10	Mr.Anil Premaratne	Acting Additional Director	Coast Conservation Department
11	Mr. V.Kariyawasam	Chairman	Hikkaduwa Urban Council
		Director-Resort	
12	Mr.T.Sooriyagoda	Development	Sri Lanka Tourist Board

Table 2: List of Participants in Interagency Workshops and Philippine Study Tour

Below is a flow chart (figure 7) which describes the methods and associated activities for achieving the goals and objectives of this program. The blue boxes indicate the activities associated with Goal 1 and the grey boxes are associated with the activities for Goal 2.

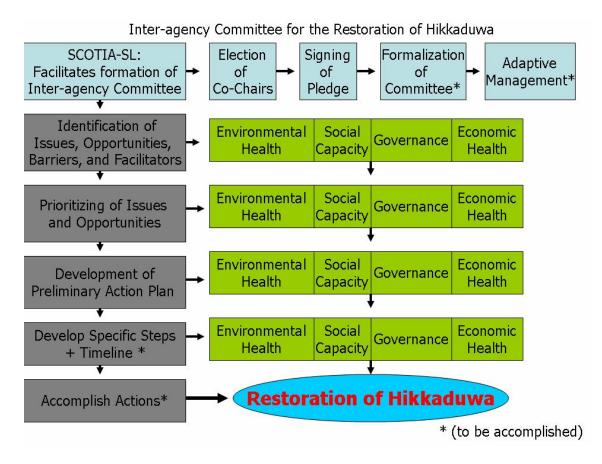


Figure 7: Objectives and steps toward building inter-governmental cooperation and capacity for restoring Hikkaduwa

- **A.** Workshop 1—Identification of Issues, Opportunities, Barrier, and Facilitators (June 12, 2007). Through a facilitated interagency participatory process, the group developed a prioritized list of issues and opportunities that face Hikkaduwa. In the second phase of the workshop the group worked to identify and describe the perceived barriers as well as the potential facilitators to overcoming these issues **(G1+2; Obj1)**. The facilitated process utilized the sustainability/resilience themes framework to organize and focus the activities of the group and the results of the workshop can be found in Appendix 2.
- **B.** Philippines Tour and SCOTIA-Philippines Workshop (June 16-24). The purpose of this tour was to provide opportunities for the participating government agency representatives to interact, share information, and create permanent linkages (G1:Obj.1). In addition the tour provided a platform for discussing the issues and challenges of achieving effective environmental management, social capacity building, and governance that will lead to sustainable development. The tour provided opportunities to visit sites that had implemented different environmental management strategies and interview Philippine governmental officials. The two day workshop provided case studies from different USAID SCOTIA Philippines sites and presentations by experts regarding aspects of sustainable development, effective governance, and environmental management. Ultimately the Philippines Tour and Workshop exposed participants to different contexts so that lessons could be learned from the successes and failures in hopes of providing ideas for the improvement of Hikkaduwa. The full Philippines Tour and SCOTIA-Philippines Workshop (June 16-24) agenda is provided in Appendix 3.

C. Workshop 2: Selection of Primary Issues (June 22, 2007). The purpose of this workshop was to prioritize and focus the energy of the interagency group on a select number of issues **(G1:Obj1+2/G2:Obj1)**. Through a facilitated and participatory process the group reviewed the results of workshop 1 and identified the three most important issues pertaining to each of the 4 themes of sustainable development and resilience (table 3).

Sustainable	Issue 1	Issue 2	Issue3
Development			
Theme			
Environmental	Solid Waste	Waste Water	Marine Sanctuary
Health	Management	Management	Management
Social Capacity	Sustainable	Tourism/Small	Formal/Informal
	Alternative	Business Capacity	Tourism Sector
	Livelihoods		Competition
Governance	Collaboration and	Enforcement	Local Authority
	Coordination	Capacity	Capacity
Economic	Tourism Product	Domestic	
Health	Quality	Tourism Product	

Table 3: Results of Workshop 2—Prioritized Issues

D. Workshop 3: Action Plan Development (June 26, 2007) Using a facilitated and participatory process the group reviewed the results of Workshop 1 and 2 and then developed an action plan for the 3 major issues pertaining to the 4 themes of sustainable development and resilience (**G1:Obj1+2/G2:Obj2**). In the development of action items, it was agreed that each should be specific, measurable, acceptable, realistic, and time-bound (SMART). This meant that items such as major infrastructure development that would require a huge financial investment or policies that were deemed politically impossible were not included as the primary goal was to develop a list of items that could be *ACCOMPLISHED*. Finally the last step of this workshop was to identify the agency or agencies that would be responsible for undertaking each action item as well as any potential partners who may facilitate accomplishing the item. Below is a table listing the actions that are currently being undertaken or need immediate attention (table 4). The full table of issues, action items, and responsible agencies is in Appendix 4.

	Table 4—Proposed Future Actions that Require Immediate Attention.					
ENV. HEALTH	Proposed Future Action	Specific Steps	Timeline	Responsible Agencies		
a. Improve Solid Waste Management			6 months	CBO-PS, Arthacharya, USAID		
	2. Design a segregation, collection and composting system for UC area. Private-Public Partnership.	TBD	6 months	UC, USAID		
	3. Provide public collection of trash from central places (impartial coverage)	TBD	1 year	UC		
	4. Provide (200) trash bins mounted to lamp posts and telephone posts fro SW collection at public centers.	TBD	1 year	UC		
b. Improve Waste Water Management	1. Promote the hookup of 10 hotels within Sanctuary to sewerage system	TBD	6 months	WB, UC, Hoteliers		
	2. Pursue private involvement in Sewerage System Management	TBD	6 months	UC		
	3. Raise awareness of hookup process	TBD	6 months	?		
	4. Provide technical assistance for 10-15 tourism establishments (costing and drawings).	TBD	6 months	?		
	5. Ensure Hotel's connect grey-water system into sewerage system	TBD	6 months	?		
	6. Identify funds for hook-up of public toilet into sewerage system	TBD	6 months	CCD, CRMP, UC, CTB		
	7. Improve aesthetics of public toilet facility	TBD	6 months	5		
c. Improve Sanctuary Management	1. Train DWLC rangers in MPA management		Done	DWLC, USAID		
	2. Train DWLC officers/rangers in conflict resolution and enforcement techniques	TBD	1 year	DWLC		
	3. Develop new visitor center	TBD	6 months	DWLC		

SOCIAL CAPACITY	Proposed Future Action	Specific Steps	Timeline	Responsible Agencies
a. Develop sustainable alternative livelihoods				J
b. Improve tourism/small business capacity				
c. Reduce informal/formal sector competition				
GOVERNANCE				
a. Improve coordination between and among	Formalize and ensure regular meetings of the "Hikkaduwa Restoration Committee"	1.Schedule next meeting	1 month	ALL Members, USAID, TB, UC
governmental agencies.	2. Develop MOU and other agreements to ensure that coordination of activities outlined in this document move from the planning to implementation phase.	TBD	3 months	All Members
	3. Develop specific steps and a time line for each action item identified in this document.	1. Begin process next meeting	1 month	ALL Members
	4. Expand the membership of the <i>Hikkaduwa Restoration Committee</i> to include all stakeholder agencies.	See below.		All Members
	a. Invite Water Supply and Drainage Board into committee	1. USAID invite.	Immediate	USAID
	b. Invite CCC into committee	1. CRMP invite.	Immediate	CRMP
	c. Invite Water Board to next committee meeting.	1. USAID invite.	Immediate	USAID,TB
	d. Invite presentation from Central Bank on available small and medium financing options.	1. TB invite.	Immediate	ТВ
b. Improve Enforcement Capacity				
c. Improve capacity of Local Authority				

ECONOMY	Proposed Future Action	Specific Steps	Timeline	Responsible
				Agencies
a. Improve quality of tourism product	Invite presentation from Central Bank on available small and medium financing options.	1. See governance section.		TB, USAID
	2. Investigate and report on other available financing options for small and medium businesses.	1. Develop report after above meeting		ТВ
b. Improve domestic				
tourism product				
c. Improve coordination between tourism sector	1. Chairman Kariyawasam (UC) will write a letter to TB requesting assistance in establishing a local destination plan and event committee	1. Write letter	Immediate	UC, TB

E. Finally the group of interagency participants agreed to develop and formalize a interagency committee for the restoration of Hikkaduwa into a sustainable and resilient community **(G1:Obj.3)**. The group signed a pledge of support (figure 8) and Mr.T.Sooriyagoda, Director-Resort Development, Sri Lanka Tourist Board and Mr. V.Kariyawasam, Chairman of the Hikkaduwa Urban Council were elected Co-Chairman of the newly formed committee.



Figure 8: Interagency pledge of coordination for the restoration of Hikkaduwa

Z

Mr. L.B.S.B Dayarathne

Min of Land & Land Develop.

Snr. Asst.Secretary

Ms. Chamari Dissanayake

Research Officer

NARA

Mr. Anil Premaratne

Coast Conservation Dept.

Addl. Director

FUTURE ACTIVITIES

1. Develop a formal schedule for future interagency committee meetings so that adaptive management can take place (G1:Obj4).

It is imperative that the members of the interagency Hikkaduwa Restoration Task Force (HRTF) establish a schedule for regular future meetings. Although the action plan that was developed by the task force is a great accomplishment, the ultimate goal of the HRTF is to complete the activities. Therefore future meetings must take place in order for the HRTF to further develop the action plan (see below) and promote collaboration in achieving the tasks. In addition Hikkaduwa should be thought of as a complex social and environmental system. Not all actions that will be undertaken by the committee will be successful, so the HRTF must learn from these unsuccessful actions and adapt future plans (adaptive management). In addition Hikkaduwa will inevitably face new internal and external challenges that are unforeseen by the HRTF and will therefore require the development of new goals, objectives, and action items.

2. Taking Plans to Action: Developing Specific Steps and a Timeline (G2:Obj.3).

In the next meeting of the HRTF, it is recommended that considerable effort be placed on further developing the action plan. Particularly, through a facilitated and participatory process, specific steps for each action item need to be developed and an agreed upon timeline indicated for each task. This will require each action item to be addressed by the responsible agency (agencies) as well as the full committee. It is understood that the responsible agency will need to develop an internal action plan and a specific task list to ensure that it will be accomplished. For example, under the theme of environmental health and the subtheme of Improving Marine Sanctuary Management, 10 action items are listed (see appendix 4) with a number of associated steps. The first action item for improving Sanctuary Management is: Develop use zones. Zones have been established and currently funds and materials are available to accomplish this task. However the HRTF proposed to "Conduct an awareness program for stakeholders regarding zoning." The responsible agencies for accomplishing this task are the DWLC, DFAR, UC, and NARA. However in order for the awareness program to be undertaken, the responsible agencies need to decide WHO will do WHAT and WHEN. Finally, how will the HRTF know if the activity was successful? Therefore INDICATORS of success need to be established and then monitored for each activity. This level of specificity is necessary if the HRTF and the member agencies expect to bring the action items to completion.

In an effort to take the plans to action, a worksheet (appendix 5) has been developed to facilitate the further refinement of the action plan. The worksheet should be used by each responsible agency to develop the specific steps that will be taken to accomplish each objective and action item. In addition, a realistic timeline for when each task will be accomplished should be indicated next to the corresponding item. Finally indicators of success should be chosen for each action item so that adaptive management may take place. Keep in mind that this document will be the roadmap for success so when preparing the worksheet, make each task, timeline, and indicator as specific and detailed as possible.

3. Communicate the action plan as well as the results of each action item to stakeholders **(G2:Obj.4)**.

Finally, prior to undertaking an activity, the HRTF and the responsible agency need to communicate the action plan to all stakeholders. In addition, many items will require stakeholder input if the action is to be successful. Poor communication of plans often leads to mistrust and lack of support. In addition once the activities are undertaken, the results of the activities need to be reported to all stakeholders.

CONCLUSION

Achieving sustainable development and resilience should be thought of as a process and not a destination. Therefore this document and action plan should be treated as a living document. The action plan should be updated, adapted, changed, and refined in an effort to restore Hikkaduwa into a sustainable and resilient community. This will require efforts aimed at improving environmental health, social capacity, economic health, and effective governance so as to reach sustainability. It is also hoped that the HRTF will use this document and action plan as a guide with which to undertake collaborative interagency activities, enhance capacity, and ultimately provide an example of effective governance. As stated, the HRTF seeks not just to identify, describe, and prescribe but to actually *ACCOMPLISH* projects in an effort to restore not only the environment and economy but also the confidence of the local people of Hikkaduwa.

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APPENDIX 1 HIKKADUWA: SUMMARY OF ISSUES AND OPPORTUNITIES (1996-2007)

HIKKADUWA: SUMMARY OF ISSUES AND OPPORTUNITIES (1996-2007)

ENVIRONMENTAL MANAGEMENT

A. Improve Solid Waste Management

- 1. Improve solid waste disposal system in UC and PS
- 2. Install public solid waste receptacles on beach
- 3. Install public solid waste receptacles at public centers such as bus station, parks, etc.

B. Reduce Sediment, Sewage, and Point Source Pollution (Improve Water Quality and Marine Health)

- 1. Increase Sewerage Hookup
- 2. Develop public toilets.
- 3. Replant riparian zone along major streams
- 4. Reconstruction of impaired sewage network.
- 5. Reduce grey-water into beach and waterways.
- 6. Implement mangrove area protection and conservation plan.
- 7. Identify point source pollution into waterways

C. Improve Tourism/Town Environment

- 1. Hire planning firm to produce integrated town design/restoration plan w/ public comment
- 2. Develop new transportation hub on fair grounds across from current train station (bus and railway)
- 3. A2 bypass road
- 4. Galle Road Redesign/widen to include sidewalks, planting, separation from traffic.
- 5. Develop beach public park on south end of Sanctuary.
- 6. Restore beach front environment by reclaiming/redeveloping waterfront buildings destroyed by Tsunami into natural area public access parks.
- 7. Redevelop old police station into tourism information center and museum
- 8. Redevelop old bus station into town square/market center (commercial center)
- 9. Develop public entertainment area.

D. Improve Sanctuary Management (update Management Plan)

- 1. Develop zones (research, snorkeling, glass bottom boat)
- 2. Develop a snorkeling only zone
- 3. Develop a snorkeling trail with floating rest stations
- 4. Improve management and reduce # of glass bottom boats
- 5. Partner with other governing organizations to reduce introduction of sediments and nutrients (see above)
- 6. Develop and implement monitoring plan of reef health
- 7. Train/educate glass bottom boat drivers in interpretation and ecological processes (impact mitigation)
- 8. Enhance enforcement capabilities of Sanctuary officers.
- 9. Develop a tourist education program to mitigate tourist impacts on reef

SOCIAL CAPACITY AND EQUITY

- 1. Sustainable Development education of local people
- 2. Sustainable Livelihoods education and training (see below)
- 3. Enhance and protect local cultural integrity and institutions

GOVERNANCE

- 1. Enhance governmental capacity to support sustainable development and resiliency through education and training
- 2. Enhance partnership capacity for inter-governmental cooperation through training
- 3. Improve capacity to enforce existing environmental regulations that reduce dumping of waste/chemicals into canals and waterways.
- 4. Improve capacity to enforce regulations that control dumping of garbage
- 5. Improve capacity to enforce building regulations
- 6. Enhance collaboration between governmental agencies to develop efficient enforcement of all environmental and building regulations
- 7. Improve Enforcement of CRM regulations

ECONOMY

A. Improve Hikkaduwa Tourism Product and Marketing

- 1. Develop local Chamber of Commerce
- 2. Develop Event plan to attract domestic (Sri Lankan) tourism
- 3. Develop unique "Brand"
- 4. Develop integrated marketing strategy for destination (local)
- 5. Develop visitor/tourist information center (redevelop old police station)
- 6. Expand tourism products (Ecotourism)
- 7. Develop cultural/religious sites tours
- 8. Develop market for local handicrafts and enhance product design/development

B. Provide Alternative Livelihoods (non-tourism)

- 1. Provide non-seasonal job training
- 2. Development of alternative livelihoods

C. Improve Integration of Local People into Tourism Economy

- 1. Provide tourism job training for locals
- 2. Provide tourism job training to expand ecotourism guiding opportunities
- 3. Provide artisan training for production of local handicrafts and art

Based on the following Reports

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APPENDIX 2:
Workshop 1 (June 12, 2007) Hikkaduwa: Prioritizing Issues, Opportunities, Barriers, and Facilitators

Workshop 1 (June 12, 2007) Hikkaduwa: Prioritizing Issues, Opportunities, Barriers, and Facilitators

Theme	Issues	Opportunities	Concerns: Barriers/constraints	Facilitators: Potential partnerships
Environmental Health				
	1. Lack of Solid Waste Disposal Facility (3)	Reduce waste by educating public regarding sorting, composting, and reduction before dumping.	 Lack of leadership in local authority. Unavailability of suitable site Community will not accept the absence of pretreatment facility Financial limitations Capacity of UC/PS 	 Local authority private sector Funding agencies. Local CBOs NGOs. CEA
	2. Lack of waste water treatment plant (3) (improper discharge of solid and liquid waste)	Establishment of central WWP to suit present and projected future requirements.	 High operational cost that prevents community from joining process. Financial limitation Lands for construction Unavailability of fish waste and offal collecting system at CFHC 	 Banks NGOs water board government Div. Secretary CEA RDA
	3. Sand sedimentation on reefs (2)	Employ a method to divert the sea current which affect the coral reef	 Absence of proper study. Lack of capital funds to implement the proposal Sensitivity of coral High cost Unmanaged visitation (local tourists Unmanaged glass bottom boats 	1.Donor agency2. Gov. funding agency3. NARA
	4. Town Development (1)	Bypass Road Beach Park	 Land acquisition Financial limitation Resistance from public and political authority 	 NIA of Land RDA UDA Min. Tourism
	5. Water stagnation and improper drainage and canal system (lack of maintenance) (1)	Improve maintenance	Non availability of specific institution to maintain the canal system Unavailability to equipment to the MC Hikkaduwa	

Social Capacity				
	1. Inhabitance of Beach Boys	Conduct awareness programs	1. Lack of alternative employment opportunities	1. CCM 2. NJ 3. JA 4. private sector
	2. Cultural Impacts on rural community	Visitor guidelines and education programs	1. Lack of tourist education	1. CTB
	3. Economic Benefits of tourism (concentrated in elite and seepage)	Introduce eco, cultural, and adventure tourism to the inland rural areas.	Not built to benefit community in relation to expenditures	 CTB private sector
	4. Education Level		1. Physical and financial resources	 Ministry of education Political authority Min. of vocational training
	5. Lack of alternative income sources and poverty		1. Limited resources	
	6. Lack of potable drinking water		1.Unavailability of suitable water sources 2.Cost	
	7. Lack of vocational education for local community		 Reluctance to go to vocational schools or training centers Marketing difficulties due to poor quality of products 	

Theme	Issues	Opportunities	Barriers/constraints	Potential partnerships
Economic				
	1. Lack of foreign tourists due to LTTE war	Promote domestic tourism	1. Peace	 Community LA Private sector
	2. Heavy tariff of electric power and fuel	Introduce a reduced concessionary tariff	1. No importance given	1. Gov. 2. SLTB
	3. Long travel time to international airport and domestic destinations	Introduce domestic flight service from BIA to Koyalla Airport	1. Absence of highway route	1. RDA 2. Gov. 3. Private
	4. Lack of alternative livelihoods	Develop alternative livelihoods	1.Educational level 2. Attitudes of the people 3. Lack of interest of investors	1. Min. of vocational training 2. BOI 3. NGOs
	5. Poor quality of tourism industry product (2)	Tourism training	 Lack of capacity Poor understanding of market Unplanned development attitudes of people 	 Ministry of Tourism Private sector
	6. Unavailability of financial assistance (loans, etc) due to non compliance and regulations.		1. How to regulate existing structures	
	7. Lack of proper business plan		 Lack of business capacity Ignorance of business planning 	

Governance				
	1. Unauthorized structures	Enforcement of rules and regulations	1. No incentives to enforce	1. Police
	2.Changing of policies when changing the ruling party	Unchangeable national policy	1. Absence of national policy	1. National government
	3. Lack of coordination between and among government organizations (sectoral oriented management approach by agencies) (3)	Introduce one stop shop concept Development of partnerships	 Institution limited to mandate. Existing FR and AR to be following the government institutions No mechanism for building partnerships Political interventions Bureaucracy 	1.CTB 2. Multi agency task force 3. Ministry of Tourism
	4. Complexity of acts, rules, regulations, and procedures		1. Difficulties to change the Acts and regulation within the short period.	
	5. Lack of understanding and knowledge regarding procedures and management systems		Poor participation of communities for education and awareness programs	
	6. Lack of enforcement	Awareness programs of public and political authority	1. Political intervention	

APPENDIX 3: Philippines Study Tour and 3 rd SCOTIA-Philippines Stakeholders Workshop	D
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Study Tour and 3rd SCOTIA-Philippines Stakeholders Workshop

June 18-22, 2007 Dumaguete City

Full Week Program

Saturday June 16th

Depart Sri Lanka

Sunday June 17th

Arrival in Manila

Monday, June 18

Arrival Dumaguete

AM: Visit to Bais and meeting with Mayor

AM: Dolphin watching area and important mangroves (eco-tourism) (SCOTIA-SL)

2pm: Late Lunch

Evening – Opening of SCOTIA Stakeholders Workshop and Cultural Presentation (c/o

Revie and Joev)

June 19, 2007

7:00AM Leave hotel for Dauin (30mins bus ride) 7:45-12:00AM Visit to Apo Island (30-45 mins boat ride per way).

Meeting with MPA Managers/Rangers

12:00-1:00PM Lunch in Dauin

1:00-2:00PM Courtesy to Mayor

Presentation on EUF

Meeting with local leaders (community-based EUF)

2:15PM Leave Dauin for Bais

3:30 PM Visit to Sanitary Landfill (SCOTIA-PH) (SCOTIA-SL)

6:00PM Dinner in Bais

7:30PM Leave for Dumaguete

June 20, 2007

7:00AM Leave for Bayawan

8:30-10:30AM Arrival in Bayawan

Courtesy call to Mayor Sarana

LGU Presentation (environmental activities – SWM, Sanitation, CRM, others

biofuel, livelihood projects)

10:45-11:45AM Visit to Fisherman's Village (Reedbed)

12:00NN Lunch in Bayawan

1:00PM Depart for Dumaguete

2:30PM Arrival in Silliman University

Visit to the Marine Laboratory

3:30-5:00PM Launching of Dumaguete Sewer Treatment Plant

Thursday, June 21 Workshop Sessions

Opening

8:30 Governor Arnaiz (Welcome Remarks)

8:45 Aurelia Micko, USAID

9:00 Grace Favila, SCOTIA (Where are We)

Cluster 1 of Sharing (EUF – Alex Yambao)

9:30 Moalboal

9:50 Puerto Galera

10:10 COFFEE BREAK

10:40 EUF for financing environmental management systems and infrastructure Attv. Roberto Oliva

11:10 Governance - Mr. Boy Dulce

11:40 Open Forum (Sri-Lankans to raise their own issues)

12:00 LUNCH BREAK

Cluster 2 of Sharing (Sanitation – Gerry Parco)

1:00 Balayan

1:20 Mactan(Cordova)

Three Resource Speakers: Alliance Building, MPA Tourism Management

1:40 Sharing of Sri Lankan experience in coastal tourism and conservation – Prakash Peiris, SCOTIA-SL

2:40 Dr. Ariel Cushnir-Sustainability-A journey not a destination.

3:30 Visitor Philanthropy. Dr. Robert Powell, Clemson Univ. (U.S.)

4:30 Film: The fate of our reefs. (Snacks to be served)

7:00 DINNER BREAK

Friday, June 22

Cluster 3 of Sharing (Solid Waste Management – Lizandro Racoma)

8:30 Moalboal (SCOTIA-PH)

8:50 El Nido (SCOTIA-PH)

Resource Speakers: Sustainability

- 9:10 Available Financial Resources Ms. Alma Porciuncula, PWRF
- 10:10 COFFEE BREAK
- 10:40 Mr. William Ablong, Vice-mayor, Dumaguete City. Alliance Building and Waste Management
- 11:20 Improving and Adapting Programs to Changing Conditions- Dr. Bob Powell, Clemson University, USA

LUNCH BREAK

1:00 Breakout Sessions (3 groups, 4th group for Sri-Lankans)

- 1 What's next?
- Sustainability

3:00 Synthesis (accomplishments/challenges across all sites) - Dr. Ariel Cuschnir 4:00 Plenary Session

- Sharing of highlights of breakout group discussions
- Resolutions

5:00 Closing

- 1 Pledges of Personal Commitment
- 2 Remarks from Sri Lanka participants

June 23, 2007

Return to Sri Lanka

WORKSHOP 3: AC	TION PLAN DEVELO	APPENDIX 4: OPMENT AND IDE	NTIFICATION OF	F PARTNERS (June	26, 2007)

WORKSHOP 3: ACTION PLAN DEVELOPMENT AND IDENTIFICATION OF PARTNERS (June 26, 2007)

ENV. HEALTH			Responsible Agency and Potential Partners		
	Current or Planned Future Activities by Agency/Organization	Proposed Future Action Steps	Gov.	Private	NGO
A. Improve Solid Waste Management		** Items written in Brown color indicate immediate action items.			
1. Improve solid waste collection system in UC and PS in households	1.UC laborers collect SW using tractors.	1. Implement a SW collection model for the PS area where no collection is available using a CBO for garbage collection, segregation and composting.	CBO-PS, Arthacharya		USAID
		2. Design a segregation, collection and composting system for UC area. Private-Public Partnership.	UC		USAID
		3. Provide every household with composting bins. Currently (300) only 10% of households have composting bins.	UC		
		4. Provide public collection of trash from central places (impartial coverage)	UC		
		5. Improve education and capacity of local SW engineers by providing study tours, education programs, and consultant workshops. Goal is to improve efficiency and reduce cost of SW collection and management.	CRM TB UC		USAID
		6. Improve staffing of SW collection dept of UC (need accountant and management staff to oversee expanding program)	Provincial + Local Gov.		
		7. Evaluate the capacity of the UC for implementing and managing the SW System by Environmental Officers	Provincial + Local Gov.		

2. Improve collection of solid waste from private hotels and	1.Partnership being developed between hoteliers and UC	1. Promote segregation of trash at Hotels. (Need to enhance partnership with hoteliers)	UC	Hoteliers	
industries.	2. Hoteliers collecting SW and depositing	2. Develop composting site for individual hotels or group of hotels.	UC/TB	Hoteliers	
	roadside in common collection bin for daily collection (currently occurring)	3. Expand capacity of hotels to store SW/garbage	UC/TB	Hoteliers	
3. Improve solid waste collection at public centers such as bus	1. CRMP improving collection of SW in Fisherman's Harbor	1. Provide (200) trash bins mounted to lamp posts and telephone posts for SW collection at public centers.	UC		
station, Fisherman's harbor, marine sanctuary, etc.	2. Market place SW is collected once a week by UC	2. Continue improving collection of SW in Fisherman's Harbor	CRMP MFAR		
4. Develop a new solid waste facility.		1. Design and facilitate the implementation of a regional landfill for the Galle District.	CEA PS		USAID
5. Improve collection of solid waste from hospital and other hazardous waste generating facilities.					
6. Improve local education regarding reduction of waste,		1. Present awareness program by officers every two weeks to local community (PS and UC).	CEA		
recycling, and composting		2. Undertake stakeholder awareness of SW and segregation. Tsunami Relief/public education (UC and Fishery Harbor) 2006-2007 and Undertaking stakeholder awareness in 2007	CEA PS		SLTRP- USAID
7. Improve collection of waste fuels, gas, oils for biofuel production		Educate fisherman regarding collection of fish waste for fuel production. (barrier: ability of boats to carry fish waste)	CRMP MFAR		

B. Improve Waste Water Management: Sewage, and Point Source Pollution	Current or Planned Future Activities by Agency/Organization	Proposed Future Action Steps	Gov.	Private	NGO
1. Sewerage Hookup		1. Promote the hookup of 10 hotels within Sanctuary	WB UC	Hotels	
		2. Promote widespread hookup through enforcement (TB, UC, WB)	TB UC WB		
		3. Plant is not economically viable currently so need to increase hookup from 6 to 25	TB CRMP CCC		
		4. Pursue private involvement			
		5. Incorporate Water Supply and Drainage Board into committee (invitation by USAID)			
		6. Incorporate CCC into committee (invite by CRMP)	CRMP		
		7. Link with the National Chamber of Commerce and their PEP program (Prepare specific individual hotel hookup proposals to access funds)	ТВ		
2. Technical Capacity to		1. Raise awareness of the hookup process			
assist hookup		2. Provide technical assistance for 10-15 tourism establishments. (costing and drawings)			
		3. Facilitate with donors and financial institutions to obtain grants or loans.			
		4. Train a local team in sewerage hookup and design			
3. Improve Community (small businesses, homes, etc) Hook-up		1. Invite Water Board (WB) to next committee meeting.			USAID
a. Cost of hookup b. Tariff c. efficiency of system		2. Discuss with WB regarding reduction of connection fee and Tariff for homes.	UC/TB		

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	3. Provide technical assistance for 1-2 homes or small	UC UDA	
	businesses to provide example costing		
	4 D 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		
	4. Pass bylaw regarding the requirements for hookup		
	(Minimum size of lot)	2 2 / /	
4. Reduce grey-water	1. Ensure Hotel's connect grey-water system into	CCD/WB/TB	
into beach and	sewerage system.		
waterways.			
a. enforcement	2. Encourage all locals living along waterways to hook up	WB/UC	
b. technical advice	to sewerage system		
	3. Provide local education	CCD	
	4. Replant riparian zones with reed beds or other plants	CCD/CRMP	
	that can reduce erosion and filter water.		
	5. Assess and Examine drainage canals to identify point	CCD	
	source pollution and viability of mitigation measures		
	y and the first term of the second se		
	6. Develop and advise locals on techniques for treating	CCD	
	grey-water		
6. Public toilet and	1. Identify funds for Hook up of public toilet to	CCD CRMP	
facilities hookup	sewerage system	UC CTB	
таетиез поокар	sewerage system	CCCID	
	2. Improve Aesthetics of toilet	USAID	
7. Stormwater	1. Hire consulting group to conduct engineering and	CCD UC	5
management	assessment of storm-water system within UC	332 33	•
inanagement	assessment of storm water system within e-g		
	2. Design Rainwater collection system for grey-water uses		
	(reduces stormwater)	CCD	
	(reduces stormwater)	CCD	

C. Improve Sanctuary Management (update Management Plan)	Current or Planned Future Activities by Agency/Organization	Proposed Future Action Steps	Gov.	Private	NGO
1. Develop zones (research, snorkeling, glass bottom boat)	1. Funds and materials are available for implementing and demarcating zones (NARA/CRMP/DWC)	1. Conduct awareness program for fisherman regarding zoning (DFAR/UC/NARA/DWC)	DFAR UC NARA DWLC		
2. Reduce Siltation of corals		1. Conduct research program with NARA to establish the cause and source of siltation and recommendation of desiltation methods (NARA).	NARA		
		2. Remove silt from sanctuary by CCD (focused on boat access cut)(funding available through Disaster Man.Centre	CCD DMC		
		3. Conduct oceanographic study of currents and coastal zone.	NARA		
		4. After the two studies formulate permanent solution for siltation problem.	NARA DWLC		
3. Improve visitor management		Refine and implement existing visitor management plan	DWLC DWLC		
		2. Implement zoning			
4. Improve management of glass bottom boats		 Train/educate glass bottom boat drivers in interpretation and ecological processes (impact mitigation) Implement quota and daily operation system. 	DWLC for all		
		3. Implement single point start and end for boat tours			
		4. Implement and enforce maximum # of boats per day agreement			
		5. Implement previously developed agreement between stakeholders.			

5. Improve infrastructure for park		1.Develop public access park at Southern end of Sanctuary	DWLC UC NARA CRMP		USAID
management		2. Develop one point start jetty or dock for glass bottom boats.	DWLC CRMP		
		3. Develop permanent office: Long term solution is trading property with education department for waterfront land under provincial council.	DWLC UC ED		
6. Reduce Oil discharge	1. Collection system in place and established by MPPA for all harbors in	1. Implement an education program for Glass bottom boat drivers and continue educational effort of fishermen	MPPA MFAR		
	SL	2. MFAR and MPPA check all boats for sea worthiness and adherence to oil discharge laws.	MFAR MPPA		
		3. Enhance ability of DWLC to monitor and enforce existing motor oil laws.	MFAR MPPA DWLC		
7. Fees/revenue for park management		 Develop user fee system through participatory stakeholder process Implement fee system 	DWLC DWLC		USAID
8. Enhance		1 ,	DWLC		USAID
enforcement		1. Train DWLC rangers in MPA management.	DWLC		USAID
capabilities of		2. Train DWLC officers/rangers in conflict resolution			
Sanctuary officers.		and enforcement techniques (20)	DWLC		USAID
		3. Develop MOU with potential partners for long term			
		training and capacity building of DWLC field staff			
		regarding enforcement, conflict resolution, and MPA management.	DWLC		USAID
9. Improve public	1. CCD NARA USAID	1. Develop new visitor center with DWLC	DWLC		USAID
ecological knowledge of	promoting teacher and	The second section with 2 will	2,,,26		001112
reefs. (Develop tourist-	student education	2. Improve teacher and student education programs	CCD NARA		
public education	programs (ongoing)	through the use films and other media sources	DWLC		
regarding reefs)					
10. Improve solid waste		1. Promote visitor education regarding SW	DWLC UC		
management in marine					
sanctuary		2. Place signs regarding guidelines for SW	DWLC UC	Hoteliers	
		3. Develop partnerships between hoteliers/DWLC/UC	DWLC UC		
		for trash collection system and implementation.			

SOCIAL CAPACITY AND EQUITY	Current or Planned Future Activities by Agency/Organization	Proposed Future Action Steps	Gov.	Private	NGO
A. Develop Sustainable alternate Livelihoods					
1. Develop non- tourism skills		1. Develop vocational training programs (masks, toys, carpentry, musical instruments, mechanical (engine repair), diesel repair)			
		Partner with Narigama Education and Vocational Training Center			
1a. Improve Fisheries Industry Development		Preserve traditional fisheries practices (for tourism purposes)	DFAR		
		2. Enforce existing fisheries laws (purchase a patrol boat for DFAR)	DFAR		
		3. Improve marketing of local fisheries.	DFAR		
		4. Link fishing practices with tourism such as deep sea fishing.	DFAR TB		
1b. Improve agricultural training		 Improve home gardening practices (agricultural extension) Agricultural Dept. Provide training in growing and marketing Landscaping/horticultural products (Agr. Dept.) 	Agr. Dept. Agr. Dept.		
B. Improve tourism/small business capacity					
1. Develop domestic oriented tourism products.		Improve development of service sector (psyber cafés, local food restaurants, buffets, etc)	TB UC	Hotel Assoc.	
products.		2. Develop marketing and event plan for attracting domestic tourists. (see Economy section)	ТВ	Hotel A.	
		3. Identify governmental land for the development of ecotours	TB UC FD UDA		

	Current or Planned Future Activities by Agency/Organization	Proposed Future Action Steps	Gov.	Private	NGO
C. Reduce Informal/formal sector competition	7. 0	Initiate an assessment and action plan for reducing informal aspect of tourism business.	TB UC CCD CEA UDA		
00000 0000p 000000		Develop a mechanism for monitoring informal sector and price undercutting	ТВ		
		3. Enhance the quality of the informal tourism sector and promote formalization	TB UC		
		4. Strengthen small and medium hoteliers association and seek pricing guidelines	TB UC		
		5. Develop a local certification or visible "seal of approval"	ТВ		
		6. Review pricing of permits to ensure that cost reflects the size and volume of business.	ТВ		
D. Improve understanding of Sustainable Development principles.		1. Enhance awareness program by linking existing program with local leaders such as Priests, UC, etc. Add disaster awareness and preparedness to this equation. Sustainable Development=Resilience=Future Well being.	CEA NARA TB DMC CCB		

GOVERNANCE					
	Current or Planned Future Activities by Agency/Organization	Proposed Future Action Steps	Gov.	Private	NGO
A. Improve coordination between and among government organizations.	1. SCOTIA sponsored training, workshops and tours promote the coordination of governmental organizations to restore Hikkaduwa	 Formalize and ensure regular meetings of the "Hikkaduwa Restoration Committee" Develop MOU and other agreements to ensure that coordination of activities outlined in this document move from the planning to implementation phase. Develop specific steps and a time line for each action item identified in this document. Expand the membership of the <i>Hikkaduwa Restoration Committee</i> to include all stakeholder agencies. 	DMC DWLC CEA MPPA MFAR FD UDA MLLD NARA CCD UC TB		USAID
B. Improve enforcement of existing laws and regulations. (Improve capacity to enforce existing environmental regulations.)		 Develop partnerships with elected officials (SCOTIA) Educate the community to the importance of abiding by laws and regulations (see Sustainable Dev. Education) Educate local officials to importance of equitable governance Improve understanding of the laws that local officers are responsible for enforcing. (run a workshop) 	UC UC and all partners DMC DWLC CEA MPPA MFAR FD UDA MLLD NARA CCD UC TB		USAID
C. Improve capacity of Local Level Authority		1. Improve understanding of the laws that local officers are responsible for enforcing by running a workshop to enhance capacity. (joint organization and interagency group)	DMC DWLC CEA MPPA MFAR FD UDA MLLD NARA CCD UC TB		

ECONOMY					
	Current or Planned Future Activities by Agency/Organization	Proposed Future Action Steps	Gov.	Private	NGO
A. Improve quality of tourism industry product (diversify)					
1. Develop mechanisms for providing capital for infrastructure improvement		1. Invite presentation from Central Bank on available small and medium financing options (including NGO, WB, National, etc opportunities)	ТВ		USAID
		2. Investigate and report on other available financing options for small and medium businesses.	ТВ		
		3. Enhance expansion of Hikkaduwa Microfinancing Program	ТВ		
2. Improve tourism management capacity		Assess the needs and opportunities to train informal sector so as to increase capacity and aid involvement in formal sector	ТВ		
B. Improve Domestic Tourism Product and Sales		Form a new NGO called Save Hikkaduwa Organization which will include ALL business sectors and political organizations and stakeholders	TB UC		
		2. Develop an Integrated Tourism Destination Action Plan	ТВ		
1. Improve coordination within tourism sector to develop domestic	TB is developing a Domestic Tourism marketing plan for Hikkaduwa.	1. Chairman Kariyawasam (UC) will write a letter to TB requesting assistance in establishing a local destination plan and event committee 2. TB and UC will form an event committee that will	TB UC		
tourism destination market	2. TB is developing and marketing event and conference	develop Event plan to attract domestic (Sri Lankan) tourism (music, art) 3. Through TB coordination and programs, Hikkaduwa formal sector will coordinate pricing and marketing efforts	TB UC		
	program.	to enhance domestic market. 4. Promote expansion and development of ecotourism, jungle tours, etc. and link with other aspects of product	TB UC		
		such as sea/beach etc. targeting domestic tourism.	TB UC		

OTHER AREAS OF ACTION			D 1 D			
A. Other Current or Planned Future			aid in accor	Potential Partnerships that would aid in accomplishing the		
Activities by your			activities.			
Agency/Organization	-			D:	NICO	
(Please indicate agency below)			Gov.	Private	NGO	
Tourism Board	A2 Bypass Road	1. Expediting the A2 bypass road by TB				
		2. Seeking funding for A2 bypass road (TB)				
Disaster Management	1.Disaster Prevention	1. Awareness programs	UC			
Centre (DMC)		2. Implementing a communication plan				
		3. Installed Early warning alarm system.				

^{**} Items written in Brown Bold color indicate immediate action items.

APPENDIX 5

Taking Plans to Action: Developing Specific Steps and a Timeline

Taking Plans to Action: Developing Specific Steps and a Timeline					
Theme and Subtheme.	Proposed Future Action	Specific Steps	Indicator	Timeline	Responsible Agencies