







Sarteneja Alliance for Conservation and Development

Sarteneja Tour Guide Association















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Planning for Tourism in Sarteneja

1.0 Background

There is a saying:

A Vision without a Plan is a Dream A Plan without a Vision is just Work But a Vision with a Plan can change the World

Sarteneja is a community with a Vision - one of environmentally and financially sustainable tourism. Tourism stakeholders within the community are working together to develop a Plan for achieving this vision, with stakeholder involvement throughout the process, through a series of community workshops, participatory surveys, focal group meetings and individual consultations.

The Sarteneja Tourism Development Plan provides a strategic framework for future tourism activities and development within the community, highlighting recommended strategies for responsible tourism development, priority funding requirements, and investment opportunities, through a structured Tourism Assessment Process¹.

Four stakeholder workshops were hosted jointly by the Sarteneja Alliance for Conservation and Development (SACD), and the Sarteneja Tour Guide Association (STGA), two Sarteneja-based

organizations, with facilitation by Wildtracks, and through funding from Wildlife Conservation Society, to provide the forums for community input into the planning process, and to give ownership of the Plan to Sarteneja.

Situated in the north eastern-most corner of Belize, Sarteneja is a traditional fishing community, established on a former Maya settlement overlooking Corozal Bay Wildlife Sanctuary.



Sarteneja has been highlighted in the past for its culture, wildlife and scenic beauty

¹ Linking Communities, Tourism and Conservation - A Tourism Assessment Process. E. Gutierrez, K. Lamoureux, S. Matus and K. Sebunya. Conservation International and the George Washington University

Sarteneja has been identified several times over the years for its potential as a site for national tourism development. It lies within the Corozal South-East Special Development Area, declared in 1991 in an effort to regulate development activities. The Tourism Development Project, under NICH, upgraded the village airstrip in 2004, and has taken initial steps towards development of the nearby Kakantulix archaeological site, one of the tourism resources available to Sarteneja, and thought to be possibly the second largest site in northern Belize (Awe, pers. com.). Every year, more tourists visit Sarteneja, for its tranquillity, its wildlife and its fly-fishing. However it is recognized that a number of steps have to be taken to strengthen the capacity within Sarteneja if it is to move towards a more tourism-based economy.

1.1 Purpose and Scope

This Tourism Development Plan was created for and with the participation of the Sarteneja community to provide a blueprint for change, taking Sarteneja forward from its present situation of a declining, fisheries-based economy towards the vision created by participants for the future, a tourism-based economy, through the identification of specific steps and strategic actions that can be implemented to achieve success.

Through a series of workshops, surveys and meetings, it has been possible to create a community vision of the way in which the community of Sarteneja would like to see responsible tourism develop in the future, through planning and implementation, based on concrete information on current tourism activities and attitudes in Sarteneja.

The highly participatory process has also ensured that many Sartenejans have been able to take part in the development of common goals, and the strategic planning seeks to involve as many people and local organizations as possible in the process.

This document highlights the capacity available within the community, and the requirements identified to provide the infrastructure and environment required for Sarteneja to move towards the vision of the village as a tourism destination. It provides



Community participation has been a key principle throughout the tourism development planning process

the people and community-based organizations of Sarteneja with a means of articulating their goals, and the steps they wish to take to fulfil their common vision. With this they can leverage support from identified partners – whether funding agencies or in-kind supporters.

The Plan identifies the strengths and weaknesses of the community in relation to tourism, as well as critical threats, and investigates identified opportunities, resulting in a series of strategic recommendations and actions to provide Sarteneja with a path towards the future.

The Sarteneja Tourism Development Plan has been developed using the guiding principles of:

- Responsible tourism
- community participation through a fully participatory process,
- promoting social and economic benefits for the community for all sectors of society
- recognition of the importance of the natural resources, and the need for good management using the most accurate scientific information available
- equality across gender, race, age, religious beliefs, and political opinions

It has been divided into the following sections:

- The Community Vision
- Community Profile
- Attractions
- Infrastructure and Services
- Visitor Profile and Competition
- Benefits resulting from Tourism Development in Sarteneja
- Planning for Tourism in Sarteneja
- Strategic Actions towards Planned Tourism Development

2.0 The Community Vision

The preparatory steps were focused on engaging the primary tourism stakeholders of Sarteneja in the development of the Tourism Development Plan, and building a community vision, agreed on by all, to be achieved through the implementation of the Plan. Using workshops, individual surveys and focal group meetings, community participants were given multiple opportunities for input into the planning process.

2.1 Developing a Vision

The Vision captured those aspects of Sarteneja considered important for sustainable tourism to succeed – the rich, culture, traditions and natural resources, and the community benefits that will be derived from carefully planned environmentally and financially sustainable tourism.

Vision

Sarteneja is the recognised community-based tourism destination in northern Belize, rich in culture, traditions and natural resources....a unified, environmentally aware community ensuring shared sustainable economic opportunities for its people.

This Vision has now been shared with the Sarteneja community as a whole, during a validation process, providing people with the opportunity to voice their thoughts on this concept for the future for Sarteneja, and on the threats and opportunities associated with implementation.



2.2 Situation Assessment

A situation analysis was conducted, providing a planning framework that allowed community members an opportunity to articulate their thoughts on Sarteneja's potential as a tourism destination, and on the current barriers and opportunities to development.

The SWOT analysis focused attention on the internal **strengths** and **weaknesses** of the community – factors over which they have some control. It also highlights the external **threats** and **opportunities** - factors outside their control that may influence the success of implementation of the Tourism Development Plan. The results from this assessment (Tables 1 – 4) were then used to develop strategies and strategic actions to enable Sarteneja to build on its strengths and address their weaknesses, make optimal use of the opportunities available, whilst minimizing the threats to success and lowering the identified barriers.

2.2.1 Internal Factors: Streng	yths
Location	Situated on Corozal Bay – scenic beauty, sunsets
	Accessible by land, water and air
	Easily accessible from Mexico
	Less rainfall in comparison to the rest of the country
Culture and Traditions	Lobster and conch fishing – traditional free diving
	Boat building
	Annual sailing regatta
	Mestizo food, herbal knowledge, dances
Archaeological Resources	Maya sites (Cerros, Kakantulix, Maya structures in Sarteneja)
	Maya artefacts
	Museum
Natural Resources	Intact tropical forest with wildlife
	Largest estuarine system in Central America
	Highlighted for importance for the West Indian Manatee
	Important bird nesting colonies— wood storks, frigatebirds, etc.
	Lagoons and cenotes (La Isla cenote, Shipstern Lagoon, Laguna
	Xpinta)
	Yucatan endemic species – birds, plants
	Recognized for sport fishing values
Protected Areas	Corozal Bay Wildlife Sanctuary (national protected area - part of
	binational initiative with Mexico)
	Shipstern Nature Reserve (private protected area)
	Fireburn Reserve (private protected area)
	Kakantulix Archaeological Reserve (in final stages of declaration
	as a national site under the Institute of Archaeology – second
	largest Maya site in Northern Belize)
	Bacalar Chico National Park and Marine Reserve (national
	protected areas on Mesoamerican Reef, accessible by boat)
Atmosphere	Friendly community
	Tranquil atmosphere
	Retains community character
	Low crime rate
Tourism Opportunities	Terrestrial and marine protected areas
	Archaeological sites
	Adventure tourism
	Water-based activities – sailing, kayaking, snorkelling, diving
Community-based	Driving force comes from within community:
	Sarteneja Tour Guide Association
	Sarteneja Alliance for Conservation and Development
	Wide stakeholder participation
	Consensus among stakeholders on need for tourism
	development
Enabling Environment	Licensed, experienced tour guides willing to be based in
	Sarteneja
	Boats and skilled boat captains who know the weather and water

2.2.1 Internal Factors: Strengths (continued)			
Enabling Environment	Local tour guide association		
	Central information centre being developed – Centre for		
	Conservation and Development (under SACD/STGA)		
	Good airstrip		
	otel rooms available throughout the year (except at Easter)		
	Utilities in place – electricity, water, phone, internet.		
	Health Centre with nurse		
	Very low traffic		
	Affordable		

2.2.2 Internal Factors: Weaknesses	
Limited community unity,	Family and political divides within community
participation and communication	No mechanisms in place for building greater unity
	Limited communication and sharing of information
	between different community sectors
	Poor historical community participation in community
	initiatives
	Limited communication with Government
Limitations to current infrastructure	Visitor facilities (toilets and showers) not currently
and accessibility	useable
	Boat access limited during norther season as wharf is
	not long enough
	Poor road access
Limited accommodation and	Hotels are full at Easter, and at other times have
restaurants when tourism increases	limited capacity beyond current tourism levels
	Restaurants are limited, with unreliable opening hours
Limited marketing	No planned marketing strategy for Sarteneja
Limited understanding of tourist	Community services are not tailored for tourism –
requirements within community	limited knowledge of hospitality, service and food
	requirement (eg. vegetarian options) for acceptable tourism standards
	Stray dogs, poorly cared for horses, cats etc.
Poorly planned past infrastructure	Lack of through-flow of water under wharf is thought
Poorty planned past infrastructure	to be responsible for increasing mud in shallow water
	bathing areas
	Previous tourist toilet facilities were located right on
	seafront, with implications for water quality
Poor solid waste disposal	Garbage collection system not yet working effectively
·	New solid waste site opened, but access not easy – a
	distance from the village
	Lack of enforcement of use of new solid waste site
Lack of control of natural resources	Surveillance or enforcement activities for Corozal Bay
	Wildlife Sanctuary in early stages
	No clear management framework for Shipstern Lagoon
	or for bird nesting colonies at Cayo Falso
	Large areas of important mangrove nursery habitat are
	within privately owned, large landholdings
	Nationally important bird nesting colonies and forest
	corridors are within privately owned, large
Loss of coastal land to foreign	landholdings Land available for community development is limited,
ownership	following sale of majority of coastal land to foreign
Ownership	owners

2.2.2 Internal Factors: Weaknesses (continued)			
Losing control over development within community	Concern of loss of community character as investors start to buy house lots for development within the village		
	Limited-time occupancy of houses by foreign owners, with parts of Sarteneja appearing closed up for much of the year, losing neighbourhood qualities		
Location	Mosquitoes		

2.2.3 External Factors: Opportunitie	es
Interest at national level in	Ministry of Tourism
promotion of Sarteneja as a tourism	Belize Tourism Board
destination	Belize Tourism Industry Association
	Institute of Archaeology
	National Institute of Culture and Heritage
Potential for Sarteneja to become a	Strategic location for direct boat access from Chetumal
border control point	Need for customs and immigration facilities and
	personnel
	Potential for local investor to establish water taxi
	service from Chetumal
Increasing Tourism in Belize	Belize is already known as an ecotourism destination
Grant funding opportunities available	Small and medium grant funding potential available for
for alternative livelihoods associated	Sarteneja once strategic priorities have been identified
with Mesoamerican Reef, and for	though Tourism Development Plan
community sustainable tourism	Funding agencies with potential interest in Sarteneja:
development linked to protected	Wildlife Conservation Society
areas	The Nature Conservancy
	COMPACT (UNDP)
	PACT
Small loans and seed grant	Possibility for expansion of hotels
availability for sustainable tourism	Possibility of development of homestay opportunities
development linked to conservation	and guest houses
	Establishment of restaurants and other tourism
	services
Marketing options available	Belize Tourism Expo
	Marketing through BTIA, BTB
	Marketing through the internet
	Marketing through guide books

2.2.4 External Factors: Threats	
Accessibility	Road impassable during heavy rain and post-hurricane
	storms
	Boats unwilling to dock during strong north winds, in
	shallow water
Environmental Degradation	Uncontrolled coastal development
	Mangrove clearance, with removal of fish nursery
	areas
	Increasing boats with associated impacts – oil
	pollution, increased probability of boat / manatee
	collisions
	Untreated sewage (200m³ per day²) discharged into
	Corozal Bay from Chetumal
	Agricultural contamination of water from cattle farms
	along rivers (Mexico and Shipyard)
	Potential of oil exploration in Corozal Bay
	Binational issues – illegal fishing and poaching of
	manatee by Mexicans
Decrease in tourism to Belize	International terrorism
	Global currency market / recession
	Rising price of oil with associated increasing costs of
	airfares
Competition	National and international competition for the tourism
	market
Large, foreign-owned resorts and	May employ from outside Sarteneja – cheaper
developments	workforce available from Central American immigrant
	pool
	Developments in or near Sarteneja may negatively
	affect the cultural and community identity of Sarteneja
Natural Disasters	In a relatively high hurricane probability area

 $^{^2}$ The Conservation and Sustainable Use of the MesoAmerican Barrier Reef System. Global Environment Facility Document, May, 2001

3.0 Community Profile

3.1 Historical Context

Sarteneja, with a resident population estimated at approximately 1,800, is the largest fishing village in Belize. It is located in Corozal District, on the north east point of mainland Belize, approximately 100km north of Belize City (the largest population centre in Belize, with a population estimated at 87,000), and 26km south east of the district capital of Corozal (with a population estimated at 8,800 (CSO, 2005) (Map 1). The name is derived from the Yucatec Maya "Tzaten-a-Ha", which is thought to translate as "water in the rock".



Maya artefacts are frequently discovered in Sarteneja. This figurine is estimated to date from

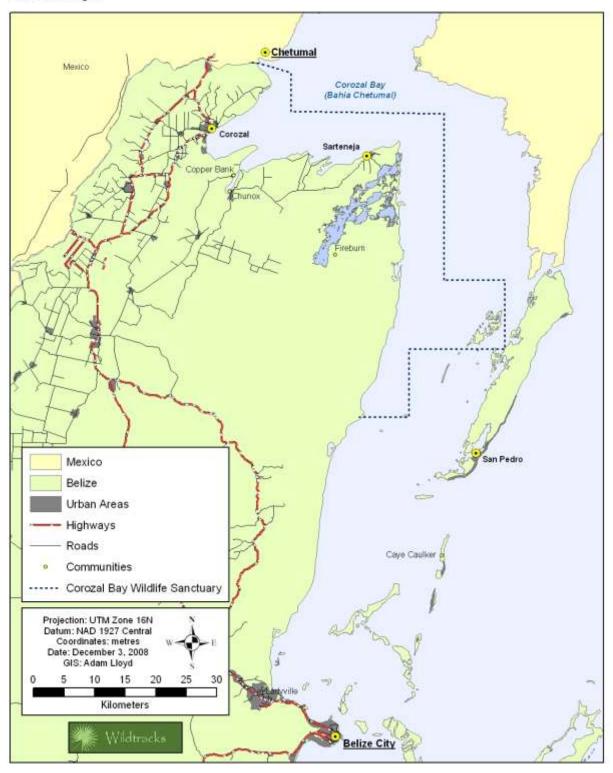
The community was first established by the Maya, and is thought to have flourished between 600BC and 1200AD, covering the entire Classic period of Maya history. The village is built on the site of a large Maya settlement, and signs of the past Maya culture can be found everywhere. In the late 1980's an archaeological study carried out in Sarteneja demonstrated that the area was once a prosperous, active, post-classical seaport.

It is believed that Sarteneja may have held as many as 300-400 ancient structures, with the site core being located 0.5 to 1.0km from the shoreline. The architecture

shows a strong Yucatec Maya influence, seen in rounded cornerstones, and carved limestone columns. The Maya are thought to have been attracted to the area by the salt pans, and the fisheries, both used as a source of income. The presence of object from non-local resources - obsidian and flint, jade and metates carved from volcanic rock, also suggest that this was a centre for long distance and regional trading, being an important stop-over point for merchants and travellers. The area was a cross roads for people travelling between Mexico, the reef, and the Corozal region., suggest trading links with Maya from other areas.

There is no definite timescale for when the settlement was abandoned, but it is thought to have been a general decline, and that during the time between the Maya, and the more recent settlement in the 1850's, the land is believed to have been uninhabited.

Sarteneja



Map 1: Location of Sarteneja

During the early to mid 1800's, traders from Mexico stopped in the Sarteneja area to resupply with fresh water. Settlers were attracted to the area by the good water supply and fertile farming soil, initially transporting the produce to Mexico for sale. With the advent of the Caste Wars, however, more families came to northern Belize from the Yucatan region, particularly from the Valladolid and Tulum areas, and most of the predominantly Mestizo residents of Sarteneja are descended from these original refugees.

When the village was first settled, the surrounding area held good, fertile farming land, with agriculture forming the main income-earning occupation, mainly from milpa farming. The farmers produced mostly tropical fruits - papaya, mango and pineapple, but also peppers, beans, and sweet potato. They also bred pigs and poultry. Most produce was transported by sea to Belize City and San Pedro for sale. In the 1890's, a sugar mill was brought to the village, transported from England, and sugar production began, but did not become a major industry in Sarteneja.

Seasonal industries developed based on the forest resources - the villagers developed a chicle industry during the wet season, harvesting the natural chewing gum latex in the tropical forests that surround the community. Mahogany was then harvested in the dry season, with both these industries on-going during 1900-1955. The majority of the houses at that time were constructed from tasiste and white cement, with palm-thatched roves - when Belize was hit by Hurricane Janet (a Category 5 Hurricane) in 1955, the village of Sarteneja was almost completely destroyed, with all but two buildings being swept away by the tidal surge, and severe erosion impacts of the coastal areas.

The village was re-built with post-hurricane aid - cement and loans that allowed people to rebuild their houses of faced stones, collected from the plentiful Maya structures on which the community is built. After the hurricane, the fertility of the soils is reported to have declined, exacerbated by a three-year drought, and the community had to seek non-agriculture based incomes. Wood cutting became an important part of the village industry, the wood (including mangrove) being harvested locally and sent to Belize City by sailboat, to be sold as firewood, earning approx forty cents per hundred bundles.

Throughout this period, the village was very isolated, being only accessible by sea. The sea began to play a large part in the livelihoods of the Sarteneja people, catalysed in 1952, by the arrival of a man called Peter Young, who settled in the village, and became the first boat builder. He lived and worked in Sarteneja until 1957, training local craftsmen, starting the boat building industry that has continued to flourish to this day.

In the early 1960's as the wood cutting industry started to decline, local men turned to lobster fishing for the main income. These two industries, boat building and lobster fishing, grew side by side, as with the growing number of fishermen came the need for more boats. The 1960's and 70's were a peak time for boat building, each boat builder averaging two boats a year, with the majority of the boats being sold in the fishing villages of Sarteneja and Caye Caulker.

To this day, traditional wooden boats are still built in the village, which is now the largest fishing community in Belize. The Sarteneja fishermen have the greatest footprint on the reef of Belize (Map 2). During the fishing season the majority of the Sartenejan fishing fleet is stationed in Belize City by the Swing Bridge, leaving for up to ten days at a time with up to ten fishermen on one boat, for trips averaging ten days at a time. Each fisherman has his own dory, or canoe, and will free dive down to a depth of up to 90 feet on the reef to catch lobster and conch, holding their breath for up to three minutes. The men return to the



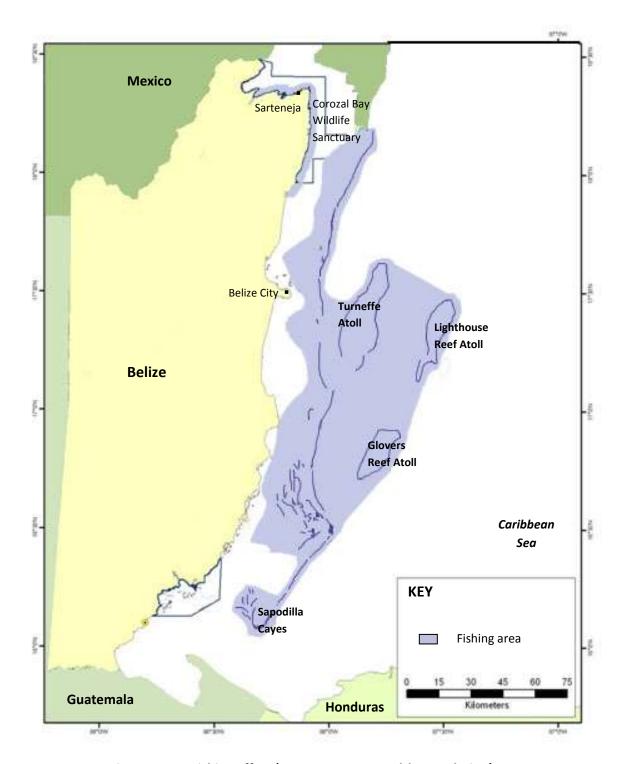
Traditional Sarteneja fishing boat being constructed – a craft past from father to son



Traditional Sarteneja fishing boat at work

village by bus for a day or two between trips, until the end of the fishing season in mid-February, when the boats are sailed back to the village and pulled up on the shore for maintenance and repair, and to be raced during the annual Sarteneja regatta.

However, the increasing number of fishermen seeking the same number of lobster and conch is leading to concerns about the continuing sustainability of the resources, and there are moves to promote alternative livelihoods within the area.



Map 2: Sarteneja – Current Fishing Effort (From: Commonwealth Foundation)

3.2 Socio-Economic Context

Sarteneja is one of the primary stakeholders of the Belize Reef, and community members have based their lives around the traditional harvesting of marine products, notably lobster, conch and finfish. Figures show that Sarteneja is home to one third of the commercial fishermen in the country (Programme for Belize, 2003), with over 80% of households within the community being dependent on fisheries resources – principally through traditional fishing for lobster, conch and finfish, but also through fly-fishing and reef tourism. (Community consultations, December, 2005).

This reliance on the marine resources creates a strong relationship between the state of the resource and the needs of the community. With the rapidly expanding national (and international) population of fishermen active on the reef, it is recognized that these resources are not being managed for sustainability nor optimal utilization (Gillet, 2003), and are in decline, with the harvest spread too thinly amongst too many people (COMPACT Planning report, 2005). It is recognized that the lobster fishery is already fully exploited (Carcamo, 2005), the conch fishery is in serious decline (McConney et. al., 2003), that there has been a collapse of some of the spawning aggregation sites, and there are too many fishermen seeking a declining fisheries resource.

It is recognized at local, national and international level that the artisanal fishing industry in Belize is in serious decline, and consultations with the fishermen and other community members of Sarteneja under previous community initiatives have demonstrated a clear recognition of the declining state of the resource, and a strong desire to develop alternative livelihoods through tourism in the local area.

Against a background of limited education (average education level is to upper primary school level among the fishermen), limited financial capital to start new initiatives and lack of training in other skills, it is going to be a challenge for this stakeholder community to move from fishing into other livelihoods, especially with the poor quality of agricultural soils, few employment opportunities and no alternative industries.

Sarteneja has been identified several times over the years for its potential as a site for national tourism development. It lies within the Corozal South-East Special Development Area, declared in 1991 as a land management tool, in an effort to regulate development activities. The Tourism Development Project, under NICH, upgraded the village airstrip in 2004, and has started towards declaration of the nearby Kakantulix

Maya site (thought to be possibly the second largest site in northern Belize (Awe, pers. com.)) as an Archaeological Reserve.

Every year, more tourists visit Sarteneja, for its tranquillity, its wildlife and its fly-fishing. Surveys conducted during 2008 show that arrival rates have increased, both with the increased reliability of the water taxi – the Thunderbolt – from Corozal and San Pedro, and with the addition of Sarteneja as a request stop to the Tropic Air schedules, flying out of San Pedro twice a day.

Whilst long term statistics are not available, data on hotel occupancy for 2007 and 2008, provided by three of the five guest houses / hotels in Sarteneja, give an insight into recent patterns of visitation. Tourism is very seasonal, with peaks in February / March and October – December (Figure 1). Total occupancy rate for 2007 for the three facilities is 263 bed/nights, rising to 716 in 2008. With the increasingly favourable reports in guide books and on websites, this upward trend is expected to continue into the future, though possibly at a less exponential rate of increase as the impact of the global recession increases.

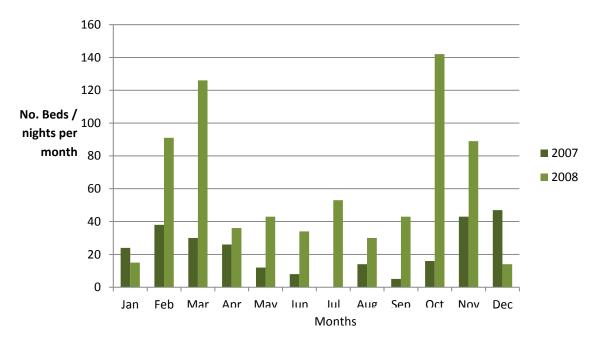


Figure 1: Occupancy (number of beds/month) of three of the five guest houses / hotels in

Several hotels have been established to cater for the current levels of tourism, ranging from basic camping facilities at the Backpacker's Paradise, to the more comfortable rooms of Fernando's Seaside Guesthouse, with room fans and hot water. There is also interest in establishing a Homestay program for student groups, to enable a wider spread of benefits in the community.

However, it is recognized that a number of steps have to be taken to strengthen the community's capacity if it is to move towards a more tourism-based economy, relieving some of the pressure on the natural resources of the reef. Since 2005, a number of initiatives

Hotel	Accommodation Type	Rates
Backpackers	Camping	Bz\$ 6.50
Paradise	Room with shared	Bz\$22.00
	bathroom	
	Room with private	Bz\$38.00
	bathroom	
Candelis	Room with private	Bz\$40.00
Guesthouse	bathroom	
Krisamis	Room with private	Bz\$40.00
Bayview	bathroom	
Lodge		
Oasis Guest	Room with private	Bz\$50.00
House	bathroom (High Season)	
	Room with private	Bz\$40.00
	bathroom (Low Season)	
Fernando's	Room with private	Bz\$50.00
Seaside	bathroom (High Season)	
Guesthouse	Room with private	Bz\$35.00
	bathroom (Low Season)	

Table 1: Hotel Rates in Sarteneja

have been implemented that have contributed towards this goal.

3.3 Community Capacity

Community capacity in Sarteneja has increased significantly through the organization of different sectors of the community into effective groups, with the recent establishment of three community based organizations – the Sarteneja Alliance for Conservation and Development, the Sarteneja Tour Guide Association and the Sarteneja Fishermen Association. These associations are working collaboratively under the umbrella of the Sarteneja Alliance for Conservation and Development (SACD), together with Shipstern Nature Reserve and Wildtracks (local conservation organizations), and representatives from the local fishing, business and education sectors, providing a strong foundation for alternative livelihoods through tourism in Sarteneja. Each organization has its own focus, and all have been able to contribute to the Sarteneja Tourism Development Plan from differing perspectives, further strengthening participation in conservation and development activities in the area.

Over the last three years, there have been a number of capacity building activities designed to increase the capacity of these organizations, through initiatives funded by Wildlife Conservation Society, The Nature Conservancy, and COMPACT, with technical input and facilitation by Wildtracks. These have included the BTB tour guide training course, an introductory course to fly fishing, basic computer skills. and introductory courses to project accounting, project implementation, monitoring and evaluation, skills. presentation The main of the objectives leading organisations were presented at one of the community meetings all of which follow the community vision:

Sarteneja Tour Guide Association (STGA) – promote Sarteneja as a tourism destination, provide alternative livelihoods for local fishermen, represent and support Sarteneja's tour guides and follow legislative issued by Belize Tourism Board and BTA

Sarteneja Alliance for Conservation and Development (SACD) – bring people together towards conservation and development

Sarteneja Tourism Committee (STC) – promote Sarteneja as a key destination for tourists arriving to Belize with emphasis on conservation; provide employment opportunities for the local community within the village, improve infrastructure and highlight Sarteneja's natural beauty with its virgin forest and wildlife

Guardians of History, Nature and Culture (GHNC) – promote history and culture of Sarteneja

Sarteneja Fishermen Association (SFA) - Providing an alternative livelihood for fishermen in Sarteneja, a key stakeholder of the Belize Barrier Reef

3.3.1 Sarteneja Tour Guide Association (STGA)

The Sarteneja Tour Guide Association (STGA) was registered in May, 2007 with the principal goal of promoting an environment in which tour guides can be employed within Sarteneja, as an alternative to the unsustainable fishing practices that currently predominate. This is in recognition of the need for much-needed economic development opportunities for the community, whilst recognizing the importance maintaining the biodiversity health of the area. This is to be achieved through:

- promotion of sustainable, environmentally-aware tourism in Sarteneja
- provision of a support structure for tour guides that have taken advantage of past Alternative Livelihood tour guide training opportunities;
- capacity building of the STGA committee and members,
- support for the conservation of the natural resources of the Sarteneja area
- start-up assistance and training in additional guiding skills for the pool of licensed tour guides that currently exists in Sarteneja.

An estimated sixty community members from Sarteneja (forty-four men and six women) have participated in tour guide training programmes provided to assist the community in moving towards alternative livelihood options in the tourism sector. All current tour guides are reliant on employment outside Sarteneja, and the majority work in the cruise ship industry. Job opportunities in this field, however, have declined over the last five years. 50% of Sarteneja guides who took the Alternative Livelihood courses are currently without jobs, and have gone back to the fishing industry, citing the preferential employment by the cruise ship industry for Belize City tour guides as responsible, as these Belize City-based tour guides are willing to work for lower daily rates, and can take on non-regular per-day guiding opportunities as a secondary income earner.

The Sarteneja guides are strongly tied to their community and very few would consider moving their families closer to the employment opportunities that are available, choosing to return to fishing when faced with this alternative. All, however, would like to continue in the tourism industry, if opportunities became available within their home community.

Whilst the tour guide training opportunities have been successful in providing fishermen with alternative livelihood options in the tourism industry, unless Sarteneja can develop as a tourism destination, much of the ground gained in the move towards guiding as an alternative will be lost, highlighting the need to establish the framework and planning for Sarteneja to develop as a tourism destination.

A recent report by WCS³ summarises the results from a survey of fifty (83%) of these participants (WCS, 2008). Twenty-one respondents currently belong to a tour guide association – ten of these belong to the Sarteneja Tour Guide Association, the remainder to the Belize National Tour Guide Association or to the Caye Caulker Association. All fifty respondents commented that they plan to move to the Sarteneja Tour Guide



Tour guides of Sarteneja

Association in the future, once job opportunities become available in Sarteneja, or nationally.

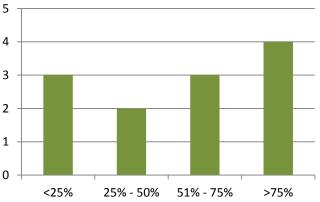
³ Wildlife Conservation Society

Of those interviewed, twelve (24%) hold current licenses, twenty-one have been licensed as tour guides, either currently or at some time in the past, and one is guiding without a license. 100% of interviewees stated that they want to be licensed tour guides

Of the twelve currently licensed tour guides, eight are employed in the cruise ship industry (out of Belize City), two as full time fishing guides, one on San Pedro, and the other with Belize River Lodge. There is also one employed as a Dive Instructor by a dive company (Hugh Parkey). Five are full-time guides, with 100% of their household income being entirely from tour guiding.

Of the twelve licensed guides, five 5 (42%) still have to supplement thei $_4$ income from fishing as they are not able to work throughout the year, being laic 3 off in low tourism season (Figure 2).

Tour guiding is very seasonal – those tour guides employed in the industry either currently or in the past o highlighted the busiest months as being January and February, with tourism tram November to April reflects the 6 month Figure 2: % of Total Income from Guiding the guides are employed by (Figure 3).



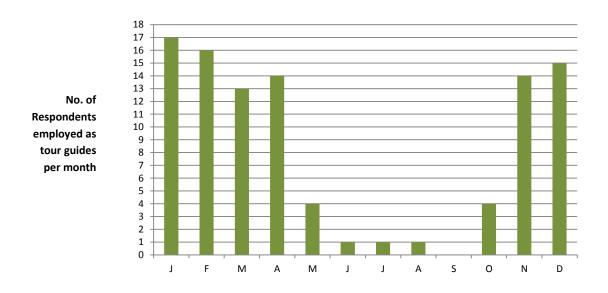


Figure 3: Seasonal Tourism Activity

3.3.2 Sarteneja Alliance for Conservation and Development (SACD)

Community capacity is based on a number of criteria – perhaps most important is the ability of the community to organize itself and build networks of individuals, associations and organizations. Working together as an Alliance, the three registered organizations of Sarteneja – SACD, STGA and SFA - strengthen each other significantly, with SACD providing a mechanism for effective collaboration, communication and networking, not only between the organizations, but also with other sectors of the community.

The Sarteneja Alliance for Conservation and Development (SACD) was established in September, 2008 to perform two roles — as the umbrella for the Alliance, and also as an active promoter for conservation in Sarteneja, through a number of specific program areas. The Natural Resource Management Program forms the framework for the Conservation Unit, currently being established under a PACT grant, with the role of establishing surveillance and enforcement activities within Corozal Bay Wildlife Sanctuary, as the first step towards co-management with Forest Department. Other program areas include Education and Outreach, and Community Development — areas recognised as critical to all the organizations involved in SACD (STGA, SFA, SNR, and Wildtracks), and by the community sectors represented on the SACD Board.

The Advisory Committee for SACD was restructured during 2008 to ensure more active participation and input from other community groups – the Village Council, Sarteneja Progressive Youth Group, Sarteneja Women's Group, the Sports Committee etc.

3.3.3 Sarteneja Fishermen Association (SFA)

The Sarteneja Fishermen Association is a community-based organization, with a membership of over 110 artisanal fishermen, registered on 19th September 2007. Whilst not focusing on the tourism aspects of the development of Sarteneja, the Sarteneja Fishermen Association is an important component of SACD. It seeks to provide a unified voice for the fishermen (particularly the artisanal lobster and conch fishermen that fish along the Belize reef), and alternative livelihoods for those fishermen trying to leave the fishing industry.

4.0 Attractions of the Sarteneja Area

Attractions are "the magnets that draw visitors to the destination" (CI, 2005), and were identified during community workshops (see 2.2.1) and through visitor surveys. Attractions were divided into Natural, Cultural, Historic and Recreational, and were assessed at a workshop focused on input from tour guides.

Natural Attractions and Protected Areas

Sarteneja seafront - scenic beauty, sunsets, colourful, sailing boats, tranquil environment, traditional culture

Marine and Forest Wildlife
Cay Falso (birds) / Waree Bight

Cayo Conejo (birds)

Barrier Reef (Bacalar Chico)

Fireburn, Shipstern

Forest Cave

Recreational Attractions

Fly fishing

Snorkelling Diving

Kayaking

Wildlife watching

Sailing Cycling Hiking

Relaxing Sunbathing, swimming

Barbecue fresh fish

Camping

Historic and Heritage Attractions

Cerros Archaeological Reserve

Kakantulix (Fireburn)

San Juan, Chac Balam (Bacalar Chico)

Cenote

Maya Well / Maya structures

Cultural Attractions

Regatta

Boat building

Sailing

Hogs head dance

Museum

Medicinal plants

Traditional cookery

Tortilla factory

Home stays

The results of the assessment for the Natural and Recreational attractions are summarized to provide input into the planning process (4.1-4.2).

	Distance from the Ease of	Ease of		Environmental	Socio-Cultural	Potential
Natural Attractions	dock	Access	Potential Uses	Fragility	Concerns	Market Draw
Forest and Marine Wildlife	2-25 miles	Varies	Observing, participating in conservation activities, fly fishing, snorkelling	Disturbance of natural habitat, garbage	None	Day trip Weekender Long-Stay
Barrier Reef	25 miles	Moderate	Snorkelling, Fishing (multiple use zone) Diving, Fly fishing (bony fish, reef fishing)	Corals, turtles (nesting beach), parrotfish,	None	Long stay (> 2 days) (Could book on line)
Cayo Falso / Warree Bight	4 miles	Easy	Bird watching, manatees, fishing, swimming, barbecue on beach	Mangroves, nesting birds, manatees	Conflict between local fishermen and fly fishing. Need workshop with fishermen Also bad-practice fishermen	Weekender Long stay
Sarteneja seafront	0 miles	Easy	Drink coconut, scenic beauty, walk along beach, sunsets, local food and drink, bird watching	Waste management (not enough bins), garbage, overcrowding	Culturally insensitive clothing,	Day trip, Weekender Long stay
Forest and Cave	1 mile	Easy	As part of historical tour, bats, forest wildlife, Laguna Xpinta. Night hike	Bats, garbage, birds	Cave may be on private property, or accessed through private property	Day trip, Weekender Long stay

4.2 Cultura	l Attractions						
Attraction	Description	Location and Timing	Uniqueness	Associated activities	Environmental fragility	Socio-cultural concerns	Potential market draw
Easter Regatta	Traditional event when sailing boats race in three categories which goes along with a rich program	Sarteneja at Easter	The only regatta in Belize at Easter	Hogs head dance, Greasy pole, Greasy pig, dance, bands, traditional cuisine	Noise, risk of collision with marine mammals, litter	Rise in crime	Weekender Day trip
Boat building	Visiting local boat builder's workshop associated with the presentation of his craftsmanship	Sarteneja year round	One of the main producers in Belize	Sailing	None	None	Day trip
Sailing	Sailing on traditional fishing boats with local skilled fishermen	Corozal Bay from mid February to mid June	Largest sailing community in Belize	Boat building presentation	Litter, water pollution	None	Weekender Long stay Medium stay
Home stays	Integration into community, experiencing living in the local community, meeting conservation organisations	Sarteneja year round except for holidays	The only place for home stays in the region	Traditional cuisine	None	Changing cultural values, disturbing privacy boundaries, improved English	Long stay Weekender Medium stay
Museum	Displaying Mayan artefacts and tools	Sarteneja year round	The only in the village	Maya history	None	Cultural pride, increased knowledge	Day trip
Medicinal plants	Presentation of local medicinal plants by one of the community members	Sarteneja year round	A few people knowledgeable about medicinal plants in the region	None	Harvesting of medicinal plants	Increases pride in local knowledge	Day trip
Tortilla factory	Presentation of local industry - corn tortilla factory	Sarteneja year round	Two factories in the village	Traditional cuisine	None	None	Day trip
Local artists	Painters, stone carvers	Sarteneja year round	Mayan motifs in slate, bright paintings depicting local life	None	None	None	Any

4.3 Historic	4.3 Historic and Heritage Attractions							
Attraction	Description	Age	Magnitude	Access	Condition	Environmental Fragility	Socio- Cultural Concerns	Potential Market Draw
Cerros	The core of the site immediately abuts the bay and consists of several relatively large structures and stepped pyramids, an acropolis complex, and two ballcourts. Bounding the southern side of the site is a crescent-shaped canal network that encloses the central portion of the site and encloses several raised-fields.	400 B.C. – 100 A.D.	52,62 Acres	By boat, by road	Well maintained site, visitor's centre, no guided tours, well maintained beaches and surroundings, parking and a dock available	Number of tourists might cause damage to the sites, possibility of boat collisions with manatees	None	Medium stay Weekender
Kakantulix	96 structures reported so far, structures built in the same style as the temples at Tikal, plenty of pottery	Approxim ately 1200 A.D. (expertise needed)	279 acres	Hike on a forest trail	Not listed as archaeological site yet, unexcavated, signs of looting, expertise for dating and description needed, no management, no infrastructure	Wildlife habitat disturbance, land clearance, garbage	Impact on local community	Medium stay Long stay
Cenote	Water filled sinkhole of ceremonial significance		70 feet depth, 100 m diameter	Hike, bicycle	No maintenance, middle of forest, no management	Wildlife habitat disturbance, land clearance, water pollution, litter	None	Day trip

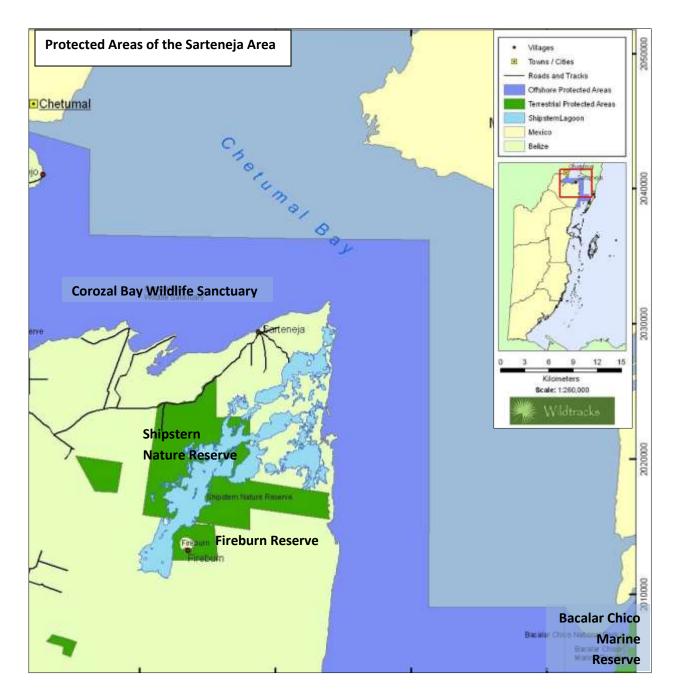
4.3 Historic and Heritage Attractions

Attraction	Description	Age	Magnitude	Access	Condition	Environmental Fragility	Socio- Cultural Concerns	Potential Market Draw
San Juan	San Juan (SJ) - remains of 9	SJ: 150	SJ: area of	By boat	SJ: Well maintained	Garbage ,	None	Medium stay
and Chac	temples with several burials	A.D. –	9000 m ²		with visitor's center	number of		Long stay
Balam	Chac Balam (CB) - former	1000 A.D.	CB: 7500 m ²		CB: difficult access	tourists might		
(Bacalar	ceremonial and administrative	CB - Late				cause damage to		
Chico)	centre, remains of burial	and				the sites		
	chambers, Coconut Walk	Terminal						
	pottery	Classic						
		Period						
Maya Well	Well built by the Mayans in a	App. 150	10 feet	Hike,	Needs cleaning	Garbage	Located on	Day trip
(Sarteneja)	solid rock, located throughout	years old	deep, 2,5	bicycle			private	
	Sarteneja		feet				properties	
			diameter					
Maya	Different kind of Maya	Needs	Various	Hike,	Mapping, surveying	Land clearance,	Structures	Day trip
structures	structures in and around the	expertise		bicycle,	and excavation	garbage	might be on	
	village, Pico de Gallo			vehicle	needed, no		a private	
					management		property	

4.4 Recreationa	al Attractions				
Recreational Attractions	Location for best areas for Activities to take place	Ease of Access	Environmental Fragility	Socio-Cultural Concerns	Potential Market Draw
Sailing	Learning to sail Sail trip - Cerros, Waree Bight	Easy	Manatees, birds	None	Any
Kayaking	Cayo Falso, seafront / Cayo Bagre (good for snorkelling if calm), Rocky Point. Laguna Xpinta	Easy	Birds, bird nesting colony, manatees, garbage	None	Day trip Weekender Long-Stay
Snorkelling	Bacalar Chico, Cayo Bagre (good for snorkelling if calm),	Bacalar Chico – Moderate Cayo Bagre - Easy	Coral, turtles, parrotfish	No	BC:Long stay CB: Any
Bird watching	Cayo Falso, Forest, Shipstern Nature Reserve (Wood Storks), Laguna Xpinta Fireburn / Kakantulix	CF: Easy SNR: Easy SNR (WS): Moderate	Nesting birds	No	Any
Cycling	Cave, shipstern, cenote, Sarteneja,	Easy	Garbage	No	Any
Fly fishing – but mostly trolling. Bait fishing	Tarpon - By holes in front of Sarteneja. Bonyfish by Cayo Conejo and Bacalar Chico (BC favoured)	Tarpon – easy Bony fish - Moderate	Poor fishing practices Boat pollution	Poor practices / non-licensed guides Potential conflict with local fishermen Mexican fishermen	Long stay Those who book tours, want full day. Some people half day
Diving	Bacalar Chico	Moderate	Corals, turtles, parrotfish, spawning groupers	No	Medium-stay Long-stay
Hiking	Shipstern, Fireburn, surrounding forest of Sarteneja	Easy - moderate	Garbage, hunting	No	Weekender Medium-stay Long-stay
Camping	Shipstern, Sarteneja	Easy	Garbage, disturbance of wildlife habitat	No	Weekender Medium-stay Long-stay

4.5 Protected Areas

A number of attractions stand out as already being in place, and actively being utilised. These include the protected areas adjacent to Sarteneja (Map 3).



Map 3: Protected Areas of the Sarteneja Area

Protected Areas							
Attraction	Distance from Sarteneja	Ease of Access	Potential Uses	Environmental Fragility	Socio-Cultural Concerns	Potential Market Draw	
Shipstern Nature Reserve	2 miles	Easy	Hiking, Wildlife watching, Camping, Observation tower,	Garbage disturbance of wildlife habitat	None	Day trip Weekender Medium-stay Long-stay	
Fireburn Reserve	15 miles	Difficult	Hiking, Wildlife watching, Sightseeing	Garbage disturbance of wildlife habitat, damaged by hurricane	Impact on local community	Medium-stay Long-stay	
Corozal Bay Wildlife Sanctuary	0 miles	Easy	Bird and mammal watching, Fly-fishing – catch and release, Swimming, Sunbathing	Garbage, water pollution, disturbance of wildlife habitat	Needs resolving legislative question, best practices need to be issued	Day trip Weekender Medium-stay Long-stay	
Bacalar Chico	25 miles	Moderate	Diving, Snorkelling, Swimming, Sunbathing, Sightseeing	Garbage, water pollution, disturbance of wildlife habitat, nesting turtles, damage of the reef	None	Medium-stay Long-stay	

4.5.1 Corozal Bay Wildlife Sanctuary

Corozal Bay is one of seven national Wildlife Sanctuaries in Belize, and was designated in 1998, as part of Belize's strategy towards the conservation of the West Indian (or Antillean) manatee (*Trichechus manatus* manatus). It is the largest estuary in the region, and considered part of the Mesoamerican Barrier Reef System, an ecoregional conservation priority.

The community survey demonstrated that the majority of households interviewed in Sarteneja (73%) use Corozal Bay for relaxation – particularly for swimming (Table 2). The Bay is also still very important for transport, with private skiffs regularly leaving for Corozal or Chetumal in preference to using the road. The Thunderbolt, a water taxi service that operates a daily service between Corozal and San Pedro, with a request stop in Sarteneja, has also

increased the importance of water-based transport, opening up options for work in Corozal and San Pedro. With the focus of fishing activities firmly on the reefs of Belize, only 30% of respondents say that they fish in the Bay, with only a small number of these (approximately ten) fishing commercially. A small number of respondents also use the Bay as a tourism venue, primarily based on sport fishing.

Of those households surveyed (May, 2008), 60% were aware that Corozal Bay is a Wildlife

		No
Yes	No	Reply
73%	21%	6%
42%	45%	13%
30%	61%	9%
5%	74%	21%
	73% 42% 30%	73% 21% 42% 45% 30% 61%

Table 2: Use of Corozal Bay (% of 150 respondents, May 2008)



Corozal Bay Wildlife Sanctuary

Sanctuary, and part of Belize's protected areas system, however only 19% felt that they were consulted when the Wildlife Sanctuary was first established. 39% were aware of the management planning process that was started several years ago under MBRS (though this was never completed), but only 17% felt that they participated in the planning process. When asked on attitudes and perceptions, the majority of respondents agreed or strongly agreed that there should be more effective management for Corozal Bay Wildlife Sanctuary – over 80% agreed or strongly agreed that management would help to sustain the fish stocks, that there should be better enforcement of regulations within the protected area, and that the community, particularly fishermen, should be involved in management decisions, monitoring and

enforcement activities. Over 90% of respondents agreed or strongly agreed that manatees needed greater protection than they have at the moment, and over 86% that it is important to protect mangroves (Table 3).

Statement	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	Don't Know
Management of the Wildlife Sanctuary will help						
to sustain fish stocks of Corozal Bay	0.7	4.7	4.0	32.7	49.3	8.7
Manatees need more protection than they have						
at the moment	0.0	2.7	2.0	40.7	50.0	4.7
There should be some no-fishing areas to						
protect fish stocks	4.0	13.3	7.3	35.3	33.3	6.7
It is important to protect mangroves in Corozal						
Bay Wildlife Sanctuary	0.7	1.3	3.3	32.7	54.0	8.0
There should be some enforcement of the						
sanctuary regulations	0.7	2.7	4.7	40.7	40.7	10.7
Participation in management decisions about						
Corozal Bay Wildlife Sanctuary is						
important to you	0.0	0.0	2.0	40.7	46.7	10.7
It is important for fishermen and other						
community members to be involved in						
monitoring and enforcement activities.	0.0	3.3	2.7	40.0	46.7	7.3

Table 3: Attitudes and perceptions – Corozal Bay Wildlife Sanctuary (% of 150 respondents, May, 2008).

These outputs are now being incorporated into the current management planning process under SACD, funded by PACT, to strengthen community participation in the management planning and implementation process, with surveillance and enforcement activities being established in early 2009.

4.5.2 Shipstern Nature Reserve

Shipstern Nature Reserve was established in 1987 - an approximately 27,000 acre private protected area owned by the International Tropical Conservation Foundation. The Headquarters and interpretive centre provide visitors with an opportunity to glimpse the full extent of this attraction. An extensive trail system has been established including a botanical trail with labelled plant species, and an 80 foot observation tower which provides a view over much of the forest, lagoons and Corozal Bay of the Sarteneja area.





Shipstern Nature Reserve from the top of the lookout tower

Ranging from saline mudflats and mangrove savanna to seasonal and Shipstern Nature Reserve

dry forests, Shipstern Nature Reserve is recognized as a critical component of the Protected Areas System and Meso-American Biological Corridor. This Reserve fills a number of highlighted critical gaps in ecosystem coverage for Belize, with species assemblages and plants that are unique in Belize, with associations with the Yucatan Peninsula. Yucatan endemics such as the Yucatan Jay, and the colonies of wood storks and reddish egrets, supplemented by forest species – keel-billed toucans and great curassow provide bird watchers with variation. Morelet's crocodiles inhabit the swamp forest pools of Xopol, with observation posts providing overlook points for visitors, with the chance of seeing tapir or other forest wildlife.

4.5.3 Fireburn Reserve

Fireburn Reserve lies 15 miles south of Sarteneja, at the southern end of Shipstern Lagoon and is managed jointly by Wildtracks and the Fireburn Community.

The Reserve covers an area of 1,818 acres, consisting of a combination of lowland moist forest, swamp forest, mangrove and saline savanna. It is bordered by Shipstern Nature Reserve to the

north and Shipstern Lagoon to the west. The proposed Kakantulix Archaeological Reserve is situated to the south-east of the Reserve. Encompassed by the Reserve is an area of 187 acres of community lands, which contains Fireburn village — a traditional Creole logging community of approximately 24 people — and its associated agricultural land.

A well established trail network exists within the Reserve. The Main Trail, running from the eastern boundary to the lagoon at the western edge of the Reserve, is the largest trail, and is used for access to



Fireburn fieldbase

logging outside the reserve. The Southern, North-Eastern and Kinkajou Trails are smaller trails

used primarily for research, education and reserve maintenance. A small trail runs from the North-East trail to a pond situated in the North-East corner of the Reserve, and acting as a magnet for wildlife in this dry corner of the country.

The Fireburn Fieldbase lies 300m along the Southern Trail, and has basic facilities, serving as a base for researchers and protected area staff and volunteers. In a clearing along the main trail is a Visitor's Centre. The building is designed for use by tourists and educational groups and contains interpretive material about the protected area. Finally, there is a small hide for wildlife observation by the pond in the North-East corner of the reserve. Wildlife is abundant in the reserve, with high numbers of bird, reptile and amphibian species. Mammals are often seen, including the white-lipped peccary, extirpated from many other parts of its range by heavy hunting pressure.

4.5.4 Bacalar Chico Marine Reserve and National Park

Bacalar Chico on northern Ambergris Caye covers 130 km2 of the Belize Barrier Reef as well as Rocky and Robles Points - the only points where the barrier reef touches mainland Belize.

With a combined area including a 15,000-acre marine reserve and 12,000 acres of terrestrial national park this part of Belize Barrier Reef Reserve System World Heritage Site is only accessible by boat. The park was established in August 23, 1996 as a result of community advocacy and lobbying by a number of the fishermen of Sarteneja, considered the primary stakeholder.

The east side of the caye is covered with extensive, shallow, mangrove-lined lagoons - breeding grounds for marine and coastal birds and a crucial nursery for many reef fish. The east facing beach serves as a major nesting ground for Loggerhead and Green Turtles. Much of Bacalar Chico's wildlife resembles



The Barrier Reef at Bacalar Chico

that of the Yucatan, with a number of Yucatan endemics. At least 187 species of bird, forty mammal (including all five of Belize's cats), fifty-eight reptiles, and twenty-two amphibian species inhabit the area. The site is also important for salt marsh, mangrove, mixed mangrove formations and coastal beach scrubs.

Sarteneja Tourism Development Plan

To the Maya, Bacalar Chico was an important trading port and it is believed that some fifteen hundred years ago, they dug a narrow channel that now separates Ambergris Caye from Mexico's Yucatan Peninsula, to provide access to the Caribbean Sea from Corozal Bay. This channel functions as the park's northern boundary and separates Belize from Mexico. Today visitors may see the remnants of the once vibrant Maya community and Maya ancestral burying ground at the archaeological site of Chac Balam.

A visitor centre and ranger station are located at the Reserve Headquarters at San Juan, and provide visitors with valuable information on the history of the protected area, as well as fishing and other permissible marine activities. There is also an 18km nature trail that provides visitors with the opportunity to get up close to the flora and fauna of the reserve.

Green Reef Environmental Institute, an STGA project partner, has worked extensively towards the effective management of Bacalar Chico National Park and Marine Reserve, assisting reserve managers through the development of zoning guidelines for the Marine Reserve, a revised Management Plan and a Financial Sustainability Plan. It seeks to establish a conservation area where conservation management, tourism needs and community benefits are balanced.

Green Reef also has a long history of working with Sarteneja, as a primary stakeholder of Bacalar Chico National Park and Marine Reserve, and has provided basic and specialized training for traditional fishermen on use of the protected area, covering tour guiding, sportfishing, SCUBA diving and kayaking. Courses have also covered knowledge of the geology, flora, fauna, marine resources and cultural history of the BCNPMR, to enable guides to deliver superior experiences for eco-tourists, educational groups and other visitors, as Bacalar Chico Nature Guide Specialists.

Green Reef in working with these community stakeholders, has increased awareness of the value and unique features of the BCNPMR, and is focusing on Sarteneja as the location for community based activities for Green Reef educational groups – linked to Bacalar Chico.

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5.0 Infrastructure and Services

The condition of Sarteneja's infrastructure and services is described in following tables divided into four categories which are accessibility, transportation, public services and evaluation of surroundings.

5.1 Accessibility Summary					
Concern		Comments			
Can debarking passengers connect easily with		There are no information boards / maps at arrival points (entrance to village, airstrip, at end of jetty.			
other transportation/information?	No	Solution: 3 information boards, 1 at each entrance point, with maps providing information on location of hotels, services, points of interest			
Are the highway and road signs, which direct visitors to the area, well located and	Maybe	Signs from Orange Walk, but not in Orange Walk itself. No signs from Corozal			
adequate?	Yes	Solution: Signs for Sarteneja in Orange Walk and at by-pass roundabouts			
		Limited information is available in hotels / guesthouses			
Are there visitors' information centres or places where information can be distributed?	No	Solutions: Information sheets developed and available from STGA at the SACD Centre. Signs in village to SACD Centre / Information Centre. Information sheets also distributed to guesthouses and homestays			
Can information about transportation be	Na	Little updated information is available in most guidebooks or on the internet			
easily found on internet?	No	Solution: Provide information to relevant websites			
Does the quality of roads allow easy access to	No	Roads are poorly maintained – muddy in wet season and dusty in dry			
the village?	No	Solution: Community support and action to leverage more frequent grading of the road			

5.2 Transportation					
	Number	Locations served, connection	Reliability and safety	General conditions	Environmental sustainability
Highways	None	N/A (not applicable)	N/A	N/A	N/A
Secondary roads	1	Junction from Chunox	good	Not maintained, not paved, dusty/muddy	Air pollution, soil pollution
Community Roads		Within Sartneja	Not enough lights, traffic signs, speed limits	Not paved, some dusty/muddy, not well maintained	Air pollution, soil pollution
Airstrips	1	San Pedro, Corozal	Very good reliability, limited security rules	No facilities at landing site, no signs, no services, no shelter, no phone	Land clearance, noise, pollution
Car rental	0	N/A	N/A	N/A	N/A
Inbound tour	0	N/A	N/A	N/A	N/A
operators					
Taxi services	0	N/A	N/A	N/A	N/A
Bus stops and service	No formal	Corozal, Belize City,	Travel time varies a lot	Old buses, seasonally	Air pollution, soil
	bus stop	Orange Walk		overcrowded, noisy	pollution
Docks	1		good	Water depth insufficient for	Sediment
				docking in rough weather	
Ferries	0	NA	NA	NA	NA
Water taxi	1	Corozal, San Pedro	Bookings needed	Good	Water pollution,
			leaving Sarteneja, stop		threat of collision
			on request arriving to		with marine
			Sarteneja		mammals
Bicycle rental	3	Sarteneja	Mainly beach runners	Easiest way of transportation	None
Motorcycle rental	0	NA	NA	NA	NA

Sarteneja Tourism Development Plan

5.3 Public services		
Concern		Comments
Is the local police force prepared to handle increased duties	Yes	Special Constable volunteers need professional training
with increasing tourism? (Crime, crowds)		
Can visitors get emergency health care locally?	Yes	Available during the week only
How far is the nearest hospital?		40 miles
Is ambulance service available in the area?	No	Ambulance will come from Orange Walk. Air ambulance available from
		BERT in an emergency
Is there a local fire protection service?	No	
Is the local water supply acceptable to visitors?	Yes	Reverse osmosis plant with UV sterilization.
Is there a public sewage system?	No	Houses have individual septic systems. Some have more basic outhouses
Are the public restrooms well-maintained and clean?	No	Not maintained, and have limited use
Are landscape management services provided for public	No	Village cleanups organized by community groups (Youth Group, SACD,
spaces? (Litter clean-up, trees, plants)		STGA etc.)
Are there recycling receptacles?	Maybe	There is limited recycling capacity within Belize, and none in Sarteneja.
	No	School project is attempting to promote recycling of plastic bottles, and
		has recycling bins in the community.
Can local roads handle more use without becoming too	No	
congested?		
Is there sufficient cell phone coverage?	No	One cell phone service provider has limited coverage
Is there sufficient amount of public pay phones?	No	Two payphones – a third would be useful near the main shop
Is there sufficient internet access?	Yes	Three internet cafes are open in the community
Are there local banking services available to:		
Change currency?	No	
Withdraw on credit cards?	No	
Cash traveller's checks?	No	
Is there a post office in the town?	No	
Is there a gas station in the town?	No	Gas available from local providers, no quality control

5.4 Evaluation of Surroundings

Three groups were surveyed to evaluate relative perceptions of quality of environmental and ambient parameters in and around Sarteneja. Input from local residents was also sought during Workshop Four, from a focal meeting with Shipstern Nature Reserve staff, and from individual interviews.

Environmental Parameters	Group 1 Foreign Seasonal Residents	Group 2 Visitors / Tourists	Group 3 Local Residents
Air Quality	Mostly Good: Except burning plastic, dust in dry season, farm animals	Very Good	Very Good/Good: Burning plastic bags, exhaust fumes from badly maintained buses, and dust in the dry season
Noise	Generally Bad: Dogs, church amplifier systems	Good: Except noise from dogs	Good/ Fair: Too muchloud stereos, bars, buses hooting, dogs
Road Traffic	Good	Good	Good/Fair: Reckless driving, especially on weekends, people without license, bad parking, bicycles
Solid Waste	Not Good: Improving, needs better transport to garbage dump	Fair: Some litter, needs more community involvement	Fair: Road access to garbage dump needs improving, however, waste management is better than it was
Conditions of Homes/ Buildings	Good: Functional but not aesthetic	Good: Functional	Good/Fair: Needs painting Most concrete - safe, functional.
Clean Water Source	Fair: Getting worse, not cleaned adequately	Fair: Salty	Bad: Too much chlorine Good: Corozal Bay - too much mud, dirty water.
Health Risks	Fair: No malaria, but HIV is present. Only one nurse available	Fair: Needs improvement	Good: Except for hepatitis in some water, malaria (low risk), aids.
Natural Landscapes	Very Good	Very Good: Traditional culture	Very Good:
Health of Major Attractions	Good: Concern over reducing fish stocks	Good: Bay water could be clearer, burning trash	Good: But access could be improved. Concern over reducing fish stocks
Sewage & Waste Water Management	Mostly Good	Fair	Good/Fair
Other	More restaurants, better pier needed	Activities needed for children, Ideal for ecotourism	Access road into Sarteneja needs maintenance

Table 4: Evaluation of Surroundings (STDP surveys, November – December, 2008)

6.0 Visitor Profile and Competition

6.1 Current Visitor's Profile

More tourists visit Sarteneja for its tranquillity, its wildlife and its fly-fishing - visitor surveys conducted during November – December, 2008 highlight a number of activities undertaken by visitors, the majority focused on outdoor pursuits (Table 5). Over 80% of visitors take part in hiking, wildlife viewing and visiting protected areas, primarily involving tours to Shipstern Nature Reserve. Swimming, cultural sites and reefbased activities are also popular.

92% of visitors surveyed said they would recommend Sarteneja to friends, based on the peaceful, welcoming atmosphere of the community, and the rich culture and wildlife of the area.

	No.
Activity	respondents
Hiking/Trekking	90%
Wildlife viewing	90%
Protected areas	80%
Swimming	50%
Cultural heritage	30%
Snorkelling/diving	20%
Fishing	10%
Biking	5%

Table 5: Use of Corozal Bay (% of 150 respondents, May 2008)

The culture and natural environment were also key elements in initially attracting visitors to the area. Surveys found that 90% of visitors stated the quality of natural surroundings to be very important in their decision to visit. Additionally, 70% answered that their desire to learn about other cultures and the opportunity to visit a traditional fishing community, were very important in their decision to come to Sarteneja. The opportunity to be adjacent to a pristine environment and with the potential to see wildlife were also major factors in attracting visitors, with 80% indicating that access to a pristine environment was very important in their evaluation of their time in Sarteneja, and 60% highlighting the importance of the opportunities to see wildlife.

Visitors discover the area through a combination of internet and guidebooks - the Backpacker's Paradise, for example, has recently had a positive write-up in the Lonely Planet as a green destination, prompting nearly 50% of visitors surveyed to select Sarteneja as a destination. At present, two websites (Fernando's Guest House and the Backpackers Paradise) attract the majority of visitors to the area. From the visitor feedback, it would appear that greater coverage of Sarteneja on the internet and in guide books would promote increased visitation numbers — if Sarteneja has the capacity to handle this increase without losing those very characteristics that attract visitors in the first place.

At present, the majority of visitors can be categorized as one of two types - the lower-end, backpacker/traveller, attracted by the area's serenity, wildlife and wilderness areas, and older visitor with higher expenditures, either seasonal residents, or looking for potential holiday or retirement properties.

6.1.1 Short-stay Visitors

Short-stay travellers attracted to Sarteneja are primarily from Canada and the USA, and travel most commonly in pairs. With the majority of the community speaking primarily Spanish, the language barrier, not surprisingly, caused an issue for the majority of visitors. Nearly 50% of short-term visitors come to Belize for a 2-3 week trip, the Sarteneja component being between 2 to 4 days of their itinerary. All visitors interviewed felt that Sarteneja has a positive tranquil atmosphere that tourists can happily enjoy for a few days.

The survey showed that the short-stay visitors who, on average, spend less, could be encouraged to spend more if facilities – craft outlets, restaurants, snack shops etc. - were in place. Many visitors indicated that their expenditures would have been higher in Sarteneja if they had not had difficulty in finding food outlets – snack shops or restaurants. A high percentage of visitors also felt that there was inadequate interpretation of the surrounding attractions (i.e. archaeological sites, cultural attractions the surrounding wildlife), and that these could be made more accessible through signs, maps, tour guides etc. All visitors suggested that these where desirable, and would make an impact on their personal decision to visit an area. Most tourists would have liked to see an information centre, in which interpretive material is displayed – a facility currently being developed under SACD / STGA.

6.1.2 Medium-stay Visitors

Despite the majority of visitors (75%) visiting for leisure, 25% visit Sarteneja with a view to purchasing a house within the community, or land on which to build a second home, a retirement home, or develop their own business ideas. Initially their average expenditure locally is high, and they bring a continued annual input into the community, encouraging others, too, to visit.

There is, however, a common concern expressed by local residents, permanent foreign residents, and the short-term visitor that these foreign investors may initially bring money to the community, but in the long term may cause a detrimental knock-on effect to the economy of the area, driving prices up, out of the range of the local wage, changing cultural outlooks, and leading to a break down in the community structure. An additional concern of local

residents is that the number of houses populated by foreign residents for only two to six months of the year is increasing, leading to dysfunctional neighbourhoods with houses standing empty for much of the year, affecting the dynamics of the community, one of those very qualities that many of these buyers are seeking.

6.2 Future Visitor's Profile

The optimum future visitor's profile was discussed during an STDP community meeting, with participants agreeing to concentrate on the current focal market - which is identified as the most beneficial economically, socially and environmentally for Sarteneja. Any development in Sarteneja should comply with its relaxing and tranquil environment, conservation efforts and should bring the most economic benefits for the local stakeholders.

The focal groups would include students, visitors willing to interact with the community (primarily through the homestays), and active people who would be interested in exploring Sarteneja's historic and natural attractions utilizing itineraries and services of local tour guides. The most desired tourism segments would be foreign middle-age tourists staying in the area for 2-3 days or more with medium level income.

Local stakeholders want to develop services offering local food, smaller packages including accommodation and half-board or full-board, and all-inclusive day tours involving local tour guides, food during the tour, focusing on cultural and natural attractions of the area.

6.3 Competition

Corozal, Caye Caulker, Placencia and Hopkins were identified as major competitors nationally for tourism that could be attracted to Sarteneja. The main factors defining competition for Sarteneja are... accessibility of destination, similarity of landscape, market segments seeking these locations, and character of attractions, bringing tourists to each location.

San Pedro, Orange Walk and San Ignacio are also considered as competition, but from a broader landscape point of view. These destinations are sought for fundamentally different reasons, but available activities may be similar.

The following table shows which aspects might cause that the tourists might favour the competition to Sarteneja, the ones that are on the same level as competition and the main advantages that Sarteneja has at its disposal for attracting tourists. Each competitor can also be considered a potential partner in collaboration.

Sarteneja Tourism Development Plan

Evaluated aspects	Sarteneja	Advantage	Caye Caulker	Advantage	Hopkins	Advantage	Placencia	Advantage	Corozal	Advantage
Opportunities to experience traditional ways of life	Excellent	٧	Good	٧	Good	٧	Fair	х	Fair	Х
Number of hotels to meet the demand	Poor	Х	Good	٧	Fair	х	High	٧	Good	٧
Variety of hotels	Poor	Х	Good	٧	Good	٧	Good	٧	Good	٧
Number of restaurants	Poor	Х	Good	٧	Good	٧	Good	٧	Good	٧
Quality of restaurants	Poor	Х	Good	٧	Fair	Х	Very good	٧	Fair	Х
Price level	Fair	٧	Fair	٧	Good	٧	Good	Х	Fair	٧
Infrastructure	Poor	Х	Excellent	٧	Good	٧	Excellent	٧	Excellent	٧
Accessibility:										
By road	Yes	٧	No	Χ	yes	٧	Yes	V	Yes	٧
By water	Yes	٧	Yes	√	yes	√	Yes	√	Yes	٧
By air	Yes	٧	Yes	٧	yes	٧	Yes	٧	Yes	٧
Number of adjacent protected areas	Good	٧	Fair	٧	Good	٧	Good	٧	Good	Х
Tranquillity	Excellent	٧	Fair	Х	Good	٧	Fair	Х	Poor	Х
Opportunity to see wildlife	Excellent	٧	Good	٧	Fair	х	Good	٧	Poor	Х
Opportunity for easy	Excellent	٧	Very good	٧	Good		Good		Poor	
access to pristine natural environment						٧		٧		Х
Beach facilities	Poor	Х	Very good	٧	Good	٧	Very good	٧	Good	٧
Marketing	Poor	Χ	Very good	٧	Good	٧	Very good	٧	Fair	Х

Sarteneja Tourism Development Plan

Evaluated aspects	Sarteneja	Advantage	Caye Caulker	Advantage	Hopkins	Advantage	Placencia	Advantage	Corozal	Advantage
Safety	Good	٧	Good	٧	Good	٧	Good	٧	Fair	Х
Opportunities for	Excellent	٧	Very good	٧	Very	٧	Good	٧	Fair	Х
adventure					Good					
Variety of natural scenery	Very	٧	Fair	Х	Very	٧	Very Good	٧	Fair	Х
and landscapes	good				Good					
Entertainment	Poor	Χ	Very good	√	Fair	Х	Good	٧	Fair	Х
Number of organized tours	Poor	Х	Good	٧	Fair	Х	Good	٧	Good	٧
Accessibility of Local arts	Poor	Х	Very good	٧	Good	٧	Excellent	٧	Fair	Х
Shopping opportunities	Poor	Х	Very good	٧	Fair	Х	Good	٧	Good	٧
Transportation to and from the sites	Fair	Х	Very good	٧	Fair	Х	Very good	٧	Good	٧
Number of people understanding tourism business needs	Poor	Х	Good	٧	Good	٧	Good	٧	Fair	Х
Availability of information about the locality	Poor	Х	Very good	٧	Fair	Х	Very good	٧	Fair	Х
Opportunities for sport activities	Fair	Х	Very good	٧	Very Good	٧	Good	٧	Poor	Х
Location "off the beaten path"	Excellent	٧	Poor	Х	Fair	٧	Poor	Х	Poor	Х
Cultural heritage	Excellent	٧	Fair	٧	Very Good	٧	Fair	٧	Poor	Х

The major advantages which define Sarteneja's excellent competitiveness

The main reasons why the potential visitors can be deterred to come to Sarteneja

6.4 Marketing

Promotion of Sarteneja is at an early stage. The main sources of information about the village for visitors are predominantly guide books or the websites of local accommodation providers. Despite this, tourists are becoming more aware of Sarteneja, primarily through past visitors spreading the word, and from travel reviews from numerous websites.

In order to achieve the set goals of attracting visitors to Sarteneja to provide an alternative livelihood option for the community, it is necessary to have a complex marketing plan developed for Sarteneja itself and all the tourism services providers alike

Recommendations for Marketing Scope

- Selecting target market segments that Sarteneja has the biggest potential to attract:
 - Student and volunteer groups
 - Long-time travellers
 - Eco-tourism fans
 - Wildlife lovers
 - Adventurers
 - Backpackers
- Identification of locations where promotion of Sarteneja would be the most effective
 - information centres in highly visited towns
 - accommodation facilities in Corozal
- Selecting the most relevant marketing tools to target markets
 - Sarteneja web site
 - Road signs in the village
 - Board and printed maps
 - Brochures and leaflets
 - Distributing photos and videos of the village on internet (youtube etc.)
 - Addressing universities abroad to collaborate with home stays
 - Close collaboration with BTB and BTA to ensure that Sarteneja is recognised as tourism destination
- Promotion of activities and tourism services within the village
 - Lists of restaurants, accommodation facilities, all tourism related services and activities available from the SACD Centre and STGA office
 - Information leaflets in accommodation facilities

7.0 Benefits resulting from Tourism Development in Sarteneja

The main objectives of Sarteneja's Tourism Development Plan are focused on creating alternative livelihood opportunities that would be beneficial for the whole community, with the creatiion of more employment and business opportunities. The third STDP community meeting identified a high number of potential jobs and business that have the potential to result from tourism growth, along with other immeasurable benefits.

7.1 Job Creation

Job creation						
Sector in tourism	Position	Kind of employment	Special requirements			
Hotels	Housekeeper	Part-time, full-time	No			
	Front of house	Full-time	English, computer skilled			
Tour operators	Tour guides	Part-time, full-time	Licence			
	Specialist tour guides	Part-time, full-time	Yes			
Catering	Chef	Part-time, full-time	No			
	Waiter	Part-time, full-time	No			
Taxi service	Driver	Part-time, full-time	Licence			
Sailing	Crew	Part-time, full-time	No			
Medicinal plant	Presenter	Part-time	Local knowledge			
presenting						
Information Centre	Attendant	Part-time, full-time	English, computer skilled			

7.2 Business opportunities

Business Opportunities						
Sector in tourism	Kind of business	Assets requirements				
Accommodation	Hotel	Infrastructure				
	Guest house					
	B&B					
	Camping	Infrastructure				
	Rooms for home stays	Rooms				
Catering	Restaurant	Venue				
	Bar					
	Fast food					
Tour operations	Tour operator	Boats, equipment, mini-bus,				
		office venue				
	Travel agent	Office venue				
Transportation	Taxi service	Vehicles				
	Gas station					
	Car/golf cart/motorcycle rental	Vehicles				
	Bicycle rental	Bicycles				
Organised activities	Sailing school	Sailing boat				
	Sailing tours	Sailing boat				
	Canoe rental	Canoe Equipment				
	Volleyball court	Land				
Provision of facilities	Venue rental	Infrastructure				
Arts & Crafts	Art retail	Venue				
Agriculture	Organic fruits and vegetable retail	Venue				
	Agro-tourism	Farm land, livestock				

Sarteneja Tourism Development Plan

7.3 Immeasurable benefits

- Development of new skills and capacity
- Economic diversification
- Improved communications
- Better access to markets
- Developed infrastructure and public services for community
- Cultural pride & education for younger generations
- Improved education
- Improving language skills
- Unifying community
- Greater environmental awareness and education
- Decrease in illegal hunting and fishing, and greater sustainability of natural resources

8.0 Planning for Tourism Development

8.1 Objectives

This Tourism Development Plan has been created based on the model of responsible tourism, with the fundamental concepts of environmental and socio-economic sustainability, and economic opportunities and benefits for all Sarteneja. The Plan emphasizes the need for the individuals within the tourism sector of Sarteneja to take responsibility for their roles in ensuring that tourism meets the standards set for these concepts. Strategies have been identified to engage stakeholders and provide a high standard of collective responsibility, with capacity building in sustainability, hospitality,

Also recognized is the need to ensure that visitors are also aware of these goals and how they can contribute towards the goal of responsible tourism in Sarteneja. Mechanisms for engaging visitors before arrival can enhance appreciation of the culture and environment of Sarteneja – the development of the SACD and STGA websites to include information on Sarteneja and how visitors can be responsible – building respect for the local culture and highlighting and endorsing businesses that are more environmentally conscious and supportive of the local economy.

8.2 Priority Strategy Identification

Priority strategies and requirements for tourism development in Sarteneja were identified during the planning process:

8.2.1 Improving access

- Completion of rebuilding of road for improved dry and wet season access, and hurricane evacuation / relief access
- Renovation and extension of Sarteneja wharf to allow docking by water taxis in norther season (also adaptation of current and future structure to allow for through-flow of water to prevent accumulation of mud in shallow water areas
- Professional road signs at critical junctions from Orange Walk and Corozal
- Increased visitor awareness of buses that travel to Sarteneja signs and timetable in Belize City, Orange Walk, Corozal and Chetumal, website, guide books
- Developing Sarteneja as a border entry point from Mexico (Chetumal)

8.2.2 Developing infrastructure and organized tourism activities

- Support Sarteneja Tour Guide Association in development of tour itineraries, establishment of best practices, and development of tour guide infrastructure
- Support Sarteneja museum initiative
- Developing sites and resources in and around Sarteneja as tourism activities
- Provide sea-front tourism infrastructure picnic benches, toilets, showers
- Encourage further development of community-based hotels, restaurants and associated businesses in Sarteneja
- Marketing of Sarteneja as a tourism destination

8.2.3 Engaging the Community for Responsible Tourism Practices

- Develop Responsible Tourism Development Plan, to include:
- Training of tour guides in responsible tourism practices through STGA
- Target tourism sector individuals for introduction to responsible tourism and how to implement
- Increase awareness within the community of the ethos and implications of responsible tourism
- Identify and develop links with sustainable and responsible community tourism destination organizations
- Provide information on Sarteneja as a responsible tourism destination on the STGA and SACD websites
- Marketing of Sarteneja as a responsible tourism destination

8.2.4 Conservation of Natural and Cultural Resources

- Support Sarteneja Alliance for Conservation and Development (SACD) in comanagement initiative for Corozal Bay Wildlife Sanctuary, with Forest Department
- Develop better communications between Shipstern Nature Reserve and Sarteneja community, and support change of status to National Park
- Support final stage of declaration of Kakantulix Archaeological Site, as a tourism resource for Sarteneja, in partnership with Wildtracks and Institute of Archaeology

8.3 Community Participation Mechanisms

The importance of community awareness and participation was highlighted through the planning process, and identification of mechanisms to ensure that as many people in Sarteneja are informed on the Tourism Development Plan project, and are aware of the potential value and benefits tourism can being to Sarteneja.

8.3.1 Short term mechanisms

Short term mechanisms included:

- Information on the Tourism Development Plan, transmitted on the local cable TV
- Posters displayed throughout Sarteneja
- Presentation of the Tourism Development Plan project at the Shipstern Nature Reserve open day
- Community surveys to validate outputs and facilitate and encourage participation
- Word of mouth dissemination by participating organizations
- Community meetings to ensure participants have an opportunity to express their opinions

8.3.2 Long term mechanisms

It was also recognized that long term mechanisms also need to be employed to enable an improved environment for tourism in Sarteneja, through:

- Education on tourism requirements, and general hospitality training, and establishment of service standards
- Establishment of a biannual Sarteneja Expo
- Presentation of the Tourism Development Plan project at the Shipstern Nature Reserve open day
- Word of mouth dissemination by participating organizations
- Community meetings

9.0 Strategic Actions towards Planned Tourism Development

Six focal areas were selected for the development of key strategies and strategic actions based on issues, priorities and opportunities identified by community participants.

- Infrastructure and services
- Recreational Attractions
- Natural Resources
- Protected Areas
- Historic and Cultural Resources
- Community Issues

Activities were then classified as to whether they could be achieved by STGA, in the short, medium or long term, or whether they required input from other agencies, and lay outside the control of STGA.

9.1 Activities under direct STGA Control

9.1.1 Activities under direct STGA Control - Short Term (within 1 year)

Infrastructure and Services			
Identified Issue / Opportunity	Solution	Responsible Organization	Limitations / Opportunities
Road Access			
Street name signs need repainting	New, bright and colourful street signs in high tourism use areas, tie into map of Sarteneja	STGA	Wood off-cuts and left-over paint from boat maintenance could be used
Air Access			
No facilities at air strip for arriving passengers	Install information board with map of Sarteneja	STGA	Possibility of seeking funds from Tropic Air?
No facilities at air strip for arriving passengers	Sign showing direction to Sarteneja	STGA	Possibility of seeking funds from Tropic Air?
Access by Public Transport			
Bus times unknown to visitors	Bus times more accessible to tourists – print as part of map and as part of advertising poster for distribution in Belize City and Orange Walk	STGA	Put time schedules of bus times on SACD, STGA and Sarteneja websites
Very limited transportation within Sarteneja	Encourage local stakeholders to establish a taxi service	STGA, SHG	
Very limited transportation within Sarteneja	Establish a bicycle rental at the STGA office or with local family	STGA, SHG	

Accessibility of Information	Accessibility of Information						
Activity	Solution	Responsible Organization	Limitations/Opportunities				
Information on locations of facilities	Develop map for visitors for printing on	STGA	Map already started by SACD				
within village	leaflet / handout, and for large board		Possibility of donations towards				
	map at airstrip / pier and at entrance to		printing from tourism interests wanting				
	village		to be included				
Establishing an information centre in	Print information brochures, maps, lists	STGA					
SACD/STGA office	of accommodation, restaurants,						
	activities, postcards						
	Establish tour itineraries together	STGA	Completed for 3 tours & on Adventure				
			Tours website				
	Have an Information Centre sign	STGA					
	designed and made						
	Signs directing people to Information	STGA					
	Centre placed throughout the village						
	Ensure internet working on computers	STGA					
	in Main Room						

Recreationa	Recreational attractions					
Activity	Identified Issue	Solution	Responsible Organization	Limitations/Opportunities		
Kayaking	No information on kayaks available for rent	Set up kayak rental in SACD/STGA office and advertise	STGA	Establish and post rental prices (for visitors & locals)		
Shipstern Nature Reserve	Potential conflict in use of Shipstern Nature Reserve by local guides vs tours by SNR rangers	Develop a working agreement between STGA and Shipstern Nature Reserve establishing clear guidelines for tours within SNR and who can conduct them	STGA SNR	A series of training opportunities open to STGA members, focused on guiding within SNR to encourage local guide use of SNR		
Wildlife watching	Limited knowledge of wildlife among local guides	Training in bird and mammal identification and ecology	STGA	Wildtracks		
Wildlife Guide	No information on local wildlife	Develop of wildlife guide for frequently seen wildlife of the Sarteneja area	STGA SACD	SNR Wildtracks		

Historic and Cultural Resources			
Identified Issue / Opportunity	Solution	Responsible Organization	Limitations / Opportunities
Easter Regatta	Build on the success of the 2009 Regatta with improved marketing and advertising, and support of 2010 Regatta committee	STGA SACD	
Home Stays	Establish and promote home stays through the FoWH project	STGA	Small loans and training available through FoWH project for establishment of homestays in Sarteneja
Provide more information about Boat Building	Printing leaflets, putting information on websites, promoting the possibility to see boat builder's workshop, include Boat building presentation in itineraries	STGA	Facts being put together, Sarteneja google website in construction to provide information about boatbuilding
Provide more information about Medicinal plants presentations	Printing leaflets, putting information on websites, include medicinal plants presentation in itineraries	STGA	
Local artists and craftsmen do not have any location to display their crafts	Identify suitable location to encourage visitors to support local craftsmen	STGA SACD	
Cerros Archaeological Reserve	Liaise with Institute of Archaeology staff at Cerros for information about site and logistics of tour	STGA IoA	
	Develop Best Practices and itinerary for Cerros tour	STGA	
	Train local tour guides in use of Cerros as a tour destination	STGA	

Identified Issue	Solution	Responsible Organization	Limitations / Opportunities
Marketing	Develop full marketing plan for Sarteneja	STGA	Funds for creating of Sarteneja website already located. Need to locate skilled marketing person (Wildtracks volunteer?)
Website links	Identify the main Belize organisations for	STGA	http://www.sartenejatours.com
	posting links to Sarteneja's website	SACD	
Information brochures	Design and print information leaflets about individual attractions of Sarteneja	STGA	
Information brochures	Create a general leaflet about Sarteneja including hotels, restaurants, bars and travel	STGTA	
	information		

9.1.2 Activities under direct STGA Control - Medium Term (1-2 years)

Infrastructure and Services						
Access by Public Transport						
Activity	Activity Identified Issue Solution Responsible Organization Limitations/Opportunities					
Ease of departure from Sarteneja	No formal bus stop in Sarteneja	Bus shelter for arriving and departing visitors, by pay phone and/or on Main Road near village entrance	STGA Village Council			

Recreational attract	Recreational attractions				
Activity	Identified Issue	Solution	Responsible Organization	Limitations/Opportunities	
Sailing	No agreements established between the tour organiser and sailing boat owners	Signing rent contracts and agreements with local boat captains willing to be available for tours	STGA	Currently few fishermen / boats available. Option may be to purchase a designated sailboat for tourism activities	
	Exaggerated financial expectations from the sailing boat owners	Meetings with local stakeholders explaining current tourism situation in Sarteneja	STGA	Start with boat owners with realistic expectations, and gradually extend	
	Few sailing boats are available during fishing season	Locate funding for purchasing a sailing boat for the association	STGA	Investigate grant funding opportunities for purchase and outfitting of sailing boat by STGA	
Snorkelling	STGA members reliant on boat owners to access snorkelling destinations	Locate funding for outboard engine for STGA skiff Agreements with skiff owners	STGA STGA	Investigate grant funding opportunities for purchase of professional snorkelling equipment	
Wildlife watching	STGA members reliant on boat owners to access water-based destinations	interested in participating and willing to be available for tours	STGA	Guide books and binoculars already available under STGA	

Recreational attractions				
Activity	Identified Issue	Solution	Responsible Organization	Limitations/Opportunities
Cycling	Few bicycles available for hire	Set up bicycle rental in SACD/STGA office or with local family Locate funding for purchase and maintenance of 4 bicycles	STGA	Bicycles need to be well maintained
	No designated cycling trails	Develop cycling routes and put up signs to direct visitors	STGA	Suitable trails would circle through farm roads and forest
Hiking	Forest trails uncleared and unmarked	Develop hiking routes and put up signs to direct visitors, interpretive materials / self-guided maps	STGA	Can be identical to the cycling routes
Fly fishing	Limited equipment available	Locate funding for purchase of more equipment	STGA	Some fly fishing equipment available for rent to STGA members
All	No tour itineraries are completed and available to inform visitors of opportunities	Completing itineraries, printing brochures and maps, making price lists	STGA	
	Seasonal availability of tour guides	Encourage more Sarteneja tour guides to become licensed	STGA	
	Few tour guides are able to conduct a terrestrial tour of Sarteneja	Organise training focused on tour guiding in Sarteneja and surroundings	STGA SACD Wildtracks	Bird identification, trees, medicinal plants, general wildlife identification

9.1.3 Activities under direct STGA Control - Long Term (2+ years)

Infrastructure and Services						
Water Access	Water Access					
No safety infrastructure for night	Reflectors should be installed on permanent buoys to	SACD	Port Authority			
traffic	mark entrance to Sarteneja for boat traffic arriving at	STGA				
	night					

Recreational atti	Recreational attractions				
Activity	Identified Issue	Solution	Responsible Organization	Limitations/Opportunities	
Fly fishing	Poor fishing practices	Develop best practices for sport fishing within Corozal Bay	STGA SACD	SACD enforcement	
Swimming, sunbathing	No sea front maintenance in operation	Community clean-up	STGA SACD		
Camping	No camp sites within the village	Investigate potential for establishing camping site within the community, possibly linked with homestay	STGA		
Diving	Few tour guides licensed for dive tours	Locate funding for running dive courses in Sarteneja	STGA Blue Ventures	Opportunity to get diving training - Simon Villanueva. Also potential through Blue Ventures	
	Few tour guides licensed for dive tours	Encourage licensed divers to get their tour guide license completed	STGA Blue Ventures		
	No dive equipment available	Locate funding to purchase dive equipment	STGA	Partner with Blue Ventures	
	No established use of Bacalar Chico Marine Reserve as a dive destination	Liaise with Bacalar Chico rangers and Green Reef to develop successful dive tours at Bacalar Chico	STGA	Tour will be expensive due to distance from Sarteneja Element of exclusivity – Bacalar Chico is not frequently used as a dive site due to distance from San Pedro	

Historic and Cultural Resources			
Identified Issue / Opportunity	Solution	Responsible Organization	Limitations / Opportunities
Majority of Maya sites in and around Sarteneja	Identify and map potential Maya sites	Property owners	Include cenote and cave
not yet identified or excavated	within the Sarteneja area for suitable	Institute of	
	for tourism	Archaeology	
	Develop signed agreement between	STGA	Financial incentives for land
	land owners and STGA / tour guides for		owners (small, but there)
	access to sites		Include museum in tour (GHCN)
	Develop information on identified Maya	STGA	Assistance from Institute of
	sites and train local tour guides in use	SACD	Archaeology
	Develop infrastructure – trail system	STGA	
	linking sites, signs etc.	SACD	
	Investigate potential to link with IoA	IoA	
	and US or UK university for long term	Wildtracks	
	project based in Sarteneja		
	Locate funding for site and trail	STGA	
	maintenance / protection for	GHCN	
	archaeological sites		
Accessibility to archaeological sites	Establish agreements with land owners	STGA	
	about access for tourists to Maya		
	structures		

9.2 Activities Outside of STGA Control

9.2.1 Activities Outside of STGA Control - Short Term (1-2 years)

Protected Areas				
Identified Issue / Opportunity	Solution	Responsible Organization	Limitations / Opportunities	
Bacalar Chico Marine Reserve / Nat	ional Park			
Lack of engagement of Sarteneja	Increase awareness of Bacalar Chico Marine	STGA	Sarteneja has been identified as a	
as a stakeholder community	Reserve in Sarteneja	Green Reef	stakeholder community of BCMR	
		Blue Ventures		
Increase accessibility for tour	Complete Best Practices booklet	STGA	SACD initiative started under	
guides		Wildtracks	COMPACT funding	
	STGA to train other tour guides in	STGA	STGA certified	
	conducting Bacalar Chico tour,		'Apprenticeship'	
	incorporating Best Practices			
	Improved communication between Bacalar	Bacalar Chico / FD	Bacalar Chico now has cell phone	
	Chico and STGA / SACD	Green Reef	coverage	
		STGA, SACD		
	Investigate possibilities of incorporating	STGA	Beach camping overnight	
	more activities at Bacalar Chico		Diving	
Expensive tour	Develop and market package for groups of	STGA		
	four or more			

Protected Areas			
Identified Issue / Opportunity	Solution	Responsible Organization	Limitations / Opportunities
Shipstern Nature Reserve			
Lack of awareness of SNR in Sarteneja	Increase knowledge and awareness of SNR in Sarteneja	SNR	Meetings, leaflets, pamphlets, school activities, open day
	Conduct activities in the schools in Sarteneja	SNR	
	Develop a communication mechanism between SNR and Sarteneja	SACD SNR	Local Advisory Committee?
	Agreement for collaboration between SNR and STGA	SNR STGA	
	Workshop for Sarteneja guides on guiding at SNR	SNR STGA	Using SNR and regulations
	Promotion of SNR as a tourism destination in Sarteneja and nationally	SNR STGA	
	Increased effectiveness of surveillance and enforcement	SNR Forest Department	Chunox – illegal extraction of timber
Fireburn Reserve		'	
Forest badly damaged by hurricane	No solution – natural regeneration		
Limited knowledge by tour guides	Increase knowledge of Fireburn as a tourism destination	STGA Wildtracks	
	Promotion of Fireburn / Kakantulix tour - leaflets	Wildtracks	Joint with SNR? Include Kakantulix in tour
Poor access	Regrade road to Cowpen		Ministry of Public Works
	Encourage use of Fireburn community for ferry service	Wildtracks STGA	
	Access by canoe / kayak through lagoon	STGA	Collaboration with Kate and Adam

Protected Areas

Identified Issue / Opportunity	Solution	Responsible Organization	Limitations / Opportunities			
Fireburn Reserve	Fireburn Reserve					
Limited employment opportunities	Encourage sale of soft drinks / chips at	Wildtracks				
in Fireburn	Fireburn	STGA				
	Promote integration of local guides from	Wildtracks	Cieto, Edwin, Godwin			
	Fireburn for Corozalito tour	STGA				
	Increase conservation awareness in	SACD				
	Fireburn Community school					
	Maintain community engagement in	Wildtracks	Kate and Adam Lloyd			
	conservation activities and protection					

Historic and Cultural Resources				
Identified Issue / Opportunity	Solution	Responsible Organization	Limitations / Opportunities	
Kakantulix Archaeological Reserve	Finalise SI for Archaeological Site	IoA	Survey already completed; Waiting	
		Wildtracks	for final survey map	
	Develop signed agreement between IoA,	IoA		
	Wildtracks, Fireburn and STGA for co-	Wildtracks		
	management	Fireburn		
		STGA		
	Develop information on site and train local	IoA	Ask for assistance from IoA	
	tour guides in use	Wildtracks	Structures already mapped	
		STGA	(Wildtracks)	
	Investigate potential to link with IoA and US	IoA	Tie in with Homestay Programme	
	or UK university for long term project based	Wildtracks		
	on Kakantulix			
	Develop infrastructure – trail system linking	Wildtracks	Possibility of help from groups such	
	sites, signs etc.	STGA	as Trekforce / Blue Ventures	
	Locate funding for site and trail	Wildtracks		
	maintenance / surveillance /enforcement	STGA		

9.2.2 Activities Outside of STGA Control - Medium Term (2-5 years)

Don'd Assess			
Road Access			
Signs needed to direct people to Sarteneja	Lobby for installation of signs in Orange Walk, at Police Station and bridge, at bypass roundabouts, and at major turnings from Corozal	STGA	Through Ministry of Tourism?
Air Access			
No facilities at air strip for arriving passengers	Construct shelter for people waiting at airstrip	Village Council	Possibility of seeking co-funds from Tropic Air?
	Install public phone with list of useful numbers (taxi, hotels)	Village Council BTL	Possibility of seeking co-funds from Tropic Air?

Natural Resources			
Identified Issue / Opportunity	Solution	Responsible Organization	Limitations / Opportunities
Poor solid waste disposal	Assess what measures still need to be taken	STGA	
	to facilitate better use of new dump site and	Village Leaders	
	develop action steps, and implement		

Historic and Cultural Resources

Identified Issue / Opportunity	Solution	Responsible Organization	Limitations / Opportunities
Accessibility to archaeological sites	Investigate possibility of improving		Approach Ministry of Works /
	accessibility to identified Maya sites of		Institute of Archaeology for
	interest		assistance
	Establish a mechanism to provide licensing		
	for Maya structures		
Maya Artefacts	Provide an opportunity for people to	IoA	
	register their artefacts with the IoA	GHCN	
	Provide support for the GHCN museum	GHCN	
	initiative		
Museum	Inform the community about the possibility	GHCN	
	to license and register the artefacts through	IoA	
	local cable television		
	Establish Museum building tenure	GHCN	Village Council? Catholic Church?
		IoA	
	Cooperate with the community to gather	STGA	
	information about the history and traditions	GHCN	
	of the village	IoA	

9.2.3 Activities Outside of STGA Control - Long Term (5+ years)

Community Spirit				
Identified Issue / Opportunity	Solution	Responsible Organization	Limitations / Opportunities	
Gangs – and associated drug, underage drinking, and teenage pregnancy issues	Engage youth leaders in community / conservation activities	SACD	SACD Volunteer rangers Volunteer and Internship Programme, Blue Ventures, Scouts	
	Sporting activities	Sports Committee		
	Supporting youth activity programmes – youth cadets, drum band etc.	Police Schools		
	Campaign for drug-free youths			
	Workshops to educate youths – drugs, underage drinking, teenage pregnancy			
	Enforcement of laws on drug use, especially in youth sector	Police		
	Memorandum of agreement between	Police, Shop owners		
	shop and bar owners for enforcement of underage alcohol purchase laws	Bar owners		
Loud music from bars	Request bar owners to reduce volume after 9:00pm	STGA		
Loud music / sermons from churches	Request churches to reduce volume of speakers	STGA		
Drunks	Request bar owners to take responsibility for drunks	STGA		
Children asking for money from	Talk to the parents of identified children	STGA		
tourists	Implement activities to keep these children occupied	SACD	Conservation related activities	
Cooperation of local	Develop mechanism to distribute			
organisations and establishments	necessary information within the local tourism service providers	STGA		
	Develop mechanisms to unify all the tourism service providers	STGA	Business sector interested in forming committee under SACD	

Infrastructure and Services			
Road Access			
Community lobbying towards fixing the road and regular maintenance	Community petition to Village Council, Area Representatives and Government, through Ministry of Tourism, with sustained lobbying	STGA SACD	Limited Government funding and non- prioritization of Sarteneja road. Paving considered optimal but unrealistic
Streets need to be better maintained – more frequent grading	Community petition to Government, through Ministry of Tourism, with sustained lobbying	STGA SACD	Limited Government funding and non- prioritization of Sarteneja road
Water Access Wharf inaccessible to Corozal-San Pedro ferry during strong northers	Extend pier into deeper water – discuss with Thunderbolt owners for best design. Include tires or similar in design to protect boats when docking	Sarteneja Village Council Political reps Thunderbolt	Funding may be available through tourism development funding or donations from Fishing Cooperative
Wharf design doesn't allow for sufficient through-flow of water, resulting in mud along shoreline	Install culverts in last third of pier, and in any extension	Sarteneja Village Council Political reps	Funding may be available through tourism development funding or donations from Fishing Cooperative
Possibility of direct access from Chetumal – but no customs / immigration in Sarteneja	Install Customs and Immigration officers in Sarteneja, with associated infrastructure	Sarteneja Village Council Political reps	Opportunity for local investment in ferry link with Chetumal
Air Access			
Interest in private aircraft flying directly to Sarteneja when entering country	Install Customs and Immigration officers in Sarteneja, with associated infrastructure	Sarteneja Village Council Political reps	Also required for boat access from Chetumal
Access by Public Transport			
Bus only runs from Sarteneja in the morning	Encourage implementation of a service running from Orange Walk to Sarteneja in the morning, and returning from Sarteneja in the afternoon	??	Minibus from Orange Walk?

All Attractions			
Identified Issue	Solution	Responsible Organization	Limitations / Opportunities
Cooperation	Develop cooperation within the	STGA	
	community, and with adjacent towns	SACD	
	and tourism organisations in Belize		

9.3 SACD Controlled Activities

Sarteneja Alliance for Conservation and Development - Activities				
Identified Issue / Opportunity	Solution	Responsible Organization	Limitations / Opportunities	
Clearance of mangrove and beach vegetation	Baseline mapping of current human impact on coastline of Corozal Bay Wildlife Sanctuary	SACD Wildtracks WWF (Tim Smith)	Need to maintain surveillance of coastline clearance through SACD patrols – and enforce when necessary	
	Increase community knowledge of role of mangroves and legal protection through leaflets and posters	SACD	Produced in collaboration with Forest Department	
	Dialogue with land developers to promote protection of coastal mangrove	SACD		
	Enforcement of mangrove regulations	Forest Department SACD		
	Distribution of WCS/Fisheries Dept. Recommended Best Practices for the Cayes of Belize to coastal land developers	SACD	Ask WCS for copies	
Fires (hunting and milpa fires)	Posters / leaflet at start of each dry season to provide awareness of effects of fire on natural resources, and best practices	SACD	Particularly on mangrove savanna	
Disturbance of nesting bird colonies	Identify nesting bird colonies within Corozal Bay Wildlife Sanctuary	SACD	See Corozal Bay Wildlife Sanctuary Management Plan	
	Build knowledge and pride in Sarteneja of nesting bird colonies through school activities, posters etc.	SACD	Through SACD Education programme	
	Use EIA /ECP legislation and inform DoE if development activities have potential to disturb nesting bird colonies	SACD		
	Education in schools of value of wildlife to Sarteneja as a tourism resource	SACD SNR	VIP	

Identified Issue / Opportunity	Solution	Responsible Organization	Limitations / Opportunities
Protected Species	Enforce no hunting regulations for protected	SNR	
	species and identified no hunting areas	SACD	
Fishing Nets in Corozal Bay	Strengthen surveillance activities in Corozal	SACD	Surveillance and enforcement
	Bay Wildlife Sanctuary		activities have started, with
			participation from local fishermer
	Co-management agreement signed between	SACD	Currently being revised
	SACD and Forest Department	Forest Department	
	Locate continued funding for surveillance	SACD	PACT Project / USFWS
	activities		
	Liaise with Forest and Fisheries Departments	SACD	Also Coastguard, Police and SNR
	for Enforcement	Forest Department	
		Fisheries Department	
	Continue policy of local fishermen	SACD	PACT providing daily stipend to
	participating on rotation as rangers	Forest Department	participating fishermen (2009)
		Fisheries Department	Locate funding to continue this
	Train and equip local fishermen for role as	SACD	Special Constable training (3
	rangers	Forest Department	already trained)
		Fisheries Department	Fisheries Officer Training
	Investigate possibility of involvement of	SACD	SACD Volunteer and Internship
	youths at risk in surveillance activities		Programme, under FoWH
	Workshop with local Sarteneja fishermen to	SACD	See CBWS Management Plan
	develop interim memorandum of agreement	Forest Department	To include integral data gathering
	for continued traditional fishing,	Fisheries Department	component, and identification of
		Wildtracks	no-fishing nursery areas
	Workshops with traditional fishermen from	SACD	Concentrate on Sarteneja first to
	other stakeholder communities		develop a workable model
	Investigate feasibility of 'swop programme'	SACD	Would need to locate grant
	for fish traps – providing traditional	Forest Department	funding
	fishermen with larger mesh size wire for fish	Fisheries Department	
	traps in exchange for current mesh		

Sarteneja Alliance for Conservation and Development - Activities				
Identified Issue / Opportunity	Solution	Responsible Organization	Limitations / Opportunities	
	Develop Sustainable Traditional Fisheries Plan, with baseline information	SACD Forest Department Fisheries Department	Needs an expert consultant in sustainable traditional fisheries. Baseline information being developed	
	Identify those lagoons considered as important nursery areas by local traditional fishermen, erect no-fishing signs in these areas, and include these in surveillance programme	SACD Local fishermen	Locate grant funding for signs Spanish Point	
	Ensure all fly fishing tour guides are trained to best practices standards	STGA		
	Develop regulations for fly fishing within Corozal Bay Wildlife Sanctuary, and conduct surveillance and enforcement activities within CBWS	SACD STGA Village Leaders Fisheries / Forest Depts.		

Natural Resources			
Water pollution	Liaise with Ecosur and Fisheries Department for development and implementation of water quality monitoring programme	SACD Wildtracks	Ecosur Fisheries Department Wildtracks investigating similar monitoring programmes in the U
	Trace sources of water pollution – Mexico, Rio Hondo, New River		In collaboration with Ecosur
Threat of manatee /dolphin collisions with increased boat activity	Erect and maintain no-wake signs in areas of high manatee activity	SACD	Signs already donated by Wildlife Trust and Save the Manatee Fund Areas of high manatee activity already identified by local fishermen and first signs erected
	Posters to increase awareness of Corozal Bay Wildlife Sanctuary in Sarteneja, and laws relating to manatees	SACD	In collaboration with National Manatee Rehabilitation Centre

Sarteneja Alliance for Conservation and Development - Activities				
Protected Areas				
Identified Issue / Opportunity	Solution	Responsible Organization	Limitations / Opportunities	
Corozal Bay Wildlife Sanctuary				
Illegal fishing	Develop sustainable fisheries plan with local fishermen, Fisheries Department and Forest Department Surveillance and Enforcement of regulations	SACD Fisheries Department Forest Department	PACT Trust grant being developed to address this	
	Integration of local fishermen into surveillance and enforcement activities	SACD		
Poor practices in Sport Fishing	Meeting with sport fishing stakeholders to establish guidelines for Corozal Bay Wildlife Sanctuary	SACD	San Pedro, Corozal and Sarteneja sport fishermen	
Poor development practices in coastal zone	Development of human impact baseline for coast for future monitoring Engagement of coastal developers towards Best Practices for coastal development	SACD Wildtracks SACD	PACT Trust grant being developed to address this. Blue Ventures Mangrove clearance issues Water quality and water quality monitoring	
	Education in schools re. importance of mangroves	SACD	PACT Trust grant being developed to address this	
Pollution in Corozal Bay Wildlife Sanctuary	Increase awareness of fishermen of toxicity of paint, and provision of garbage cans for empty paint cans	SACD SFA		
	Work with GoB / Ecosur towards a solution for Chetumal waste issues	SACD		
	Identify sources of human impacts and river-borne pollution entering Corozal Bay Wildlife Sanctuary and develop action steps to mitigate	SACD	In collaboration with Forest and Fisheries Depts. and Ecosur Blue Ventures	
	Implement Action Steps to mitigate pollution from river-borne sources	SACD	In collaboration with Forest and Fisheries Depts. and Ecosur	

Sarteneja Alliance for Conservation and Development - Activities			
Protected Areas			
Identified Issue / Opportunity	Solution	Responsible Organization	Limitations / Opportunities
Corozal Bay Wildlife Sanctuary			
Lack of active management	Co-management agreement between SACD and Forest Department	SACD Forest Department	Fisheries Dept. support
	Funding for co-management activities	SACD	Funding agencies, Current economic climate
Illegal fishing	Meeting with local traditional fishermen to outline strategies for sustainable fishing and zoning options	SACD Wildtracks Local Fishermen	PACT Trust grant being developed to address this