ANTIGUA AND BARBUDA: ST. JOHN’S URBAN PROFILE
TABLE OF CONTENTS

FOREWORDS 5
EXECUTIVE SUMMARY 6
BACKGROUND 7
GOVERNANCE 12
SLUMS AND SHELTER 14
GENDER AND HIV/AIDS, SAFETY AND SECURITY 17
DISASTER MANAGEMENT, CLIMATE CHANGE AND THE ENVIRONMENT 21
CULTURAL HERITAGE 25
BASIC URBAN SERVICES 28
LAND 30
PROJECT PROPOSALS
ST. JOHN’S CITY 33
DISASTER MANAGEMENT, CLIMATE CHANGE AND THE ENVIRONMENT 34
BASIC URBAN SERVICES 28
LAND 30
According to research published in UN-HABITAT’s 1 flagship report, The State of the World’s Cities 2010-2011, all developing regions, including the African, Caribbean and Pacific states, will have more people living in urban than rural areas by the year 2030. With half the world’s population already living in urban areas, the challenges we face in the battle against urban poverty, our quest for cities without slums, for cities where women feel safer, for inclusive cities with power, water and sanitation, and affordable transport, for better planned cities, and for cleaner, greener cities is daunting.

But as this series shows, there are many interesting solutions and best practices to which we can turn. After all, the figures tell us that during the decade 2000 to 2010, a total of 227 million people in the developing countries moved out of slum conditions. In other words, governments, cities and partner institutions have collectively exceeded the slum target of the Millennium Development Goals twice over and ten years ahead of the agreed 2020 deadline.

Asia and the Pacific stood at the forefront of successful efforts to reach the slum target, with all governments in the region improving the lives of an estimated 172 million slum dwellers between 2000 and 2010.

In sub-Saharan Africa though, the total proportion of the urban population living in slums has decreased by only 5 per cent (or 17 million people). Ghana, Senegal, Uganda, and Rwanda were the most successful countries in the sub-region, reducing the proportions of slum dwellers by over one-fifth in the last decade.

Some 13 per cent of the progress made towards the global slum target occurred in Latin America and the Caribbean, where an estimated 30 million people have moved out of slum conditions since the year 2000.

Yet, UN-HABITAT estimates confirm that the progress made on the slum target has not been sufficient to counter the demographic expansion in informal settlements in the developing world. In this sense, efforts to reduce the numbers of slum dwellers are neither satisfactory nor adequate.

As part of our drive to address this crisis, UN-HABITAT is working with the European Commission and the Brussels-based Secretariat of the African, Caribbean and Pacific (ACP) Group to support sustainable urban development. Given the urgent and diverse needs, we found it necessary to develop a tool for rapid assessment and strategic planning to guide immediate, mid and long-term interventions. And here we have it in the form of this series of publications.

The Participatory Slum Upgrading Programme is based on the policy dialogue between UN-HABITAT, the ACP Secretariat and the European Commission which dates back to the year 2002. When the three parties met at UN-HABITAT headquarters in June 2009, more than 200 delegates from over 50 countries approved a resounding call on the international community to pay greater attention to these urbanization matters, and to extend the slum upgrading programme to all countries in the ACP Group.

It is worth recalling here how grateful we are that the European Commission’s 9th European Development Fund for ACP countries provided EUR 4 million (USD 5.7 million at June 2011 rates) to enable UN-HABITAT to conduct the programme which now serves 59 cities in 23 African countries, and more than 20 cities in six Pacific, and four Caribbean countries.

Indeed, since its inception in 2008, the slum upgrading programme has achieved the confidence of partners at city and country level in Africa, the Caribbean and in the Pacific. It is making a major contribution aimed at helping in urban poverty reduction efforts, as each report in this series shows."

I wish to express my gratitude to the European Commission and the ACP Secretariat for their commitment to this slum upgrading programme. I have every confidence that the results outlined in this profile, and others, will serve to guide the development of responses for capacity building and investments in the urban sector.

Further, I would like to thank each Country Team for their continued support to this process which is essential for the successful implementation of the Participatory Slum Upgrading Programme.

Dr. Joan Clos
Executive Director, UN-HABITAT
EXECUTIVE SUMMARY

OVERVIEW

“Slums in many cities are no longer just marginalized neighbourhoods housing a relatively small proportion of the urban population; in many cities, they are the dominant type of human settlement, carving their way into the fabric of modern-day cities, and making their mark as a distinct category of human settlement that now characterizes so many cities in the developing world.” - UN-HABITAT

With over half the world population living in cities, it is estimated that one in every three urban dwellers now lives in a slum. The total slum population today exceeds one billion.

The daunting daily challenges poverty-stricken slum dwellers face range from a lack of basic services and infrastructure such as water and sanitation, to a lack of security of tenure and job opportunities.

A large number of them live in the African, Caribbean, and Pacific regions, which is why the European Community, through its agency EuropeAid and the Intra-ACP Fund, provided 4 million Euros for UN-HABITAT’s Participatory Slum Upgrading Programme.

One of the most important impacts of the programme is that it brings together a wide range of stakeholders and urban actors. Local and national government, private and informal sector, civil society, non-governmental organization, academia, and research institute representatives join bilateral and multilateral partners to discuss the major challenges and how best to address them.

Such collaboration is advantageous, especially the involvement of target groups, who often know best how to improve living conditions. Innovative planning, programme formulation, and resource mobilization will reinforce partners as they meet the future demands of our growing cities.

ST. JOHN’S AND ITS CRITICAL ISSUES

OVERVIEW OF ST. JOHN’S CITY

St. John’s, situated in Antigua, is the capital of the three-island nation of Antigua, Barbuda and Redonda. St. John’s City has a population of about 25,000 - 32% of the country’s total population. The next largest urban area in the country, All Saints Village, has a population of about 4,000; St. John’s is therefore a primate city. A primate city is defined as being “at least twice as large as the next largest city and more than twice as significant” [Mark Jefferson in 1939]. A primate city is number one in its country in most aspects, like politics, economy, media, culture, and education.

St. John’s, at the head of a deeply indented harbour, is not only the residential capital of the country, but the commercial, entertainment and administrative centre as well. Tourism is important, and the harbour has been dredged to accommodate deep-draft (35 feet) cargo and cruise vessels. Because of the city’s British colonial past, it is blessed with a number of historic buildings and heritage sites which are important for heritage tourism, especially in light of the fact that most tourist cruise ships that visit the country dock in St. John’s Harbour and the tourists disembark directly into downtown St. John’s.

Though St. John’s may be one of the most developed and cosmopolitan municipalities in the Lesser Antilles, it has its share of problems and issues.

A BRIEF HISTORY OF ST. JOHN’S CITY

In the year 1666, only a small group of houses existed along the Cove, the area which would later be called St. John’s Harbour. The harbour was large, and though shallow, it was ideal for loading the English colony’s exports into small boats, which were sailed out to merchant ships anchored offshore. The main produce then was sugar, tobacco, indigo, and ginger. In 1667, the town of St. John’s was less important than Falmouth Town, as the latter possessed Antigua’s first church and courthouse and was in close proximity to the important Nelson’s Dockyard Naval facilities. However, by 1689, St. John’s had grown to be the same size as Falmouth, and by 1701 it became the island’s premier trading town seconded by Parham Town. This may have come about as sugar was developed to become the colony’s dominant export and St. John’s was more accessible than other settlements to the central sugar growing plains. Also, the largely calm St. John’s Harbour, being situated on the leeward side of the island, was more feasible for anchoring ships; Falmouth and Parham Harbours were further windward.
In 1702, St. John’s was laid out with cross (grid) streets, the public market was established and many wharfs were constructed. The town became a city in 1842 and covered an area of about 150 acres (less than a quarter square mile). The first St. John’s Anglican Church was built in 1681. The present St. John’s Anglican Cathedral was completed in 1845 near the earlier site, and today is a salient landmark and national icon as it dominates the city’s skyline with its immense size and height and serves as a major tourist attraction.

Today, the city of St. John’s sprawls across the coast of St. John’s Harbour. It has grown considerably since the early 18th century, but particularly during the past 40 years. It now covers an area of well over four square miles and embraces villages and communities that were once considered rural. The city houses roughly a third of the total population of the country. Its central business district (CBD), however, is more or less confined to limits of the original 18th century town (North Street up to Independence Avenue which was formerly East Street, across to South Street, and bordered on the west by the St. John’s Harbour shoreline). While a great deal of rebuilding and new construction has taken place over the years, much of the old town still remains, with plenty of wooden and stone buildings having colonial architecture and streets with their original layout.

St. John’s has been the administrative centre of Antigua and Barbuda since the islands were first colonized in 1632, and it became the seat of government when the nation achieved independence in 1981.
BACKGROUND

INTRODUCTION

Urban Profiling

The St. John’s Urban Profiling consists of an accelerated, action-oriented assessment of urban conditions, focusing on priority needs, capacity gaps, and existing institutional responses at local and national levels. The purpose of the study is to develop urban poverty reduction policies at local, national, and regional levels, through an assessment of needs and response mechanisms, and as a contribution to the wider-ranging implementation of the Millennium Development Goals. The study is based on analysis of existing data and a series of interviews with all relevant urban stakeholders, including local communities and institutions, civil society, the private sector, development partners, academics, and others. The consultation typically results in a collective agreement on priorities and their development into proposed capacity-building and other projects that are all aimed at urban poverty reduction. The urban profiling is being implemented in 30 ACP1 countries, offering an opportunity for comparative regional analysis. Once completed, this series of studies will provide a framework for central and local authorities and urban actors, as well as donors and external support agencies.

METHODOLOGY

The Participatory Slum Upgrading Programme consists of three phases:

Phase one consists of the rapid profiling of urban conditions at national and local levels. The capital city, a medium-sized city, and a small town are selected and studied to provide a representative sample in each country. The analysis focuses on seven themes; governance; slums and shelter; safety and security, gender and HIV/AIDS; disaster management, climate change and the environment; cultural heritage; basic urban services; and land. Information is collected through standard interviews and discussions with institutions and key informants, in order to assess the strengths, weaknesses, opportunities, and threats (SWOT) of the national and local urban set-ups. The findings are presented and refined during city and national consultation workshops and consensus is reached regarding priority interventions. National and city reports synthesise the information collected and outline ways forward to reduce urban poverty through holistic approaches.

Phase two builds on the priorities identified through pre-feasibility studies and develops detailed capacity-building and capital investment projects.

Phase three implements the projects developed during the two earlier phases, with an emphasis on skills development, institutional strengthening, and replication.

This report presents the outcomes of Phase One at the local level in St. John’s.

URBAN PROFILING IN ST. JOHN’S

The urban profiling in St. John’s is one of two similar exercises conducted in Antigua and Barbuda; the other urban profiling centres are All Saints.

Representatives from St. John’s who included local and national government, private and informal sector representatives as well as civil society and non-governmental organizations, academia, research institutes, and bilateral and multilateral partners elaborated together where major challenges are and how best to address them. The aim was to develop options for formal inter-agency collaboration in order to create a coordination body integrating a wide range of urban stakeholders in a single response mechanism.

REPORT STRUCTURE

This report consists of:

1. a general background of the urban sector in St. John’s, based on the findings of the St. John’s City Assessment Report, a desk study, interviews, and a city consultation. The background includes data on administration, urban planning, the economy, the informal and private sector, urban poverty, infrastructure, water, sanitation, public transport, street lighting, energy, health, and education;

2. a synthetic assessment of the following seven main thematic areas: governance; slums and shelter; safety and security, gender and HIV/AIDS; disaster management, climate change and the environment; cultural heritage; basic urban services; and land. In terms of the institutional set-up, regulatory framework, resource mobilization, and performance; this second section also highlights agreed priorities and includes a list of identified projects;

3. a SWOT2 analysis and an outline of priority project proposals for each theme. The proposals include beneficiaries, partners, estimated costs, objectives, activities, and outputs.

1 ACP - African, Caribbean and Pacific Group of States

2 SWOT - Strengths, Weaknesses, Opportunities, and Threats
TOPOGRAPHY OF ST. JOHN’S

Much of St. John’s is situated on a wide and fairly gentle slope that dips from east to west to meet St. John’s Harbour. The area is extensive enough to have allowed continued built expansion and urbanization over the centuries.

The area is fortunate, as well, to be bordered by fairly flat or gently undulating land that has enabled access by a number of main roads from the countryside, such as; All Saints Road, Factory Road, Old Parham Road, Frias Hill Road, Fort Road, Bendals Road, Golden Grove Main Road, and Five Islands Road linking to Hatton Road.

The area’s fairly gentle gradient has allowed good rain and waste water runoff across much of the city (some areas presently flood during rains, due to poorly designed and maintained street drains) while facilitating ease of building and road construction and easy movement of pedestrians and powered transport (horse and cart in times past and automobiles today). The land’s gentle uniform slope, together with its high concentration of clayey loam soil, has caused the water table to be high. This high water table has produced a number of natural springs and enabled the development of wells in and around the city, which served as a valuable source of water for residents in colonial days. The high water table however, has the drawback of making septic soak-a-ways impractical in some parts of the city, leading to improperly treated sewage effluent being discharged directly into drains and to residents resorting to using the “Night Soil System”, where latrines are fitted with a tub that is periodically collected by a trailer and dumped elsewhere.

<table>
<thead>
<tr>
<th>Area of slope</th>
<th>Gradient (Expressed as a ratio)</th>
<th>Remark</th>
</tr>
</thead>
<tbody>
<tr>
<td>From the Antigua Grammar School west to St. John’s Harbour</td>
<td>1:58.2</td>
<td>Gentle gradient</td>
</tr>
<tr>
<td>From Her Majesty’s Prison west to St. John’s Harbour</td>
<td>1:44.6</td>
<td>Gentle gradient</td>
</tr>
<tr>
<td>From the Country Pond west to St. John’s Harbour</td>
<td>1:39.7</td>
<td>Gentle gradient</td>
</tr>
<tr>
<td>From Independence Avenue west along St. Mary’s Street to St. John’s Harbour</td>
<td>1:57.5</td>
<td>Gentle gradient</td>
</tr>
<tr>
<td>From the Cenotaph west along High Street to St. John’s Harbour</td>
<td>1:47.9</td>
<td>Gentle gradient</td>
</tr>
<tr>
<td>From the Botanical Gardens west to St. John’s Harbour</td>
<td>1:34</td>
<td>Hill Top, about 100 feet above sea level. Fairly gentle gradient</td>
</tr>
<tr>
<td>From the Nurses’ Home at Holberton Hospital west to St. John’s Harbour</td>
<td>1:23.8</td>
<td>Hill Top, about 100 feet above sea level. Fairly gentle gradient</td>
</tr>
<tr>
<td>From the St. John’s Anglican Cathedral westward to where Church Street meets St. John’s Harbour</td>
<td>1:18.8</td>
<td>Hill Top, about 100 feet above sea level. Fairly gentle gradient</td>
</tr>
<tr>
<td>From the Premier’s Residence west to St. John’s Harbour</td>
<td>1:25.7</td>
<td>Hill Top, about 100 feet above sea level. Fairly gentle gradient</td>
</tr>
<tr>
<td>From Michael’s Mount (before part of the top was graded to build the Mount St. John’s Medical Centre) west to St. John’s Harbour</td>
<td>1:13.5</td>
<td>Hill Top, about 100 feet above sea level. Fairly gentle gradient</td>
</tr>
<tr>
<td>From the Nurses’ Home at Holberton Hospital west to St. John’s Harbour</td>
<td>1:23.8</td>
<td>Hill Top, about 100 feet above sea level. Fairly gentle gradient</td>
</tr>
<tr>
<td>From new Parliament Building west to St. John’s Harbour</td>
<td>1:23.1</td>
<td>Hill Top, about 100 feet above sea level. Fairly gentle gradient</td>
</tr>
</tbody>
</table>

The moderately uniform slope is punctuated by a few distinct hill tops (some are mentioned in the Table above) that have been strategically utilized for their views, natural cooling and defensive purposes in the past. Two such hills that have had defensive forts built on them during the colonial era are Rat Island Hill and Goat Hill.

Near the coastline of St. John’s Harbour, the coastal plain becomes so flat and low-lying that in many parts it is prone to flooding during heavy prolonged rains. Such areas include: parts of the Point Community, Lower North Street, Green Bay and Perry Bay, Lower Market Street, parts of Villa Area, and parts of Yorks.

CLIMATE

The typical climate for St. John’s, and for Antigua and Barbuda in general, is Tropical Maritime. This climate is characterized by warm temperatures year-round, moderated by the gentle Northeast Trade Winds that blow almost constantly from across the Atlantic Ocean. There is little seasonal temperature variation, though the air gets a bit cooler in the winter months of the northern hemisphere. Rainfall is low relative to the more mountainous Caribbean islands, and the average annual rainfall is 1,150 millimetres. Periodical droughts tend to occur roughly every seven years.

DEMOGRAPHICS OF ST. JOHN’S

The majority of the population of St. John’s reflects that of the rest of Antigua: people of African descent/Black (91 percent), mixed ancestry (4 percent), Caucasian/White (2 percent), Syrian/Lebanese (1 percent), East Indian (1 percent), and other (1 percent)³.

St. John’s has a population of about 25,000 – 30,000, roughly 32 percent of the country’s total. The 2001 Census of Population and Housing for Antigua and Barbuda puts St. John’s population at 24,451, and the country’s population as 76,886. The Census projected the country’s population by 2010 to grow to 90,801; and if the city’s population was to remain at 32 percent of the national, then it could be projected to have increased to 29,056 by 2010.

ECONOMIC ACTIVITIES IN ST. JOHN’S

St. John’s is well known for its various stores, supermarkets, shopping malls as well as boutiques that sell designer jewellery and haute-couture clothing. There are also many independent, locally-run establishments, selling a variety of fashions.

St. John’s attracts tourists due to its many exclusive resorts and its cruise ships which dock in its harbor at Heritage Quay and Redcliffe Quay several times a week. Tourist activity in St. John’s is concentrated in the two harbour front complexes:

1. Heritage Quay is a two-story shopping centre that is a favourite with cruise ship passengers who shop for duty-free, designer and locally made products. The elegantly designed complex has over 50 diverse air conditioned shops, as well as a casino, numerous restaurants and an attractive hotel overlooking the harbour. The Quay is also popular for its local entertainers and festive atmosphere. The uniqueness of Heritage Quay is its Finger Pier, which allows berthing of two or more large cruise ships simultaneously. This gives the cruise ship passengers the luxury of disembarking from the ship into duty free shopping. The pier is also equipped with the necessary utilities such as water, telephone and electricity.

2. Redcliffe Quay is more rustic and historic, where shops, restaurants and galleries occupy restored stone buildings and wooden huts. The atmosphere is more laid-back and intimate. There are also many colourful vendors in the area selling batik pareos, T-shirts, woven and wooden products, paintings, and

<table>
<thead>
<tr>
<th>Parish</th>
<th>Total</th>
<th>Male</th>
<th>Female</th>
</tr>
</thead>
<tbody>
<tr>
<td>St. John’s</td>
<td>24,451</td>
<td>11,400</td>
<td>13,051</td>
</tr>
<tr>
<td>St. John’s Rural</td>
<td>20,895</td>
<td>9,754</td>
<td>11,141</td>
</tr>
<tr>
<td>St. George’s</td>
<td>6,673</td>
<td>3,166</td>
<td>3,507</td>
</tr>
<tr>
<td>St. Peter’s</td>
<td>5,439</td>
<td>2,595</td>
<td>2,844</td>
</tr>
<tr>
<td>St. Phillip’s</td>
<td>3,462</td>
<td>1,643</td>
<td>1,819</td>
</tr>
<tr>
<td>St. Paul’s</td>
<td>7,848</td>
<td>3,652</td>
<td>4,196</td>
</tr>
<tr>
<td>St. Mary’s</td>
<td>6,793</td>
<td>3,212</td>
<td>3,581</td>
</tr>
<tr>
<td>Barbuda</td>
<td>1,325</td>
<td>687</td>
<td>638</td>
</tr>
</tbody>
</table>

Source: Antigua and Barbuda 2001 Census of Population and Housing.
jewellery. There is a large finger pier next to Redcliffe Quay that berths two or more tourist ships.

The St. John’s Development Corporation (SJDC) (the statutory body charged with developing and managing the city) in conjunction with the Wings Travel Agency, has launched a tour of St. John’s. The tour which was launched on December 1, 2005 during the annual Tourism Blast Off activities, has exposed visitors to the areas of the city which are of historic value as well as introduced them to the traditions and ways of life of the local people.

The Museum of Antigua and Barbuda in St John’s displays a collection of items on the island’s history, geology and culture. Further, tourists are only a walking distance from some of the spectacular and important historic buildings and sites, including: St. John’s Anglican Cathedral, Ebenezer Methodist Church, The Cenotaph, Prince Klass Memorial, The Country Pond, Rat Island Citadel, Government House, Westerby Memorial, V.C. Bird Memorial and V.C. Bird Statue, St. John’s Court House (now used as the Museum of Antigua and Barbuda), and the National Archives which house the “Codrington Papers” and other important historical documents and records.

The investment banking industry has a strong presence in the city. Many major world financial institutions have offices in St. John’s.

There are fruits and vegetables, meat, fish, and craft markets on the southwestern edge of the city where fresh produce, meats and fresh fish, as well as crafts and souvenir items are sold daily.

The Antigua Rum Distillery is located near the Rat Island Citadel and is the only rum distillery on the island. Annual production yields more than 180,000 gallons of the famous bottled Cavalier and English Harbour Rums.

CULTURE OF ST. JOHN’S CITY

There are several museums in St. John’s, including the Museum of Antigua and Barbuda and the Museum of Marine Art - a small facility containing fossilized bedrock, volcanic stones, petrified wood, a collection of more than 10,000 shells, and artefacts from several English shipwrecks. There is also the National Archive that houses the “Codrington Papers” and other important historical documents and records.

St. John’s is where the country’s largest and grandest festival is hosted annually, held for a little over one week from the end of July into early August. It is held to commemorate the emancipation of the people of Antigua and Barbuda from slavery on 1st August 1834, and the increased spending at this time does much to stimulate the local economy. The many visitors that come from other countries for the festival also result in a significant injection of monies into the economy. The Antigua Recreation Ground, Antigua and Barbuda’s national stadium located in St. John’s, is the main venue for the carnival celebrations.

A few miles east of St. John’s is the Sir Vivian Richards Stadium, a multi-use stadium in the North Sound area, that was created mostly for cricket matches, and has hosted the matches during the 2007 Cricket World Cup.

The Botanical Gardens, established in 1893, is near the intersection of Factory Road and Independence Avenue. This small park’s many flowers and shady trees, benches and gazebos provide a quiet refuge from the bustle of activity in the city.

ANTIGUA AND BARBUDA’S EXHIBITION AND CULTURAL CENTRE

Antigua and Barbuda’s Exhibition and Cultural Center (more commonly known as the Multi-Purpose Cultural Centre), is located in Perry Bay towards the southwest end of the city, and is a major centre for official and cultural activities in the country. It hosts local, regional and international conferences, weddings, receptions, cultural events, conventions, and trade shows. The centre is comprised of a conference centre that has the capacity to seat over 200 persons, a cultural centre with a capacity of over 600 persons, an exhibition hall with a capacity of over 2500 persons, a VIP conference room, and an amphitheatre for outdoor performances. It also features a VIP room and function rooms, a cocktail lounge and restaurant and bar facilities, and vehicle parking facilities.

ST. JOHN’S MARKET COMPLEX

The newly rebuilt St. John’s Public Market Complex is where most farmers and vendors sell their fruits, vegetables and other agricultural products.

Next to the public market is the craft market where locals sell their indigenous and creative arts and crafts. Leather and shell work, crafts made from fish scales, souvenirs, T-shirts, bags, hats, locally made soaps and fragrances, and other items depicting Antiguan culture and lifestyle are sold here.
GOVERNANCE

OVERVIEW
As Head of State, Queen Elizabeth II is represented in Antigua and Barbuda by a Governor General who acts on the advice of the Prime Minister and the cabinet. Antigua and Barbuda has a bicameral legislature: a 17-member senate appointed by the Governor General mainly on the advice of the Prime Minister and the leader of the opposition, and a 17-member popularly elected House of Representatives. The Prime Minister is the leader of the majority party in the House and conducts state affairs with the cabinet. The Prime Minister and the cabinet are responsible to Parliament. Elections must be held at least every 5 years but may be called by the Prime Minister at any time. National elections were last held on March 12, 2009.

Constitutional safeguards include freedom of speech, press, worship, movement, and association. Antigua and Barbuda is a member of the Eastern Caribbean Court System. Jurisprudence is based on English common law.

MUNICIPAL GOVERNMENT FOR ST. JOHN’S
Day-to-day municipal management activities and land use planning for St. John’s are handled by the statutory body, the St. John’s Development Corporation, under the institutional provisions laid out in the St. John’s Development Corporation Act (Cap. 392). The corporation has been engaged in the following activities:

1. Developing, managing and maintaining the Heritage Quay Shopping Centre.
2. Providing operational facilities for and regulating the activities of St. John’s City vendors.
3. Preventing sales of pirated entertainment products by street vendors.
5. Regulating the activities of taxies and other tour operators, especially in Heritage and Redcliffe Quay.

6. Managing the Multi-Purpose Cultural Centre at Perry Bay, St. John’s.

7. Ensuring that St. John’s City is kept clean and aesthetically pleasing.

8. Cooperating with the Police Force to: (i) control city crime and maintain security for tourists; (ii) control city traffic and regulate parking, particularly in the downtown areas on cruise ship days.

9. Managing two finger piers (at Heritage Quay and Redcliffe Quay) where most of the cruise ships to the country dock.

10. Formulating local area plans that would improve the general flow and efficiency of the city, especially in the downtown areas.

A HISTORY OF THE ST. JOHN’S DEVELOPMENT CORPORATION

In 1986 by an Act of Parliament, St. John’s Development Corporation was formed. This statutory body was made responsible for the re-enhancement and orderly development of the main commercial centre, St. John’s City. This corporation was facilitated to bring alive the vision of creating a duty free shopping and entertainment complex which would revolutionize shopping in Antigua and more so the Organization of Eastern Caribbean States (OECS). Heritage Quay was the first of its kind in the Lesser Antilles and was seen as a catalyst for economic activity in St. John’s.

Heritage Quay was the first project of the St. John’s Development Corporation and became functional in August 1988, though it was not officially opened until November 4, 1988. The development of Heritage Quay has breathed new life into the downtown district and has added immeasurably to the attractiveness of St. John’s.

Additionally, Heritage Quay has improved the shopping environment in St. John’s and has also created the financial background where St. John’s Development Corporation could press on with its longer term development goals for the city.

The vision of the St. John’s Development Corporation is “To have a vibrant city that the citizenry and visitors can be proud of, and one that reflects in character and the cultural make-up of the people’s heritage. A city that is well laid out, with attractive shopping and commercial areas that are clean, safe, secure, and people friendly, a city that provides a level of physical and social infrastructure with facilities that reflect its role as a modern city. A city with green areas that are well manicured and rich with flora that punctuates the urban landscape.”

Mission of the St. John’s Development Corporation:

- To guide the implementation of a programme for the renewal and modernization of the City of St. John’s, bearing in mind its cultural and architectural history.

- To consolidate commercial and administrative uses in St. John’s City in a clearly defined Central Business District (CBD).

- To facilitate opportunities for economic activity and employment which reflect the skills of the population and economic priorities of the Government.

- To optimize the use of prime waterfront land around the harbour.

- To maintain the residential character of St. John’s in clearly defined neighbourhoods surrounding the Central Business District, and provide land for a variety of housing types, to meet the varied needs of the resident population.
Population growth, the changing structure of the economy and the process of urbanization and commercialization are exerting severe pressure on available land resources and housing. Factors increasing the demand for housing include:

- Population growth
- Continuing growth in immigrant workers and their families
- Increase in demand for affordable housing

The Antigua State College (ASC) Report estimates that the Central Housing and Planning Authority is only able to meet 40 percent of the demand for residential land due to artificial land shortages in the land market. Low and middle income earners are often unable to purchase land in the private market where prices are higher.

The price of housing is beyond the reach of many residents of St. John’s. While the demand for housing is real, the effectiveness of that demand is determined by the purchasing power of those who are in need of housing.

**SQUATTING**

Squatting appears to have become a more serious and widespread problem in recent times for the following reasons:

1. Land prices keep soaring. As a result, low and middle income earners feel they have no other recourse but to squat on idle land. A quarter acre of land in the suburbs that sold for about EC $12,000 in the 1980s is now on the market for EC $80,000 and above.

2. The inexpensive Crown land market is unreachable for most land buyers, as there is on average about 300 Government plots for sale annually while the waiting list is between two to three thousand applicants. Additionally, even the prices of Crown land have been climbing over time and are now out of reach for some low-income earners.

3. The huge influx of Caribbean immigrants over the past few decades has resulted in much of the cheap available land being bought off, and has raised the demand and consequently the cost of buying land.

4. Rich expatriates and resort tourists have come to Antigua in recent years and bought land at prices that are many times above the local rate. Therefore, some locals are reluctant to sell their land to locals when they can fetch much higher prices from foreign buyers.

5. Some squatters are aware that if they are able to remain squatting on a piece of private land for 15 or more years, they will by law be able to claim squatters’-rights to the land.
6. Although it is against the law, some squatters have been able to obtain electricity from the Antigua Public Utilities Authority and water services (for example at Perry Bay, Booby Alley at North Street and Yorks New Extension).

7. Many landowners in Antigua reside in other countries and as a result are not able to regularly check their land for encroachers.

8. Government agencies that have the responsibility of monitoring and evicting squatters are understaffed and under-equipped to deal effectively with this problem that has become fairly widespread.

PROBLEMS RELATED TO THE DEVELOPMENT OF LAND FOR HOUSING

Housing projects done by Government agencies are frequently announced before approval is granted for the subdivisions. The Development Control Authority admits to having difficulties in enforcing the approval procedures. Without the adequate planning and development control evaluation, the following occurs with relative frequency:

- Inefficient use of land in public sector projects where land has been purchased in excess of what is required.
- Siting of projects in areas prone to flooding, for example, the Yorks New Extension and Golden Grove New Extension residential subdivisions.
- Failure of both private and public sector developers to provide adequate infrastructure; a situation that eventually burdens the Central Government which must provide for and maintain the infrastructure. This is the case with some housing developments at Cooks New Extension and Golden Grove New Extension; and
- Installation of infrastructure which is not in conformity with standards.

On time provision of infrastructure and utilities in new subdivisions remain a problem in the country. Government agencies and private developers are guilty of selling lots in new subdivisions and extensions to existing villages before roads are paved and in some cases before water and electricity are available to lot owners, resulting in functional and aesthetic deficiencies. The problem is particularly severe when residential subdivisions are placed in poorly drained sites without adequate street side drains and sidewalks. (Sustainable Island Resource Management Zoning Plan: State of the Country Report for Antigua and Barbuda - Draft January 2010).

INSTITUTIONAL STRUCTURE OF THE HOUSING SECTOR

The institutional structure within Antigua and Barbuda’s housing sector is fragmented. While the Central Housing and Planning Authority is the main public sector agency responsible for building houses for sale and for rent, there are many other government agencies and departments which have a key role to play in the housing delivery process (for example; Antigua Public Utilities Authority, Public Works Department, Central Board of Health, Development Control Authority, Antigua and Barbuda Development Bank, the Antigua and Barbuda Investment Authority, and the National Mortgage and Trust Company Limited) but there are no formal mechanisms for ensuring systematic co-ordination between these various agencies and departments. This has resulted in overlapping of activities, duplication of efforts, and conflicts between organizations carrying out similar activities, particularly in the planning, development and allocation of public lands.

**DATA ON THE HOUSING SECTOR IN ST. JOHN’S**

<table>
<thead>
<tr>
<th>Year</th>
<th>Population</th>
</tr>
</thead>
<tbody>
<tr>
<td>2005</td>
<td>1,333</td>
</tr>
<tr>
<td>2001</td>
<td>1,656</td>
</tr>
<tr>
<td>1990</td>
<td>1,518</td>
</tr>
</tbody>
</table>

**Slum population in urban St. John’s**

- Year: 2005  
  Population: 1,333
- Year: 2001  
  Population: 1,656
- Year: 1990  
  Population: 1,518
CASE STUDY - SQUATTING CONDITIONS AT PERRY BAY, ON THE SOUTHWEST END OF ST. JOHN’S (JUNE 2011)

Approximately 200 squatters were found to be living in Perry Bay, on land owned by the Perry Family. The squatter settlement is sometimes called, “Tinning Village”, and consists mainly of closely built shanty-type houses arranged along a narrow strip that is bordered on the south by the perimeter wall of the Perry Bay Playing Field and hemmed in on the north by a long, earthen and open water-filled drain that is on average 4 to 5 feet wide.

Though most of the houses are shanty in nature, their condition varies from just a collection of board-sheets roughly nailed together to pretty decent-looking houses. Toilet facilities are extremely poor and consist of the following:

- Latrines built directly over the open drain at the back of the settlement.
- Water closets whose septic pipes empty raw sewage directly into the open drain.
- Water closets whose septic pipes flow into septic tanks, and whose semi-treated effluent goes directly into the open drain. There are no soak-a-ways.

Many of the houses are built right next to the highly polluted drain. When this drain floods, as it often does when it rains, it overflows into the houses. Therefore, the risk of disease outbreaks is high. The squatters claim that the flood waters take about two hours to recede into the nearby bay.

Despite the houses being very congested, some squatters rear chickens in pens and cages right next to their homes, and the excrement from these animals adds to the risk of disease in the area. Rats which are common in the area also increase the risk of diseases spreading.

Some of the houses are illegally connected to the Antigua Public Utilities Authority electricity lines and meters. The electricity extension chords which run from one house to another constitute a major fire hazard, especially because these houses are constructed of flammable wood and are close to each other.

Majority of squatters are immigrants from the Dominican Republic, and are a mixture of men, women and children of varying ages. Immediate measures need to be taken to clean up the squatter settlement because of the risk of disease out-breaks this squatter settlements pose to the nearby communities of Green Bay and Gray’s Farm. Additionally, the settlement is in clear view of the tourist cruise ships when they dock at Heritage and Redcliffe Quays and are an eyesore.
GENDER AND POVERTY

The Poverty Line is a monetary measure of the minimum consumption, in dollar terms, of goods and services that would allow a household to meet its basic needs. Persons are considered poor if their expenditure falls below the poverty line. The poverty or indigent line for Antigua and Barbuda in 2006/06, based on prices that existed at the time, was estimated at EC $2,449 (US $917) per annum or EC $6.71 (US $2.51) per day. According to a Kairi study (2007), Antigua and Barbuda’s indigent population was estimated to be 3.7 percent. In other words, 3.7 percent of the population could not afford the minimum nutrition required to maintain good bodily health.

The Vulnerability Line is set at 125 percent of the poverty line. It shows the number of persons who are at risk of falling into poverty, should an unexpected event such as a natural disaster or economic shock occur. In this regard, the research showed that an additional 10 percent of the population was deemed to be vulnerable.

The two districts in the nation with higher than average poverty levels were St. John’s and St. Philip’s. This high rate for St. John’s City is due to it being the destination of the rural-urban drift, as well as of economic migrants from abroad.

It was found that low paying jobs tend to keep women vulnerable and in poverty, and limited their ability to provide for their children. Their efforts to cope by taking more than one job resulted in their children being left unattended for long periods, and as a result becoming vulnerable to abuse and delinquency.

In St. John’s and the rest of Antigua, both men and women have equal access to housing loans and mortgage financing but not necessarily equal opportunities. Women’s lower income levels pose a greater limit than men on the size and quality of housing they can access and procure, especially when a woman is the head of a single-parent household.

The issue of teenage pregnancy and the treatment of girls who fall victim reflects the continuing challenges females face in the society. School girls who become pregnant are sometimes forced to drop out of school. Pregnancy usually means the end of formal education for girls if they do not choose to attend post-school and adult education programmes.

In the estimation of the Gender Affairs Directorate, immigrant female workers are the ones most likely to suffer abuse. They are exploited financially and sexually, forced into prostitutions, and fall victim to human trafficking.

The resource constraint faced by the Gender Directorate limits the extent to which it can deal with these problems. However, by cooperating with other agencies, it has been able to have some impact. It distributes information leaflets to private clinics and is always on the look-out for opportunities to bring gender and poverty issues to the attention of the authorities and the public at large.
LEGAL FRAMEWORK FOR GENDER VICTIMS OF ASSAULT

The Antigua and Barbuda Sexual Offences Act (Number 9 of 1995) criminalized marital rape. However, this criminalization extends only to certain circumstances, as follows:

1. Sexual assault by a husband in certain circumstances.

2. The Domestic Violence Act (No. 3 of 1999) provides for protection orders by means of summary proceedings in cases involving domestic violence and for related matters.

SERVICES FOR GENDER VICTIMS AND SURVIVORS

Emergency housing operated by Hour Glass Foundation (Year: 2001, an NGO initiative). While there is no shelter dedicated to victims of domestic violence, a non-governmental organization “Hour Glass Foundation” operates Hero House and arranges emergency housing for three to five days for victims of domestic violence. This programme utilizes the homes of volunteers for the placement of persons in need of emergency accommodation.

The Directorate has recently collaborated with Hero House enabling the extension of services to skills training and the provision of a building which can be used by a small number of battered women in need of emergency shelter.

THE SUNSHINE HOME OPERATED BY THE SALVATION ARMY

The Salvation Army operates the Sunshine Home, an institution for girls in difficult circumstances as well as girls in conflict with the law. It is reported that the main causes of institutionalization are parental abuse, incest and delinquencies (running away from home). As is the case with other children’s homes in the Caribbean, there is no physical separation made between abused and delinquent girls. The girls are generally admitted to the Home pursuant to a Fit Person’s Order granted by the Magistrate Court in response to an application made by the Citizen’s Welfare Department.

HOTLINE FOR DOMESTIC VIOLENCE

The Directorate of Gender Affairs operates a hotline for domestic violence. The hotline is serviced by a group of trained volunteers under the supervision of the Directorate.

HIV/AIDS EPIDEMIC

OVERVIEW OF THE AIDS EPIDEMIC

Known as the ‘gateway to the Caribbean’ since the end of the 18th century because of its advantageous location, Antigua and Barbuda is considered a minor trans-shipment port for the illegal passage of narcotics bound for the United States and Europe. It appears that the existence of this gateway has had an impact on drug use and other social behaviours, especially among the youth.

Deaths from HIV-related causes were among the ten leading causes of death and in people aged between 20-59 years, AIDS was the leading cause of death (30 deaths which represented 9.8 percent of all deaths) in this age group.

The economy depends heavily on tourism for foreign exchange, employment and government revenue. This dependence, coupled with the introduction of casinos and gambling spots, has resulted in the growth of sex work. HIV is no longer just a health issue; it is also a social issue, a human rights issue and an economic issue. This disease affects young adults just as they are in the most reproductive years of their lives, when they should be contributing to the economic development of the country and raising their children. It also affects our young women and children.

<p>| TABLE 3: |
| STATISTICS ON TYPE OF ABUSE IN COMPLAINTS OF DOMESTIC VIOLENCE |</p>
<table>
<thead>
<tr>
<th>Types of Abuse</th>
<th>Number</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Verbal abuse</td>
<td>15</td>
<td>37</td>
</tr>
<tr>
<td>Physical abuse</td>
<td>31</td>
<td>78</td>
</tr>
<tr>
<td>Threats to kill children/family</td>
<td>4</td>
<td>10</td>
</tr>
<tr>
<td>Damage to property</td>
<td>4</td>
<td>10</td>
</tr>
<tr>
<td>Personal harassment</td>
<td>16</td>
<td>40</td>
</tr>
</tbody>
</table>

Source: Directorate of gender affairs.
The first case of AIDS in Antigua-Barbuda was reported in December 1985 in a homosexual male and since then and up to the end of September 2007, a cumulative total of 663 people tested positive for HIV and a cumulative total of approximately 250 AIDS cases were reported to the AIDS Secretariat. By December 2009, the number of people who tested positive for HIV/AIDS were 815. A total of 163 people have died from AIDS-related causes, giving a 65 percent fatality rate. Since the advent of free Anti-retroviral Treatment in September 2004, the death rate from HIV/AIDS has remained below 10 persons per year. Heterosexual transmission is the leading mode of acquiring HIV.

Determinants of the epidemic include multiple sexual partners, prostitution, sex tourism, inconsistent condom use, and underlying psycho-social and economic factors which include an increasing migrant labour population; mobility among native Antiguans; interest in high-end commodities which stretch earning power; and gender inequalities.

Activities aimed at fighting HIV/AIDS spread include social marketing of condoms; school-based AIDS education for youth; Voluntary Counselling and Testing; HIV/AIDS programmes for sex workers, homosexuals and other most-at-risk populations; and programmes to ensure safe injections in health care settings. People living with HIV are also being provided with the appropriate medical care, home care and supportive palliative care.

**SAFETY AND SECURITY**

**CRIME**

St. John’s City and the country as a whole is classified as having a low to moderate crime rate, compared to other industrialized countries. However, in recent years up until 2009, there has been an increase in incidences of crime. The murder rate for the year 2006 was 12, and for 2009 it went up to 19. However, according to the new Commissioner of Police, Vere Brown, incidences of murder in 2010 were less than half that for 2009. Incidences of rape also came down by nearly 300 percent. The overall crime figures by the end of December 2009 were 2,407 reported incidences but by the end of December 2010, they had reduced to 1,960. (Source: Interview of Antigua and Barbuda Commissioner of Police Vere Brown, December 22, 2010. View this on the Internet: http://www.youtube.com/watch?v=H0gdIUuPepgA).

Incidences of rape and indecent assault were 41 in 2006 and 35 in 2007. With the capture, death and prosecution of a number of rape suspects in the last couple of years, the incidences of rape for the period 2010-2011 have dropped significantly. This is partly because members of the public have been more forthcoming with information.

Communities that were most affected by an increase in rape cases in the mid to late 2000s are located in and around St. John’s City. They include Grays Farm, Green Bay, Ottos, Browns Avenue, Martins Village, Whener Road, Nut Grove, Golden Grove, and Johnson’s Village. In an effort to combat rape, women’s groups like Women Against Rape (WAR) and Professional Organization for Women in Antigua and Barbuda (POWA) launched a media campaign meant to sensitize and educate the public on ways to protect and safeguard women from rape. The Police Force set up a special Rape Unit to exclusively handle rape cases and also stepped up its “community policing campaign” to win the confidence of the public so that people with crime information would feel free to share this information with the police. To this end, a confidential 1-800 telephone hotline was made available. Further, notices were published in newspapers, aired on the electronic media and posted on billboards in various communities asking people to report any crime information they may have.

Another reason for the increased crime rate, according to the Government, was the increase in the number of deportees from the United States. Caribbean Common Market (CARICOM) delegates met with the United States Department of Homeland Security to discuss this issue. They suggested that criminal records of all deportees be provided to the countries. The British High Commissioner to the Caribbean stated, however, that recent studies have shown that there is no definitive or significant link between criminal deportees and actual crimes committed in the Caribbean region.

In an effort to curb crime, a number of senior Canadian “Mounties” (policemen) were appointed on contract to top positions in the Antigua and Barbuda Royal Police Force, where their considerable experience in crime-fighting and police administration could be put to good use. In 2010, Mr. Vere Brown, a citizen of the country, with considerable police training and a decorated police career, was as Commissioner of Police. In an effort to boost crime fighting initiatives, 48 new police constables were recruited to the Police Force in 2007.
The Antigua and Barbuda Royal Police Headquarters is situated along the American Road, on the east periphery of St. John’s City. The city centre itself is served by St. John’s Police Station on the corner of Newgate and Market Streets, and St. John’s Fire Station on the corner of Factory and Coronation Roads. The latter is manned by fire policemen. There is also a small police station in Gray’s Farm that serves all the residential communities at the southwest end of the city (Gray’s Farm, Green Bay, Perry Pay, Cooks, and Ottos).

FIRE DISASTER

Challenges faced by the Antigua and Barbuda Fire and Rescue Services:

1. Close proximity of buildings, especially those that are old and dilapidated.
2. The illegal practice of obtaining electricity from over head power lines or persons sharing electricity with neighbouring houses via electricity extension cords.
3. Vehicular obstructions due to either small and poorly-surfaces road-ways, or indiscriminate parking in St. John’s City, mainly in Grays Green, Gray Hill, Golden Grove, Ottos, Brown’s Avenue, and Point/Villa areas.
4. Inadequate Fire Hydrants in St. John’s and its the environs.
5. Inadequate fire safety measures in commercial buildings in St. John’s.

Measure taken to correct hazards:

1. Demolishing of several high-risk unoccupied buildings.
2. Eliminating any fire spread risk in case of fire, by boarding-up any unoccupied or abandoned buildings.
3. Reporting any discoveries of illegal use of electricity to Antigua Public Utilities Authority, with the view of criminal persecution.
4. Filing reports of incidents of actual or potential obstruction on road-ways to the health department and/or police station, and having these vehicles towed.
5. More building inspection and enforcement.

Corrective measures needed for implementation:

1. Implementation of a fire prevention code.
2. Installation of a sprinkler system in new buildings.
3. Holding property owners of abandoned buildings accountable for damage caused to other people’s property as a result of fire outbreaks.
4. Installation of a new hydrant system in St. John’s.
5. Strong legislation in respect to parking; an emergency lane should be established.
6. Making it mandatory for extinguisher training, installation of smoke detectors, and other fire prevention measures in commercial spaces.
7. The establishment of a dedicated fire prevention and awareness unit within the fire department.
8. The use of fire-resistant materials in the construction of new buildings.
9. Stringent policing.
10. The establishment of a search and rescue unit within St. John’s Fire Station.
FLOODING

The passage of Hurricane Omar close to Antigua in 2008 saw a record-breaking 6 inches of rain fall in the space of just 2 hours. This led to serious flooding in St. John’s which resulted in many businesses remaining closed for a period of time after. Stocks and revenue were lost. The floods also led to destruction of property.

Physical conditions that may have exacerbated the problem of flooding:

- Many of the street drains were blocked with garbage and plywood and planks were left in place where the drains were recently cast over with concrete.
- Many of the drains were poorly designed and constructed, being too small, too shallow or crooked.
- Some areas close to the coast tend to be flat and low-lying and thus are more prone to becoming flooded.
- Some natural drains were overgrown with vegetation.
- As more and more land around the city becomes paved or occupied by buildings, infiltration of rainwater into the ground becomes less and, consequently, runoff increases.

STORMS / HURRICANES

High winds and hurricanes have always been a concern for people living in St. John’s. It is said that the many huge Mahogany trees present all over the city were planted in colonial times as windbreakers against hurricanes that periodically struck the island.


Hurricane Luis was by far the most devastating. This hurricane damaged and destroyed 90 percent of buildings in Antigua and Barbuda for the following reasons:

- The cyclone was very huge in size and had a very slow forward speed, as a result, it lingered over the islands for a long time.
- The winds were very strong, bordering between categories 4 and 5.
- The last two hurricanes to strike Antigua before this were in 1950. As a result, modern building codes, methods, and materials had become lax. As a result, many buildings were vulnerable to wind and rain damage.
EARTHQUAKES
Like most of the islands of the Eastern Caribbean, Antigua and Barbuda lies on a convergent plate margin – where the crustal plate beneath the Atlantic is colliding with the Caribbean plate. Because of this, these islands experience fairly frequent earthquakes. Most of these quakes are mere tremors, but occasionally a very powerful one may strike and cause much damage to buildings and to the local economy. Examples of these took place in Antigua in 1843 and again in 1974.

The 1974 earthquake had a magnitude of 7.5, making it one of the largest earthquakes of the year, worldwide, in terms of seismic energy released at the earthquake source. Fortunately, the source was tens of kilometres from the nearest inhabited land. The damage was most costly to Antigua, though there were no deaths. The Cathedral of St. John’s, built at the site of the cathedral destroyed in the 1843 earthquake, suffered extensive damage to its masonry exterior. The new deepwater harbour facility at St. John’s was also damaged. Equipment and buildings in the West Indies oil refinery, on the outskirts of St. John’s, were damaged, and thousands of barrels of crude oil leaked from tanks.

On 8th February 1843, the biggest earthquake known to have affected the Eastern Caribbean occurred, with a magnitude of 8.5. It was felt from St. Kitts to Dominica. In Antigua, the English Harbour sank. Thirty people on the island lost their lives.

FIRES
Fire outbreaks in the city are mainly as a result of the following factors:

- Buildings in many areas are very close to each other, which makes the spread of fires much easier. In slum areas in particular, landowners often rent land spots to too many house owners, resulting in overcrowding of houses which increases the risk of fires spreading and causing serious damage when they occur.
- Only 60 percent of buildings are equipped with smoke detectors, sprinkler systems and fire extinguishers.
- Many buildings have less than the minimum required 20-foot street setback.
- Faulty electrical wiring is a fire hazard in some buildings.
- Occasional power outages and surges have triggered fires in some buildings.
- Buildings under construction are not monitored closely enough by the Development Control Authority (DCA) to ensure that all fire-safety standards are met.
- There is little use of fire-retardant materials in building construction.

A number of commendable measures are already in place to deal with the fire outbreaks:
1. There are a number of fire-hydrants around the city. These fire hydrants have restricted parking in front of them to allow ease of access by fire trucks.
2. Close proximity of the St. John’s Fire Station ensures quick response to fire calls.
3. The fire station has recently procured a fleet of ultra-modern large-capacity fire trucks.
4. Vehicle parking has recently been restricted to only one side on many streets and to linear-parking instead of feather-parking, so as to allow swift and easy access by fire trucks and other emergency vehicles.

DROUGHTS
Antigua and Barbuda are prone to periodical droughts, which occur roughly every seven years. Even though the Northeast Trade Winds that constantly blow across the country are warm and moisture laden, Antigua and Barbuda both suffer bouts of drought due to their low topographies which do not trigger rainfall. Further, Antigua is one of the most deforested countries in the Caribbean after Haiti, and this has led to reduced rainfall. The lack of forest cover further exacerbates drought conditions since forests normally perform the function of retaining rain runoff.

There are several non-governmental and community based organizations involved in environmental conservation projects and who also supplement the city council’s environmental management efforts.

CLIMATE CHANGE AND SEA LEVEL RISE
Global warming is recognized as one of the defining global challenges of the twenty-first century. According to the fourth assessment report of the Intergovernmental Panel on Climate Change (2007), global temperatures are projected to rise between 1.4°C and 6.4°C over the period from 1990-2100, while, as was said at the International Scientific Congress on Climate Change, held in Copenhagen in 2009, global sea level rise is expected to rise by one metre or more in the same period.
As a result, the biggest challenge for Caribbean cities, particularly for coastal and small island developing states like Antigua and Barbuda, is the possible need to relocate populations in response to the flooding caused by sea-level rise. Sea-level rise has been occurring mainly as a result of the surge in greenhouse gas emissions, which is causing global warming and the melting of polar ice and mountain glaciers.

Slum areas are anticipated to be the most vulnerable to extreme weather events such as hurricanes and droughts and to sea-level rise. The low-lying areas of coastal cities may be particularly susceptible to erosion, flooding and storm surges. A list of such areas in the vicinity of St. John’s include; Perry Bay, Green Bay, Fibrey, Lower North Street, Point, Lower Villa, Lower Fort Road, and Yorks.

The management of pollution, sanitation, waste disposal, water supply and public health, in addition to the provision of adequate infrastructure in urban areas, could become more difficult and costly in adverse climatic conditions.

African, Caribbean and Pacific populations are at risk from increased incidences of vector-borne diseases. A warmer environment could open up new territories for Malaria; altered temperature and rainfall patterns could also increase the incidence of Yellow Fever and Dengue Fever.

The Environment Division in Antigua-Barbuda is to craft a comprehensive policy to address the possible impacts of climate change on the coastline and watersheds. The aim is to determine the possible impact on both human health and the economy. The Environment Division has issued a warning to developers to adhere to the Development Control Authority (DCA) guidelines concerning “set-back limits” for buildings on the coast. The Division is encouraging developers, regardless of the scale of the development, to adhere to the guidelines, which were developed for the protection and conservation of both property and environment.

- Committee distributes funds to the various organizations involved in urban disaster risk reduction and management.

ST. JOHN’S CITY ENVIRONMENT

The location of St. John’s City is suitable for several reasons:

- It is situated on the northwestern side of Antigua, and being on the leeward side of the island, its harbour and ships are sheltered from the full strength of the Northeast Trade Winds and Atlantic waves.
A number of hills in and around St. John's have been used to good effect: the landmark view of the St. John's Anglican Cathedral (over 80 feet above sea level); a hotel built on Michael's Mount to take advantage of the spectacular view of the city and harbour below (144 feet above sea level) – this location is now occupied by Mount St. John's Medical Centre; the St. John's Botanical Gardens that utilizes a natural hill with undulations that create a more interesting landscape; the Government Office Complex that consists of a number of imposing edifices set on a hillside overlooking St. John's Harbour; and the now disused Holberton Hospital that is set on top of a hill that is over 170 feet above sea level.

The main environmental challenges in St. John's City include:

• A very polluted harbour: The high density of buildings and clayey soil and the high water table that prevent septic soak-ways from working well have resulted in the flow of poorly treated septic effluent into street gutters which drain into the harbour. The septic effluent in the gutters, especially on hot days, generate unpleasant smells along the city streets.

• The historic Country Pond where numerous people earn a living by cleaning people's vehicles, has been declared highly polluted by the Central Board of Health. The water is said to have become polluted by septic runoff from the nearby Government Office Complex that apparently does not have a proper sewage system, and from public toilets at the Antigua Recreation Grounds.

• The high amounts of littering in St. John's, the shortage of street-side disposal bins and the improper disposal of garbage have worsened the environmental situation in St. John's.

• A number of restaurants release effluents that flow into the street gutters and produce a bad smell.

• Not all idle land in the city is kept clean and properly maintained.

• There is a serious rodent problem in the city which is as a result of poor environmental practices such as indiscriminate dumping of waste. Some rats can even be seen scuttling about during the day.

• Too many stray dogs roam the city and there is no dedicated programme in place to capture and rehabilitate or utanize them. They defecate in the streets and sidewalks which is unsightly and can lead to spread of diseases.

• Improperly built and maintained gutters and drains in the city which flood during heavy rainfall.
BUILT HERITAGE STILL PRESENT TODAY

Much of the old town of St. John's still remains with plenty of wooden and stone buildings and the original street layout. Even in the very heart of the Central Business District, there are several large two-storied buildings, small shops and one and two room cottages, appearing as they did in the 1840s, surrounded with small flowers and vegetable gardens and overshadowed with large mango, breadfruit, coconut, and plum trees.

The first wooden cottages were built using materials bought from sugar estates that were being torn down near the end of the colonial era. The cottages were kept small and simple to facilitate their transportation when owners had to move. These dimensions are maintained for many of the present-day cottages for the same reason. Note that some poor outlying areas of St. John’s (as well as many rural areas) had wattle and daub houses up until the late 1940s and early 1950s. The floors were of bare earth, which sometimes hosted the debilitating insect pests called “jiggers”. It was when two hurricanes ravaged Antigua in the early 1950s that all the wattle and daub houses were destroyed, never to be rebuilt.

Most of the historic buildings in St. John’s City have the lower floor made up of masonry construction and the upper floor made up of wood. Originally, the thick 18 to 24 inch masonry walls of the lower floor were said to keep the inside of the building cool during the day in the very hot tropical climate and also act as a barrier to termite attacks on the wooden floor above. The lighter upper wooden floor was supposed to allow the building to better survive earthquakes. The earlier one-and-a-half storey houses were built with the lower floor of masonry serving as storerooms (cellars) and/or workshops, with outside steps leading to the wooden living quarters above. Some old buildings have been carefully renovated or restored, and some relatively new buildings have been designed with an old colonial style and appearance.

HERITAGE CULTURAL ACTIVITIES STILL IN EXISTENCE

Many of the early town activities still survive today as well, such as:

- Street-side hucksters selling traditional foods and confectioneries such as cakes, nuts, sweets, fruits, and vegetables from wooden trays.
- Vendors selling items such as brightly coloured clothes, home utensils, locally made brooms, and bags of charcoal along the street.
- Parades of Iron Bands, John Bulls, Outlander Dancers, Moko-Jumbi, and Stilt-Walkers still grace the city’s streets during new year celebrations, much as they did centuries ago. Such parades were some of the few African expressions of culture that the local population of African ancestry were allowed to periodically indulge in during the era of colonial rule.
Carnival Celebration, the country’s largest summer festival, is held every year in the heart of St. John’s for a little over one week, to commemorate the emancipation from slavery on August 1, 1834 for local people of African descent. However, all ethnicities and nationalities, including tourists, participate in the celebrations.

Therefore despite the many instances of modernization, St. John’s City has managed to maintain much of its quaint appearance, charm and rich culture which are all very important for the country’s identity and for developing the heritage tourism industry.

A DESCRIPTION OF THE CULTURE

The culture of St. John’s City, and Antigua and Barbuda as a whole, is predominantly a blend of British and African. An example of British culture is the game cricket which is a popular pastime in most communities in the country. In St. John’s, it is played on the many fields/grounds that are dispersed throughout, the most renowned being the Antigua Recreation Grounds. Other popular sports include football and basketball. Though the official national language is English, African culture expresses itself in the dialect that most Antiguans and Barbudans speak daily. African culture is also manifested in their local rhythmic music and dance, as well as in their way of dressing, food and mannerism. The Warri Game, played on a hollowed-out board with beads, is a national game in Antigua and Barbuda that originated from Africa. Many taxi drivers can be seen daily around St. John’s playing Warri to pass time as they wait for customers.

American popular culture and fashion have assumed a heavy influence, especially in recent years. Most of the country’s media is made up of major United States networks.

Family and religion play important roles in the lives of Antiguans and Barbudans, and St. John’s City residents are no exception. Most attend religious services on Sunday, although there is a significant number of Seventh-day Adventists who observe the Sabbath on Saturday.

The national Carnival held every August commemorates the abolition of slavery. Its festive pageants, shows, contests, revelries, and other activities are now a major national pastime as well as an important pastime for St. John’s residents. In-fact, most of the Carnival activities are held in the St. John’s area.

Calypso, Soca, Reggae, Gospel, and North American Pop are the major types of music in St. John’s and the rest of the country. Steelpan and steelband music are an important part of Antigua and Barbuda’s musical heritage and culture and help define the country’s identity as distinctly Caribbean.

Corn and sweet potatoes play an important role in St. John’s and the national cuisine. For example, a popular Antiguan dish, Dukuna (DOO-koo-NAH) is a sweet, steamed dumpling made from grated sweet potatoes and coconut, flour, and spices. One of the Antiguan staple foods, Fungi (FOON-ji), is a cooked paste made of cornmeal, okra and water. Rice, beans and peas, pasta, white-flour bakes/dumplings, fish, chicken, goat, lamb/mutton, salted cod, smoked herring, and beef are also important in the local diet.

EXAMPLES OF HISTORIC SITES THAT ARE OF TOURISTIC INTEREST IN ST. JOHN’S

1. Government House – built in 1800, its has been the residence and office for the island’s governor to date. It retains its pleasant gardens, three fine interiors dating from about 1800, and its imposing façade with a two storey colonnade.

2. The Cathedral Church of St. John the Divine – is an edifice which dominates the city scape with its hill-top position, immense size and 70-foot high twin spires with silvery cupolas. It is described as “the double cathedral” because of its cut-stone exterior construction and mahogany wood interior, and its architectural style show Georgian and Romantic influences. Besides being the mother church of the Anglican Diocese of the Eastern Caribbean, it is regarded as an important national monument by all Antiguans.

3. The St. John’s Court House – was built in 1747 and is the oldest building still in use in St. John’s City – now housing The Museum of Antigua and Barbuda. The building was designed with a Georgian/Romantic appearance, by America’s first and distinguished architect, Peter Harrison. The walls are of 14 inch thick yellow limestone and for centuries, the building has been described as “A very noble structure for a West Indian colony… Its plan is very uniform and neat.”

ISSUES RELATING TO HERITAGE PRESERVATION IN ST. JOHN’S

1. Restoring and maintaining historic buildings is in most instances, expensive, time consuming and difficult, especially if one aims to maintain the building’s authentic historic architecture and style.

2. Old historic buildings tend to require constant maintenance in order to remain sound, while modern buildings require only once-in-a-while maintenance.
3. Some old historic buildings are allowed to deteriorate because it is too expensive to try and to restore them (for example, the Public Library that existed on lower High Street).

4. Very few people in the country or region have the expertise and experience needed to properly restore and maintain old historic structures.

5. Many people are simply not aware of the historic, educational and touristic value that old, historic buildings possess.

6. It is very difficult, and at times impossible, to procure construction materials that are authentic to the historic period of the building.

7. Some people are opposed to the restoration of old historic buildings, seeing them as either a waste of money or icons that conjure up images of a shameful and cruel past of slavery.

8. Not everyone enjoys the sight of colonial-styled buildings. Some people prefer buildings with modern architecture and design.

9. Some old historic buildings, even when restored, are still more vulnerable than modern buildings to forces of nature such as earthquakes and hurricanes.

10. Forces of economics may compel a developer to tear down a small historic building and erect a much bigger modern building in its place with more efficient facilities and amenities, so that higher business productivity and economic returns can be realized.
The main Basic Urban Service issues facing St. John’s are as follows:

**PIPED WATER**

Irregular and inadequate water supply is caused by factors such as periodical drought that afflict the island and old and worn out water systems that cause heavy water leakage. Additionally, due to the continual growth of the city, water demand has risen to the point where many of the old drains are too narrow to adequately supply the volume of water required. Water consumption in St. John’s now averages approximately 40 gallons per person per day.

Antigua Public Utilities Authority plans to set up 3-4 desalination plants around the country that will better regularize water services.

Piped water goes to the urban slums, but some households cannot afford to pay for this service. In 1991, of the 7,532 households in St. John’s, 2,644 or 35 percent did not have access to piped water in their homes. They got their water from public standpipes that could be found at various points. A Kairi study carried out in 2007 found that 21 percent of the population depended on stand-pipes.

### TABLE 3:

<table>
<thead>
<tr>
<th>TOILET FACILITIES IN ST. JOHN’S CITY (%)</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Flush toilet linked to sewer</td>
<td>1.5</td>
</tr>
<tr>
<td>Flush toilet linked to septic tank/soak-away</td>
<td>73.8</td>
</tr>
<tr>
<td>Pit latrine / VIP latrine</td>
<td>21.8</td>
</tr>
<tr>
<td>Other</td>
<td>0.3</td>
</tr>
<tr>
<td>None</td>
<td>1.5</td>
</tr>
<tr>
<td>Not stated</td>
<td>1.1</td>
</tr>
<tr>
<td>Total (%)</td>
<td>100</td>
</tr>
<tr>
<td>Total (number)</td>
<td>9,772</td>
</tr>
</tbody>
</table>

Source: Kairi Consultants Ltd. / National Assessment Team of Antigua and Barbuda, 2007.
SEWAGE

There is a great need for a city-wide central sewage system that will improve the city’s handling and treatment of sewage.

According to the 2001 Census of Population and Housing in St. John’s, out of 6,577 households, 2,073 or 32 percent still relied on pit latrines, 100 households or 2 percent had no toilet facilities at all, and 4,190 or 64 percent of households had flush toilets linked to septic tanks.

A recent study of sewage discharge in St. John’s City in 2007 stated that only a small percentage of property (3 percent of households) had individual sewage treatment systems, while a similar percentage discharged untreated effluent directly into the open drainage system; the majority used septic tanks of varying conditions and efficiency.

Waste from septic tanks is disposed of at the municipal landfill site. This has been found to pose a threat to the quality of water in the area’s aquifers. Most septic tanks are of inadequate capacity, and the large number of tanks plus the increasing population have led to a situation where the ground area is unable to absorb all of the effluent draining into it. Most of the effluent flows in the street drain system which poses a threat to public health. It ends up in St. John’s Harbour causing worrying levels of marine pollution, which if allowed to continue and expand, could result in unacceptably high levels of faecal coliform along nearby recreational beaches.

St. John’s sewage situation is made worse by:

1. Inadequate legislative control and lack of capacity for enforcement of proper sewage disposal practices.
2. Poor incentives for construction and use of effective septic tanks.
3. Inadequate monitoring of water quality to guide policy-makers and legislators.

Challenges that the poor face in accessing basic urban services include:

1. Shortage of personal finances.
2. Lack of land tenure.
3. Living in problem areas that are prone to flooding and with poor vehicular access.

Laws regulating the provision of basic urban services include:

2. The Health Act.
There is an artificial scarcity of residential land in Antigua which is created by private land owners who are unwilling to sell land for housing. Instead, they hold land as a means of financial security and to pass on to their children. There is also a lot of underdeveloped land in approved subdivisions or which have been allocated to locals and foreigners who are unable or unready to develop them. This artificial scarcity is reflected in the high prices of land and housing that puts them beyond the reach of low and middle-income earners.

Allocation of Government (Crown) land for development is carried out by various agencies (Lands Division, Central Housing and Planning Authority and the Agricultural Department), with limited consultation and coordination between them.

There is no formal land use policy for St. John’s. The price of land and property in the city is primarily determined by the market forces of supply and demand. Land prices in the city are several times higher than in the suburbs and in the countryside. High land prices, coupled with limited land space and inadequate vehicle parking facilities, have forced many businesses to relocate to the suburbs and even to the rural areas.

There is a draft land use framework now under review by the Ministry of Agriculture, Lands, Housing, and the Environment.

Land ownership in the city is governed by the Land Laws of Antigua and Barbuda, and land use is regulated by the Development Control Authority (DCA). The Development Control Authority is also mandated by the Antigua and Barbuda Physical Planning Act, 2003 (No. 6 of 2003) to draft, monitor and update a land use and zoning plan for the country, referred to as the Antigua and Barbuda National Physical Development Plan (NPDP). Two such plans were drafted in the past (in 1976 and in 2001) but were never ratified and implemented by the Cabinet and Parliament. Currently, a planning consultancy firm from Trinidad and Tobago, GENEVAR, has been contracted to revise the existing 2001 National Physical Development Plan, which is to be presented to the Antigua and Barbuda Government in mid October 2011 for passing and implementation. The present Government appears to have a strong desire for an official NPDP, to aid it in regulating land use which is becoming increasingly scarce and in guiding the formulation of development policies and activities.

St. John’s local area land use, development planning and management of municipal activities are carried out by the statutory body, the St. John’s Development Corporation.

Also, land zoning ordinances are being drafted by the Ministry of Agriculture, Lands, Housing, and the Environment.
INSTITUTIONAL SET-UP OF THE LAND SECTOR IN ST. JOHN’S CITY

- The Land Registry, under the Ministry of Legal Affairs, administers all Crown Land and keeps land records.

- St. John’s Development Corporation directly manages how land is developed and used in St. John’s. The St. John’s Development Corporation Act (Cap. 392), Section 4 (3) (a) states: “The Corporation may acquire, manage and dispose of land whether within or outside any designated area.”

- Land titles fall under the Ministry of Legal Affairs.

- The Survey Department is under the Ministry of Agriculture, Lands, Housing, and the Environment, and is responsible for the laying out of land.

- The Cadastral Department is responsible for maps and aerial photographs.

- The Inland Revenue Department is charged with the task of receiving and collecting land taxes.

- St. John’s Development Cooperation is mandated to implement development goals (land and otherwise) in the city.

- The Environment Division vets Environmental Impact Assessments (EIAs) that developers may be required to produce for large projects and projects that may have an impact on the environment, and can advise the Development Control Authority to close down an operation that is in violation of the Environmental Act.

- The Development Control Authority does final approval of all development projects in St. John’s.

- The Cabinet must give approval for the use of all coastal, beach and marine land as these areas are under Crown ownership.

The land institutions affecting St. John’s are well coordinated. However, there are a few overlaps such as between legislation for the Development Control Authority and for the Central Housing and Planning Authority. Both the Development Control Authority and the Central Housing and Planning Authority have legal powers of eviction (though in practice, only the Development Control Authority has been exercising them).

Citizens, city residents and the civil society are directly involved in land management, to the extent that the majority of land in St. John’s is privately owned and used.

There is adequate land legislation, but some legislation needs to be updated in order to deal with contemporary issues. The major impediment according to the National Physical Development Plan 2001, is that there is no mechanism for implementing most of the laws (no schedules drafted and approved, and implementing agencies not designated or equipped), and where agencies exist there is need for more coordination.

Encroachment of buildings on agricultural land is also a major challenge, as seen in St. John’s Parish (for example, at Paynters and Woods Estates and in the Cashew Hill area). In addition, a lot of agricultural land is currently left idle or is under low intensity agricultural use. Failure to exploit their full potential leaves these areas vulnerable to encroachment of buildings (especially in the absence of an official National Physical Development Plan).
SOME RECOMMENDATIONS AND POLICIES ENUNCIATED IN THE DRAFT 2001 NATIONAL PHYSICAL DEVELOPMENT PLAN AND THE ANTIGUA AND BARBUDA NATIONAL AGRICULTURAL LAND USE POLICY (NALUP)

1. Proposals for built development on agricultural land must be evaluated to determine whether the type, size and location of such development compromises the viability of agricultural production on surrounding land.

2. Indiscriminate grazing and tethering of livestock should be prohibited, especially in residential areas.

3. Clearing of land for buildings should only be carried out with the approval of the Development Control Authority.

4. Provide greater direction and certainty for landowners, developers, land managers, and the community in planning decisions involving land.

5. Prime agricultural land shall not be alienated for built development, industry or non-agricultural uses, without consultations with the Livestock, Crop and Forestry sections of the Ministry of Agriculture.

6. Provision of public utilities or other infrastructure or a proposal of significant economic benefit to a region may cause prime agricultural land to be converted to non-agricultural use. Such conversion must:
   - Comply with some discrete planning scheme or amendment; and
   - Have the confirmation from the Development Control Authority that there is an overriding need for development for community benefit and a suitable alternative site is not available.

7. Adjoining non-agricultural use and development should not unreasonably fetter agricultural use.

8. Where agricultural land has been encroached or change of use has occurred because of illegal actions and actions contrary to policy, there must be procedures for mandatory reclamation of that land to its rightful use and guidelines or procedures for application of compensatory penalties that will deter such change of use.
## ST. JOHN’S CITY

<table>
<thead>
<tr>
<th>STRENGTHS</th>
<th>WEAKNESSES</th>
<th>OPPORTUNITIES</th>
<th>THREATS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Human resources: there are many educated and skilled individuals residing in the country; population is mostly English-speaking and friendly; and the country has stable socio-political conditions.</td>
<td>Weak manufacturing sector. A deteriorating agricultural sector, which was once the main-stay of the economy but which now contributes less than percent of the nation’s GDP. Most food is now imported.</td>
<td>Under-exploited marine resources. The CARICOM Single Market and Economy (CSME) – the right to establish businesses and to work in member countries. Economic Partnership Agreements (EPAs) – to be able to take advantage of the European market. Petro-Carib and The Bolivarian Alliance for the Peoples of Our America (ALBA) Agreements – providing much needed economic and technical assistance, and the potential for new markets.</td>
<td>Natural disasters. Increased import prices – mainly oil. Continuing trend of out-migration (emigration) – the so-called “Brain-drain” – of the country’s smartest, most educated and experienced workers to the developed countries of North America and Europe. Not only are these people not present to help develop the country, but the country looses the vast resources it spends to educate and train them. Impact of the Global Financial Crisis on Antigua and Barbuda (see flow chart below).</td>
</tr>
<tr>
<td>Unique location: close proximity to the world’s most lucrative market, the USA; directly across the Atlantic Ocean from the world’s second most lucrative market, Western Europe; centrally located within the Caribbean archipelago; less than a day’s sail for cruise ships doing “island-hopping”.</td>
<td>Demographics: small size of population which means small local market and low economies-of-scale in business and industry. A small economy is also vulnerable to external economic shocks. Poor economic linkages - both backward and forward linkages. For example, there are not enough interactions and mutual benefit-exchanges between the two principal industries of the country, tourism and agriculture.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Natural resources that are ideally suited for tourism: bright clear skies and spectacular sunsets; warm weather and sea; cool constant North East Trade Winds; beautiful sandy beaches; attractive coastal waters; beautiful under-water sceneries including coral reefs; interesting landscapes and land features. Rich and interesting culture, history, festivals, and sports.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Under-exploited marine resources.</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>The CARICOM Single Market and Economy (CSME) – the right to establish businesses and to work in member countries.</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Economic Partnership Agreements (EPAs) – to be able to take advantage of the European market. Petro-Carib and The Bolivarian Alliance for the Peoples of Our America (ALBA) Agreements – providing much needed economic and technical assistance, and the potential for new markets.</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>There is a lot of potential for national economic and social advancements by investing in more areas like education and sports tourism.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### STRENGTHS

- Human resources: many educated and skilled individuals residing in the country, mostly English-speaking and friendly, with stable socio-political conditions.
- Unique location: close proximity to the world's most lucrative market, the USA; directly across the Atlantic Ocean from Western Europe; centrally located within the Caribbean archipelago; less than a day’s sail for cruise ships doing “island-hopping”.
- Natural resources: ideal for tourism, including bright clear skies, spectacular sunsets, warm weather, sea, cool constant winds, sandy beaches, coastal attractions, underwater sceneries, beautiful landscapes, and rich culture, history, festivals, and sports.

### WEAKNESSES

- Weak manufacturing sector, with a deteriorating agricultural sector contributing less than 1% to GDP, and most food now imported.
- Demographics: small population means limited local market and economies of scale, making the country vulnerable to external economic shocks.
- Poor economic linkages between tourism and agriculture, and other principal industries.

### OPPORTUNITIES

- Under-exploited marine resources:
  - The CARICOM Single Market and Economy (CSME) provides the opportunity to establish businesses and work in member countries.
  - Economic Partnership Agreements (EPAs) allow access to the European market.
  - Petro-Carib and The Bolivarian Alliance for the Peoples of Our America (ALBA) Agreements offer economic and technical assistance, and potential for new markets.
- Potential for economic and social advancements by investing in areas like education and sports tourism.

### THREATS

- Natural disasters.
- Increased import prices, mainly oil.
- Continuing brain-drain due to emigration to developed countries of North America and Europe,带走国家的最聪明、最教育和经验丰富的劳动力，不仅无法帮助发展国家，还使国家失去了巨大的资源，即为这些人员花费的教育和培训费用。
- Impact of the Global Financial Crisis on Antigua and Barbuda (see flow chart below).
# DISASTER MANAGEMENT, CLIMATE CHANGE AND THE ENVIRONMENT

<table>
<thead>
<tr>
<th>STRENGTHS</th>
<th>WEAKNESSES</th>
<th>OPPORTUNITIES</th>
<th>THREATS</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>DISASTERS</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>High level of coordination both locally and regionally.</td>
<td>High turn-over of volunteers.</td>
<td>There is a global shift from disaster preparedness and response to risk management and mitigation.</td>
<td>Global warming and climate change.</td>
</tr>
<tr>
<td>Effective National Emergency Operations Center (NEOC) volunteer system.</td>
<td>Inadequate resources (financial and human).</td>
<td>Training alternatives are now more flexible, for example, distance learning, more available information and real-time data on the internet.</td>
<td>More people travelling, especially to a tourism destination like Antigua and Barbuda. This has contributed and will continue to contribute to the rapid spread of communicable diseases.</td>
</tr>
<tr>
<td>Frequent and wide-ranging training.</td>
<td>The Government system can be too dynamic, where personnel are frequently moved from one job position to the next.</td>
<td>Now there are more community-centred initiatives.</td>
<td>The entire Caribbean region is seen as a relatively soft/easy target for terrorism.</td>
</tr>
<tr>
<td>Very adaptable and resilient disaster emergency system in place.</td>
<td>Local partnership agencies often lack adequate internal planning.</td>
<td>Improving technologies (computers and accompanying software, satellites, storm-chasing airplanes, weather balloons, and cell phone communication.</td>
<td>Poor development practices such as backfilling of and placing buildings in natural water-ways, stripping land of all vegetation, and constructing buildings along the coast without observing the prescribed coastal set-backs.</td>
</tr>
<tr>
<td>High level of public support during a disaster.</td>
<td>Some level of public apathy, especially to non-frequent disasters such as earthquakes, severe droughts and severe flooding.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

| **CLIMATE CHANGE AND SEA LEVEL RISE** | | | |
| The infrastructure is already in place for cruise ships. | The sewage system from nearby farms, for example Gray’s Farm Community, leaks into the St. John’s Harbour causing pollution. | St. John’s has the potential to be the leading cruise ship stop in the Caribbean. | Floods which occur during hurricanes damage the ports which require a lot of money to reconstruct. |
| The infrastructure is packed close together making it easy for any modifications to occur such as implementing a proper central sewage system. | The drainage system is inadequate. | Any new buildings that are to be erected must put in place proper drainage systems. | The sewage system and other sources of pollution serve as a threat to the harbour. The National Solid Waste Strategy (NSWS) should insist on more natural filtration systems. |
| | The design of the city makes it difficult to make adjustments (the buildings are old and the systems are cracked). | The National Solid Waste Strategy (NSWS) should insist on more natural filtration systems. | |
### BASIC URBAN SERVICES

<table>
<thead>
<tr>
<th>STRENGTHS</th>
<th>WEAKNESSES</th>
<th>OPPORTUNITIES</th>
<th>THREATS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Garbage collection in St. John's City and in the nation is done on a regular schedule - daily and weekly - respectively.</td>
<td>The National Solid Waste Management Authority's (NSWMA) repair and maintenance programme for vehicles and equipment is weak.</td>
<td>Garbage recycling has been in existence in Antigua and Barbuda long enough for it to be recognized as a resource and revenue generating business.</td>
<td>Unplanned increase in population (Antigua has experienced a significant influx of immigrants within the last couple of decades). This has led to an increased generation of solid waste that is placing a greater burden on the disposal system.</td>
</tr>
<tr>
<td>Waste collection work is done well - The National Solid Waste Management Authority employees take their responsibilities seriously.</td>
<td>Widespread littering.</td>
<td>Ship waste disposal can generate foreign exchange for the country (Maritime Pollution Convention Annexes would only allow the country to accept certain types of waste).</td>
<td>As Antiguans and Barbudans rapidly adopt a more consumption based lifestyle that comes with their growing standard of living, they tend to throw away more things and generate more garbage. For example, more national events mean more garbage: The coming of Cricket World Cup to Antigua; The rash of pre-Carnival fetes in recent years; Love Fest and other large musical shows and concerts; J'ouverts during not only Carnival but many other events of the year.</td>
</tr>
<tr>
<td>Waste storage bins are provided for disposal of litter.</td>
<td>Inadequate enforcement of legislation dealing with matters such as littering.</td>
<td>External training and conferences offer learning and the introduction of new ideas that can further improve waste collection and disposal.</td>
<td>The national landfill is filling up faster than planned. The landfill was established with three cells and each cell was designed to last 7-10 years.</td>
</tr>
<tr>
<td>A system is in place for washing gutters and streets.</td>
<td>Absence of a central sewage system.</td>
<td>Considerations for waste-to-energy projects/businesses.</td>
<td>Due to the current world economic recession and the resultant contraction of Antigua and Barbuda's economy, there have been a number of IMF stipulated cutbacks in Government subventions. Historically, Government subvention constituted about one third of the The National Solid Waste Management Authority's income, and with this gone, there is no money to do extra needed things such as the hiring of more maintenance personnel.</td>
</tr>
<tr>
<td>Adequate side-walks are in place in some areas.</td>
<td>Squatting and poor enforcement of laws relating to land use.</td>
<td>The National Solid Waste Management Authority is partnering with private businesses to ensure proper waste management.</td>
<td></td>
</tr>
<tr>
<td>Erection of many modern buildings that facilitate proper waste disposal.</td>
<td>Illegal hawking of goods.</td>
<td>Exploring possibilities for funding of a Central Sewage Treatment System, since international agencies see this as a human priority and thus make access to soft loans easy.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Improper storage and disposal of waste that has led to the proliferation of rodents.</td>
<td>Review and implement land use policy.</td>
<td></td>
</tr>
</tbody>
</table>
**Project proposal**

**Board of Guardians**

**LOCATION:** The Board of Guardians Office is on St. John's Street (lower) in St. John's City, and is administered by the Social Transformation Division located on Dickenson Bay Street, St. John's City.

**DURATION:** Began in the late 1980s and is to run indefinitely. However, it is operated based on a budget that is revised and approved annually.

**BENEFICIARIES:** The poor who have no other means of assistance. People are recommended to the board for assistance by entities such as: a church or pastor, relatives, friends or acquaintances who are not in a position to help, health officials, social workers, truancy officers, police officers, other government and community officers, and agencies. The Board of Guardians require the following information: name, age, location or place of residence, date of birth, and living conditions and other reasons for assistance.

However there are always more people in need than the project budget can sustain. Therefore, people must be carefully screened by the Board to ensure that the most needy are the ones given assistance. Assistance is basically a cash transfer.

**IMPLEMENTING PARTNERS:** The Board of Guardians has a dedicated staff of nine people. One of them is the Relieving Officer whose duty it is to take the relief funds to their beneficiaries. Members of staff also assess whether or not a recommended person should be helped and conduct home visits.

**ESTIMATED COST:** 2009-2010 budgeted annual grants to individuals without salaries: USD 468,550. All the money came from the Government’s central fund.

**BACKGROUND:** The programme started in the late 1980s under the name, “The Poor People’s Relief Fund”. The initial donations per person were much smaller than they currently are.

**OBJECTIVES:** To assist the poor and indigent in society who are not able to help themselves and who have no other source of assistance.

**OUTPUTS:** Raised standards of living or sometimes simply survival or sustenance for the very poor and helpless in society. Assisting the helpless to get a start in society so that they may eventually help themselves.

**ACTIVITIES:** Financial assistance is given by a card record system, and the cards are kept by the individuals. When an individual receives a payment, his/her card is updated. When the card is filled out, a new card is issued.

Beneficiaries receive a stipend every two weeks, or monthly in some cases.

For basic home repairs, the board gives individuals a grant of EC $2,500. Repairs mainly consist of painting, replacing decaying boards and fixing leaking or weak roofs. The Board first sends an assessor to document the repair work needed, which must then be assessed and approved by the Board. The beneficiary is then sent to designated hardware stores with a voucher to collect the materials. Note that the grant is for materials only. The beneficiary pays for labour.

**WEAKNESSES:** Presently, the Board of Guardians and the Social Transformation Division is not always able to tell who is urgently in need and who is already receiving assistance from other Government relief programmes. Similar Government relief programmes are as follows:

1. Petro-Carib – People Benefit Cards, that are used for receiving produce from Central Marketing Cooperation (CMC) and Fisheries Outlets.

2. An EC $100 subsidy voucher to people of pensionable age, to help pay Antigua Public Utilities Authority utility bills.

3. People over the age of 80 can apply for free utility services from Antigua Public Utilities Authority.

4. From the Board of Education; a) School Meal Programs at certain schools; b) Uniform Grant for students from both public and private schools, once their parents apply for it; c) Free school text books for all students in the country; d) Free education for every student attending Government schools.

5. Job Placement Programme for jobless people in search of employment.

6. GRACE (Government Residential Assistance Care for the Elderly) where presently 70 people are employed to take care of the elderly.

**EQUIPMENT PROCURED:** The Board of Guardians has its own Government-supplied transport vehicle, and the office is set out with the necessary furnishing, stationery and equipment.
Because of the compact nature of the city, especially the Central Business District, one does not need transportation to get around. The city is expanding and more vehicle parking and commercial spaces are being constructed.

<table>
<thead>
<tr>
<th>STRENGTHS</th>
<th>WEAKNESSES</th>
<th>OPPORTUNITIES</th>
<th>THREATS</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>High property taxes.</td>
<td>There is still space for the city to expand.</td>
<td>In the short term, the city may lose businesses since the construction of the Multi-Storey Car Park is on hold and businesses are losing income when patrons and customers cannot get parking for their vehicles. As a result, some businesses are relocating to the suburbs where there is more land available for parking.</td>
</tr>
<tr>
<td></td>
<td>High land and property prices.</td>
<td>As the city expands, there is the likelihood that more businesses will be established and more jobs generated.</td>
<td></td>
</tr>
</tbody>
</table>

There is still space for the city to expand. As the city expands, there is the likelihood that more businesses will be established and more jobs generated.
BIBLIOGRAPHY:

Antigua and Barbuda


GEF/IWCAM, Mitigation of Groundwater and Coastal Impacts from Sewage Discharge from St. John’s, Antigua, 2007.


Government of Antigua and Barbuda, The St. John’s Development Corporation Act (Cap. 392).

Henry, Edward T., A History of Antigua and Barbuda. www.antiguamuseums.org/Historical.htm

Historical and Archaeological Society, “A Guide to Historic St. John’s”. Museum of Antigua and Barbuda, P. O. Box 103, in co-operation with the Ministry of Tourism, St. John’s, Antigua, West Indies.


CONTACTS:
Alioune Badiane, Director, Regional Office for Africa and the Arab States,
E-mail: Alioune.Badiane@unhabitat.org
Doudou Mbye, Programme Manager, Participatory Slum Upgrading Programme,
E-mail: Doudou.Mbye@unhabitat.org
Kerstin Sommer, Programme Focal Point, Participatory Slum Upgrading Programme,
Email: Kerstin.Sommer@unhabitat.org
E-mail: PSUP@unhabitat.org