



Figure 3: The South East Peninsula





NEVIS



Figure 4: Nevis Peak

Nevis lies along a parallel of the inner volcanic arc of the Lesser Antilles and is comprised of nine distinct volcanic centers. The central Nevis Peak, *see Figure 4*, is the most imposing of these centers with an altitude of 985m (3,232 ft.), giving the island a conical appearance. Round Hill (Windy Hill) to the north climbs to 309m (1,014 ft.) with Saddle Hill in the south rising to 381m (1,250 ft.). The other subsidiary peak of note is Butlers Mountain 578m (1,896 ft.) which thickens the range lying to the east of the island.

The terrain slopes steeply from these peaks, at approximately 40 degrees, but it flattens out to gentle slopes and low cliffs towards the coastal fringe. These slopes are characterized by deeply incised ghauts with steep sides, which act as the primary channels for drainage. Most of the runoff through these ghauts ends up in the near-shore marine area. The remainder either infiltrates downward to recharge the underground aquifers, or collects in coastal lagoons.



2.3 GEOLOGY

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The island is composed, almost exclusively, of volcanic rocks of andesite or dacite mineralogy. Its geology is similar to that of other volcanic islands in the Lesser Antillean archipelago. The entire island archipelago is geologically young, having begun to form approximately less than 50 million years ago, during the Miocene era. Volcanic activity occurred along the ridges of this arc during the Miocene era and has continued since. Most of the deposits are pyroclastics and range in size from silt-sized to boulders several meters in diameter. Agglomerate turf of angular andestic fragments embedded in a silty or sandy matrix is the most typical rock type of the middle and Olivees range. Mount Liamuiga pyroclastics are more commonly sandy, turfy ashes with a much higher proportion of boulders. Flows and intrusives are evident, the latter occurring mainly in the older rocks of the southeast. A basalt flow from Mount Liamuiga is evident at Black Rocks.

The soils of St. Kitts and Nevis have been used intensively for over three hundred years, nevertheless (Lindsay and Horwith 1999) report that in general, the soils of both islands have stood up amazingly well under the strain of long periods of cultivation. According to these authors there are marked differences between the soils of St. Kitts and Nevis and is reflected in the role agriculture plays in the respective economies. The soil types found on St. Kitts are as follows:-

Yellow: An ash-based, porous, well aerated soil that makes the best agricultural soil.

Brown-Yellow: Good for crops, weathers from small stones, angular boulders, sand(Mixed), covers much of the well-watered western slopes and lowlands

Red-Brown: Soils of the upper slopes, higher in nitrogen and organic matter but leached by high rainfall in areas far too steep for agriculture, under forest cover.

Shoal: Montmorillonitic clay with silica pan (found on the Southeast Peninsula). This soil is difficult to farm and is the type found on Nevis' lowlands.



Nevis is a volcanic island that began its formation in mid-Pliocene times (approximately 3.45 million years ago). However, the island comprises a number of discrete eruptive centers that range in age from mid-Pliocene to Pleistocene. These prevent any single model of the island's geological evolution. The geology of Nevis can be subdivided into four informal units: Volcanic of the eruptive centers, volcanigenic rocks - pyroclastics and lahars, fluvial and lacustrine deposits, and raised beaches.

It has been noted that Nevis has fewer soil types with extensive areas where good soil is rendered almost unusable because of the profusion of interlayered rocks, clasts and boulders. The three primary soil types of Nevis are as follows:-

A Red-Brown Earth at the summit of Nevis Peak. This soil is mature, but strongly acidic and of little agricultural importance.

A Brown-Yellow Earth, which encircles the area of the Red-Brown Earth type. This is a good agricultural soil but contains many boulders that limit mechanized methods of cultivation.

A "shoal" soil, which occurs in low-lying areas. Lying on volcanigenic sediments, this soil is loamy but clayey and difficult to cultivate.

2.4 CLIMATE

St. Kitts and Nevis has a tropical maritime climate, which is influenced by steady northeast trade winds and tropical oceanic and cyclonic movements. Seasonal and diurnal variations in temperature are small. The mean temperature is approximately 27°C (80.6°F).

Rainfall is mainly cyclonic and orographic and increases in amount and frequency with altitude. The average rainfall in St. Kitts is 1422.4 mm (56 inches) and in Nevis it is 1199 mm (47.2 inches). The rainy season is typically August to November with a wet spell in May and the dry season is from mid-January to April.



SOCIO-ECONOMIC PROFILE

2.5 BRIEF HISTORY

The first inhabitants of the islands were pre-ceramic people called Sibonay. They are believed to have arrived about 2,100 years ago from Central America. The next people to colonise the islands were the Arawak who originated from the Orinoco River area in modern day Venezuela. They in turn were followed by the Caribs, again from South America.



Figure 5: Carib Drawings at Dry River bed (St. Kitts)



Figure 6: Replica of a Carib Dwelling (Nevis)

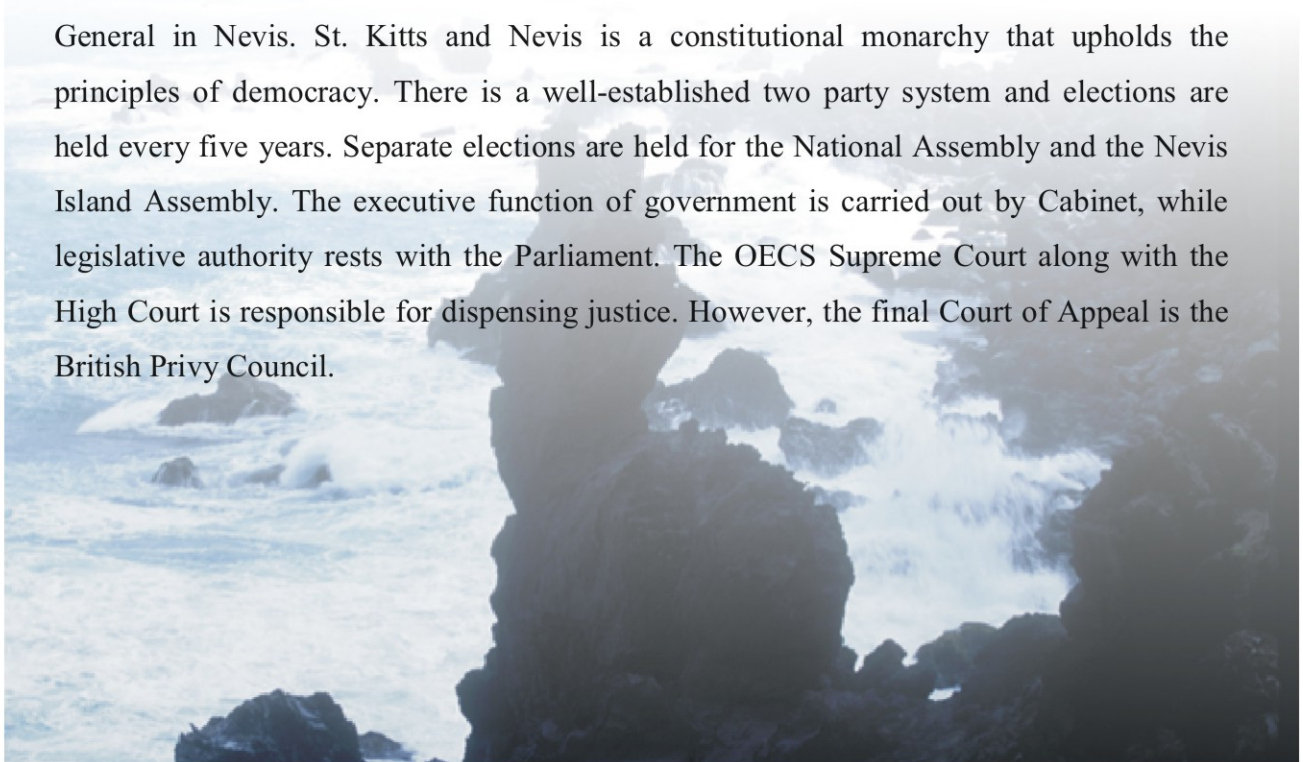
Christopher Columbus landed on the larger of the two islands in 1493 on his second voyage and named it after St. Christopher after his patron saint. Columbus also discovered Nevis on his second voyage, reportedly calling it Nevis because of its resemblance to a snowcapped mountain (in Spanish, "nuestra senora de las nieves" or our lady of the snows). European colonization did not begin until 1624, when the first English, then French colonists arrived on St. Christopher's Island, whose name the English shortened to St. Kitts. Within the first decade of European settlement, Africans were taken from countries such as present day Senegal, Nigeria, Congo and Angola, to name a few, to provide slave labour for the cultivation of sugar cane. By 1700 the African population significantly outnumbered the Europeans.



The English and French held St. Kitts jointly from 1628 to 1713. During the 17th century, intermittent warfare between French and English settlers ravaged the island's economy. In times of peace however the island earned them exceptional wealth. Meanwhile Nevis, settled by English settlers in 1628 grew continuously prosperous. St. Kitts was ceded to Great Britain by the Treaty of Utrecht in 1713. The French then seized both St. Kitts and Nevis in 1782. The Treaty of Paris in 1783 definitively awarded both islands to Britain. Two centuries later in 1983, the Federation of St. Kitts and Nevis attained full independence on September 19th, 1983.

2.5.1 POLITICAL PROFILE

There is a National Assembly in St. Kitts that provides for eleven elected representatives, eight from St. Kitts and three from Nevis. This unicameral assembly also provides for three senators – two appointed by government and one by the Leader of Opposition. It is important to note that there is no local government in St. Kitts. The Nevis Island Assembly and the Nevis Island Administration have legislative and administrative responsibility for Nevis within the confines of the Federal structure. The titular Head of State is Queen Elizabeth II who is represented by the Governor General. There is also a Deputy Governor General in Nevis. St. Kitts and Nevis is a constitutional monarchy that upholds the principles of democracy. There is a well-established two party system and elections are held every five years. Separate elections are held for the National Assembly and the Nevis Island Assembly. The executive function of government is carried out by Cabinet, while legislative authority rests with the Parliament. The OECS Supreme Court along with the High Court is responsible for dispensing justice. However, the final Court of Appeal is the British Privy Council.





2.6 LAND & PROPERTY RIGHTS

The situation regarding land ownership differs between St. Kitts and Nevis. In St. Kitts Government owns approximately 80% of the lands, of this around 30% is used by SSMC for producing sugar cane. Other Government lands are vested with the Frigate Bay Development Corporation (FBDC) and the National Housing Corporation (NHC). Freehold tenure is granted with respect to residential lands, while Leasehold tenures are often granted to agricultural lands. On Nevis, private individuals own most of the lands while government owns a small portion. A number of long term leases and freehold titles are also prevalent on Nevis.





2.7 SOCIAL SETTLEMENTS

2.7.1 HUMAN SETTLEMENTS

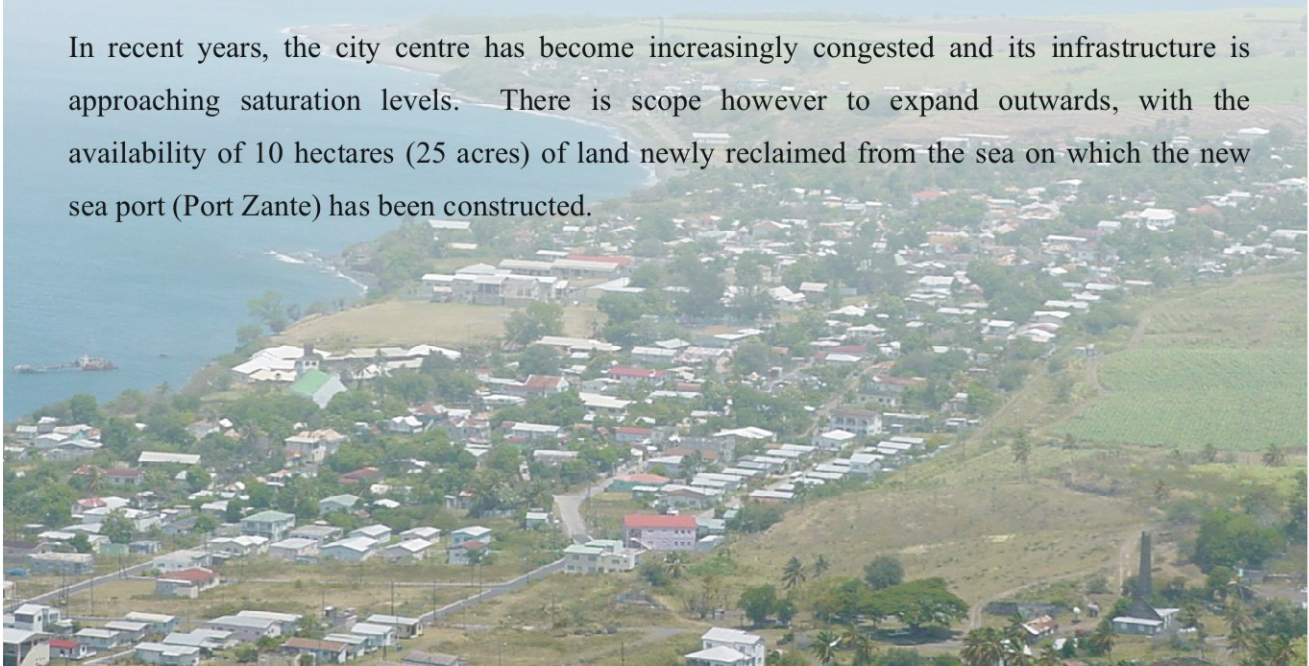
The settlement patterns on St. Kitts and Nevis has mainly occurred as a result of historical socio-economic factors and more recently from planned development strategies.

ST. KITTS

On St. Kitts the settlement pattern consists of a series of small villages along the island main road, which passes very close to the coastline. There is a general preference for living near the coastline, primarily because most of the upland interior land is very rugged and steep, with some sections under the forest reserve and the remaining areas being intensely cultivated by sugar cane.

The major urban areas are Basseterre - the capital city, Sandy Point and Cayon. The drift from rural to urban areas over the past two decades has led to Basseterre becoming overcrowded. Sandy Point and Cayon are also experiencing expansion related problems.

In recent years, the city centre has become increasingly congested and its infrastructure is approaching saturation levels. There is scope however to expand outwards, with the availability of 10 hectares (25 acres) of land newly reclaimed from the sea on which the new sea port (Port Zante) has been constructed.





NEVIS

Unlike St. Kitts, the majority of the population on Nevis is not concentrated in the capital, Charlestown. There is more evidence of dispersed settlement patterns. This is due to the fact that peasant farming on low lying areas was more predominant on Nevis than on St. Kitts thus giving rise to this dispersed pattern.

The main urban areas in Nevis are located in Charlestown - the capital, Gingerland, Newcastle and Cotton Ground. The latter areas are not experiencing great population pressures as are their counterparts on St. Kitts. However, the population in the capital is expanding due to the influx of migrants from Guyana and the Dominican Republic who prefer to reside in Charlestown. In recent years, the Central Business District (CBD) has become saturated resulting in it expanding into Stoney Grove and Pinney's Industrial Site.

Major land uses in the urban zone of the Federation include:

- The Robert L. Bradshaw Airport (St. Kitts) and the Vance W Amory International Airport (Nevis);
- A variety of social infrastructure and institutions including schools, hospitals and churches;
- Significant areas of urban open spaces including cultural centres, parks, botanical gardens, the Pall Mall Square, playing fields;
- Hotels, especially the Marriott Hotel in St. Kitts and Four Seasons in Nevis(*see Figure 7*);
- Industrial parks;
- Cemeteries; and
- Major infrastructure installations, including the power stations.



Figure 7: Four Seasons Hotel

