

Sint Eustatius

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Strategic development plan

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St. Eustatius

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Preface

My fellow Stadians,

An important ingredient in the successful development of any country is the ability of its people to be progressive and forward thinking. While the future ultimately cannot be predicted it is important to realize that the decisions that are now being taken will have their impact on the future for generations to come. It is also equally important to realize that we live in a dynamic world that continues to change and evolve. Therefore it is imperative that we actively influence and effect the changes that are inevitable by getting involved and being an active participant in the process. With these basic principles in mind the strategic development plan was initiated, with the idea of drafting a collective future vision, which would serve as a basis for our future strategic development.

The process commenced with the collection of ideas and consultations with stakeholders which produced the first draft and started the discussions. The level and intensity of discussions showed the importance and level of commitment on behalf of all stakeholders. We saw an entire community coming together to share opinions and plan our future development strategy. As a result of these discussions we now have a product that forms the basis for all future development. We have collectively taken the first steps

on the journey towards a brighter future where we can realize, a growing hospitality product, an improved and expanded economic zone, all while preserving the space to restore the traditional economic pillars such as agriculture, quality animal husbandry and fishery industries.

While the realization of this strategic development plan is an important milestone in our developmental process it is just the beginning. We must now continue to look forward to transform these ideas into a spatial plan that reflects our established vision. We must remain committed to the process and with a critical eye on the changes, continue to move forward.

Statia has a bright future ahead. Realizing this future as laid out before us in the strategic development plan is realistic and achievable. With continued commitment and participation of all stakeholders we can be confident that we are building a future that we can be proud of and that the next generation can continue to build on. Let's continue to build this bright future together. My sincere thanks and congratulations to all.

Lt. Governor Gerald Berkel



MAZINGA
Gift Shop





1 Strategic Vision

1.1 Statia is developing

Higher level of prosperity in a livable environment

In the future, the population of St. Eustatius will enjoy a higher level of prosperity in a livable environment. This is the vision statement of St. Eustatius for the next decade. The implications of this statement are threefold.

First: economic growth is required to reach a higher level of prosperity for the island and the people of Statia. The tourist sector, among others, provides opportunities to achieve this goal.

Second: to develop and maintain amenities a growth of population is needed.

Third: to preserve and develop Statia's spatial qualities, careful planning is required. Touristic amenities and facilities, new homes, investments in infrastructure, environmental management; all need to be encompassed in a strategically balanced plan.

Why a strategic development plan?

Statia offers many development possibilities on a geographically small island. This asks for well considered planning choices. The key focus is to preserve existing qualities such as culture, nature, our rich heritage and the authenticity of a Caribbean island. Statia strives for sustainable

development, towards an attractive place to live, work and recreate.

This Strategic Development Plan (SDP) is designed to give an outline to the envisioned sustainable development of Statia.

1.2 Sustainable development

Authenticity and identity as point of departure

Statia has unique qualities. The island is authentic and pure, has many cultural heritage sites, beautiful natural landscapes, unique flora and fauna and excellent diving sites. Other qualities that attribute to Statia's identity are the local culture, the peacefulness and the small size. It is this mix of qualities that makes Statia one of a kind in the Windward Islands. Statia's development is the development of these unique identifying qualities: to strengthen and protect them and use their full potential for the island's well-being, now and in the future.

Social welfare as key to success

Growth of prosperity is not an objective in itself, but aims at achieving a higher level of welfare. Investments in Statia's economic development aim at a growth in quality rather than quantity; new activities will be designed to contribute to the quality of life on Statia. Aiming at a growth in welfare is equal to aiming at a socially strong Statia, where there is a place for everybody and where the less fortunate also profit from growing wealth - this generation as well as future generations.





Making use of opportunities

Statia chooses for a sustainable development strategy. Sustainability does not restrict, but creates new opportunities for the economy - if only by creating the image of Statia as a sustainable travel destination. Statia will have to discover, develop and offer new sustainable products and services. This will broaden and strengthen our economy, and generate the necessary income to enhance welfare.

1.3 Improving social welfare and prosperity

Statia, home of Stadians

To arrive at a higher level of prosperity in a better living environment, Statia will invest in the development of its inhabitants from a social and socio-economical perspective, based on Statia's own cultural and religious traditions, standards and values. The emphasis is on facilitating the ambitions of the inhabitants: economic progress, self-evolvement and social security. Growth of the economy will go hand in hand with social development and improved social services such as education and health care.

It starts with good education

Prosperity starts with good education. Education creates knowledge, social skills and self-actualization, necessary for success in the labor market. Education also creates the cultural identity and self-awareness, which contributes to the quality of life in general.

Many Stadians leave the island for higher education - and do not come back due to lack of work. To achieve a balanced economic growth, it is necessary to prevent brain drain. Therefore quality employment has to be created and the educational system has to be in line with the demand on the labor market.

A working society

New economical activities creating employment should benefit the island and its inhabitants. Many Stadians leave the island for lack of work on Statia itself. A sound future for Statia requires a solid economical basis to create employment for the inhabitants of the island. Lack of sufficient job opportunities can lead to social problems and poverty. A stratified labor market is necessary to create possibilities for upward mobility. Private enterprises will be supported in order to stimulate the residents toward self-employment.

Controlled population growth

Economic growth will generate an influx of new residents. Careful accommodation and integration is needed to prevent segregation of population groups, feelings of displacement and estrangement from one's familiar environment by the 'indigenous' population. This calls for controlled growth of the foreign labor force, keeping it in pace with the growth of the population and the local labor force. The aim is a population growth from over 3,500 today to around

5,500 inhabitants in 2030. Two thousand new Stadians - many of them born here, many immigrated.

Health care for all

Health care is a basic right: it must be accessible to all, physically as well as financially. Improving the health care system on Statia is an important goal, presently aimed at creating a new multi-functional medical center, adding ambulant care, home care and a center for youth and family. To improve the level of health care, medical expertise will be called from abroad, and current staff will receive relevant training in order to upgrade the quality of service.

Important aspect of health care is prevention of social problems, such as teenage pregnancy, substance abuse and youth criminality.

Living well on Statia

Improving the living conditions and the environmental qualities contributes to welfare and socio-economical progress. The Stadians, irrespective of income, must have access to quality housing and a proper living environment. The Government in cooperation with the Housing Foundation will invest in new social housing, an upgrading of the existing stock and in a pleasant living environment. Private owners can be offered incentives, such as subsidies, to stimulate improvements to their homes.

1.4 Statia's promising economic pillars

Tourism

Presently, the main economic pillars of Statia are oil transshipment, tourism and the School of Medicine. But there are trump cards yet to be played: Statia's unique heritage, beautiful town and landscape, excellent diving, unique terrestrial flora and fauna and a splendid position among the other Caribbean islands. In short, tourism has great economic potential. To attract tourists to Statia, a larger room capacity has to be created. A number of 250-300 hotel rooms in total is considered to be a minimum to be able to effectively promote the Island on the market. In addition other hospitality facilities will be developed. Lower Town can accommodate a part of these extra hotel rooms, and will be developed as a tourist center. For now, Zeelandia and the strip located on the west side of the Road to White Wall are other areas, designated for hotel development. With tourism comes the demand for other amenities such as welfare facilities, shops, restaurants and supply industry. Tourism creates extra income and contributes to the stratification of the labor market; this will benefit the island economy. Connected to developing the tourist amenities, an active marketing of the island as a tourist destination is a prerequisite for a flourishing touristic sector.





Sint Eustatius

Other supporters to the island economy

NuStar Terminals is investigating the possibilities for rearrangement and expansion of their facilities; the employment opportunities are not yet clear.

The School of Medicine has an ambition to grow. Local agriculture and fishery can supply the home market – including the tourist market – with fresh produce. Approximately 15 hectares of land are, in this plan, reserved for expansion of agriculture. The current plans for improvement and expansion of the harbor improve the infrastructure for local fishing vessels at the same time.

Last but not least, the strategic position in the - Caribbean arch and duty free status, among other factors, contributed to the development of Statia as a trading center in the 18th century and attracted the oil transshipment facility (NuStar Terminals) to the Island in the present era. By further expanding the harbor and the airport, the government expects to attract more transshipment activities and related industries.

Growth in these sectors, tourism and others, is expected to increase employment from 1,015 to approximately 1,625 jobs. The total income of the island will then increase by approximately 60%.

1.5 Careful spatial planning

Existing qualities as point of departure

One of the assets of the island is its green and blue image. The National Park on the Quill and the protected nature areas Boven and Signal Hill offer a variety of botanical and animal life; the National Marine Park has some of the world's finest diving sites and is an important tourist attraction. Statia also has a rich cultural and historic heritage which, however, is partly hidden and overgrown. To sustain the expected development on the island, it is mandatory to preserve and strengthen the existing qualities. That is why Statia chooses for a careful development in order to prevent Statia's assets to decay, and add to the historical character.

Touristic development of Lower Town

Lower Town will be further developed as a tourist area, creating opportunities for the development of small-scale, 30 to 70 room hotels. The possibilities for these developments are investigated in a sketch design (see chapter 6). The architectural design will have to be in balance with the existing buildings and with quality ambitions in the field of sustainability and cultural heritage. If possible, the remains of the old merchant buildings can be used (restored, transformed) for new hotels, shops and other recreational facilities. This will recreate the image of Statia's history. In the port area, amenities will be realized to facilitate yachting

tourists to moor and land. Near the port a fish restaurant could be built to serve the catch of the day.

Nature protection by concentrating residential areas

The population will grow from the present 3,500 inhabitants to approximately 5,500 inhabitants in 2030. To house these new residents, 800 extra homes must be built. To utilize the existing infrastructure efficiently, these homes will mainly be situated in the existing residential areas in and around Oranjestad. In other areas residential development will be limited - to protect nature and scenery, the assets of Statia. In still other areas, such as the National Park on the Quill and the protected nature areas Boven and Signal Hill, – the natural resources for the future - subdivisions and construction will not be allowed.

Development of airport terminal building

The obstacle-free zones along the airport will be extended to comply with international regulations. This requires relocation of the terminal building. The area east of Concordia is suitable for relocation. This will offer the opportunity to modernize the terminal, expand it with more facilities, and design an environment that meets the ambition of spatial quality. Near the new terminal building space is available for small-scale office development and residential use.

A place for horticulture and free roaming cattle

North of the airport and near the schools space will be assigned to horticulture - another opportunity to develop Statia's sustainability. Horticulture will have to meet the demands of sustainability on account of the scarcity of water and the sensitiveness of coral reefs in relation to possible drainage of fertilizers and toxic agents. Free roaming cattle pose a serious threat to the island's biodiversity and scenery. Surface grazing leads to soil erosion (and consequently, via runoff, to degradation of coral reefs), vegetation is being degraded, and historical stacked stone walls are being damaged. This asks for a controlled grazing system and modern professional management techniques, wherein the cattle will be gathered and fenced. North of the airport a location will be assigned. This area now already is a favorite site for the cattle to graze. This accomplished, a replanting program can be executed. The area east of the Quill is a suitable location for professional husbandry.



1.6 How to implement the SDP?

Implementing the SDP by a professional organization

The SDP offers a framework for governmental decision making, aimed at a well-balanced development on Statia. Consequently, a professional organization will be necessary to manage, stimulate, facilitate, check and maintain development. Synchronization of policies of governmental departments, offices and services is necessary. The executing organization has to connect to Statia's present organizational structure and to the experience and mind-set of the Stadians. They must be able to recognize themselves in the Plan and have confidence in its success potential.

Cooperation with market

Implementation of the SDP is not a government affair alone, but strongly depends on initiatives in the private sector. This concerns for example the development of Lower Town, and other areas. The SDP calls for cooperation and incentives.

Starting point for Statia's development

Finally, this SDP is not a finish line, but a starting point for the island's development. This Plan does not contain an exhaustive list of projects but is a dynamic document outlining the direction for Statia to develop and provide a basis for new developments. To be able to achieve the ambitions on spatial quality, this SDP is elaborated in a Spatial Development Plan (zoning).



2 Formation process

2.1 Research, analyses and development options

The SDP is based on elaborate research and stands on two pillars: the Social Economic Initiative (SEI, 2007) and the Economic Development Plan 2004-2007.

Prior to composing a widely supported SDP, a large number of stakeholders has been interviewed. Among these were Stenapa, Statia Oil (NuStar), the Medical School, Secar, the Housing Foundation, GEBE, Steba, the airport, hotels and diving schools. Ambitions, bottlenecks, opportunities and threats came up for discussion.

Based on these interviews, a SWOT (Strengths, Weaknesses, Opportunities, Threats) analysis has been executed. An analysis of the current situation, possible developments and expected chances and threats is presented in themes as tourism, population and housing, infrastructure, social-cultural aspects, business, agriculture, nature and ecology, scenery, heritage and archaeology, and environmental constraints. The SWOT analysis and thematic analyses led to a Note of Outlines and Choices, wherein the development possibilities for Statia were investigated. Thematic options were being related to one another and incorporated into consistent scenarios, creating insight into the physical consequences of development options. A choice for

one scenario or a combination of development options from different scenario's composes the strategic policy for the long term, to be dealt with in the Strategic Development Plan.

In order to investigate the development options for Statia an economic quick scan has been executed. The development possibilities were presented to the community in a Town Hall Meeting, and separately, to a number of the aforementioned stakeholders.

2.2 Draft SDP

The Strategic Development Plan was designed as an elaboration of choices made on the basis of the Note of Outlines and Choices and the SWOT analysis. The result of the first Town Hall Meeting was discussed with stakeholders and civil servants, which led to the proposed course for development in the SDP.

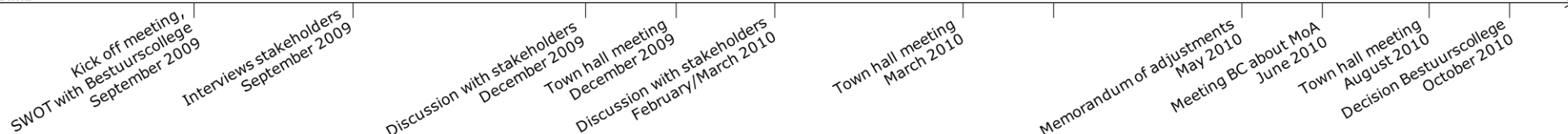
In the first Town Hall Meeting the development options for Statia were discussed on the basis of a series of statements, leading to the selection of the following most promising development options:

- moderate population growth;
- residential development mainly in vicinity of Oranjestad;
- economic development: tourism, agriculture/horticulture, services for (foreign) retirees, local entrepreneurship;



Note of outlines and choices		Draft SDP	SDP
Research and analyses	Scenario's		
<p>Strengths</p> <ul style="list-style-type: none"> • Social cohesion • Quiet, peaceful and safe • Noteworthy history and archeology • Tourism activities: history and heritage, nature and diving • Beautiful nature and scenery • Mix of functions in Oranjestad • Solid investing environment 	<p>Weaknesses</p> <ul style="list-style-type: none"> • Limited medical care • Quality level of education and brain drain • Quality and insufficient infrastructure and accesibility • No sustainable waste disposal • Local entrepreneurship/unemployment • Small degree of economic diversification • Small scale of economic diversification • Weak hotel sector • Oranje bay beach not suitable for tourist purposes • Free roaming cattle 		
<p>Opportunities</p> <ul style="list-style-type: none"> • Statia Oil or related industries • More stay-over and transit tourists • Heritage and history useful for more tourism • Medical education/medical related innovative industries • Soil good for agriculture, horticulture or husbandry • Fishery: economically interesting • Second homes • Image • Sustainability • More self sufficient 	<p>Threats</p> <ul style="list-style-type: none"> • Economic decline • Social problems • Environmental and ecological situation • Erosion • High buildings • Planning overkill 		
<p>Analyses and research</p> <ul style="list-style-type: none"> • Physical analysis • Economic quick scan • Tourism, population and housing, infrastructure, social-cultural aspects, business, agriculture, values of nature and ecology, scenery, heritage and archaeology, environmental constraints. 			

Time line



- tourism development: Lower town, Zeelandia, south of Weg naar de White Wall;
- nature conservation: Quill, Boven, Signal Hill.

Further explanation is included in appendix 1.

The Draft SDP has been presented in a second Town Hall Meeting on March 15th, followed by office consultations on March 16th 2010. The comments delivered at the office hours and the written responses received between March 16th and April 1st show that adjustments and alterations on the SDP were needed for the SDP to function as a community-based foundation for a zoning-plan. (chapter 3)

The summarized in the Memorandum of Adjustments and connected with proposals for adjustments on the SDP map.

2.3 Final SDP

At a third Town Hall Meeting (August 26th, 2010) the proposed adjustments and alterations were presented to the community, and were met with considerable approval.

As a result of this Town Hall Meeting a few alterations have been made in this Final SDP. Accompanied by textual changes, the following alterations have been made on the map:

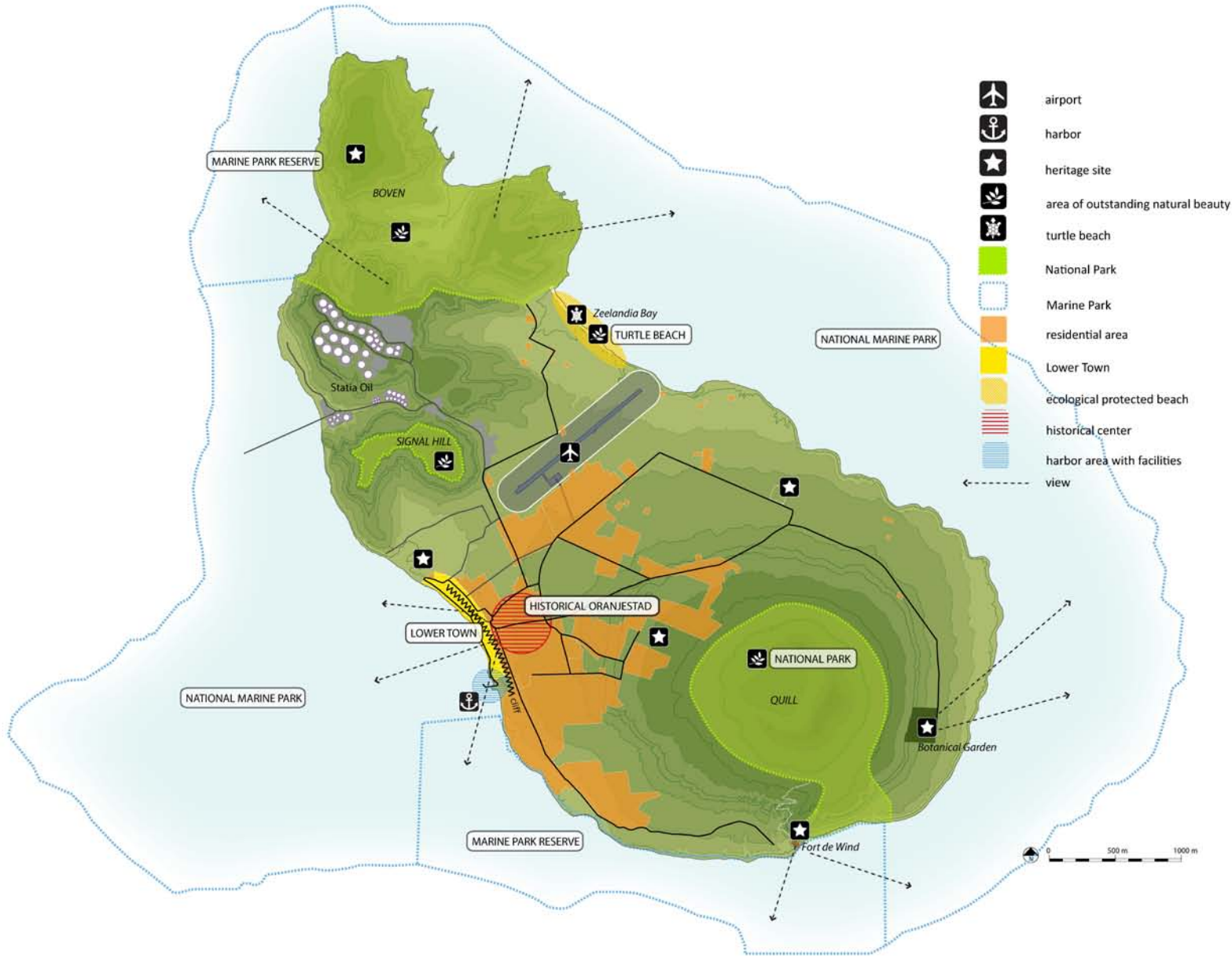
- a possible future relocation of harbor is indicated;
- residential area is extended on the east-side;
- boundary of the protected nature area Signal Hill is changed;
- cattle grazing area is indicated north of the airstrip.

Draft Strategic Development Plan,

Adjustments and alterations, July 2010.
Numbers correspond to the Memorandum of adjustments



Sint Eustatius



3 Statia now

Statia has unique qualities: an authentic and pure character, an extensive cultural heritage, beautiful landscapes and excellent diving sites. Other qualities that give Statia its identity are the local culture, the peacefulness and its small size. This mix of qualities make Statia one of a kind in the Windward Isles. Statia's development must be based on these unique identifying qualities; they must be protected, strengthened and used to their full potential for the island's development now and in the future.

3.1 The Island

Statia is a small island with a rich heritage, areas of outstanding natural beauty and a fantastic Marine Park. Statia's spatial qualities are charted on the appended spatial quality plan.

Living history

The island of St. Eustatius is located in the Caribbean Sea, just 60 kilometres South of St. Maarten. Columbus sailed past the island in 1493. Over the next 150 years, St. Eustatius was claimed by the English, the Dutch and the French. During the second half of the 18th and early 19th century, St. Eustatius was a major trading post with at its peak some 20.000 inhabitants and thousands of ships calling at her shore per year. Part of the wealth came from the growing, and even more importantly the pro-

cessing of sugarcane. In the early 19th century there were 90 plantations and sugarcane was cultivated high up the slopes. After 1830 plantation agriculture declined.

Efforts were made for its revival, even right up to the beginning of the 20th century with the cultivation of sisal, which remained an important export-product until 1928. Unfortunately plantation agriculture in St. Eustatius did not survive. Since then several new efforts to redevelop agriculture failed.

Statia is nicknamed 'The Golden Rock', reflecting its former prosperous trading days and wealthy residents. The tangible heritage of the colonial era is represented by a variety of churches, fortresses, batteries, plantation structures and (submerged) ruins. In order to make St. Eustatius more interesting for tourists, history and heritage of the island can be strengthened: re-create and enrich the historical decor. Historic monuments, valuable characteristic buildings and archaeological valuable elements are interesting in this context.

Fascinating landscape

Geologically, the island is saddle-shaped, with the 600 meter-high dormant volcano Quill in the southeast, and smaller hills, remains of an extinct volcano Signal Hill, Little Mountain (or Bergje), Gilboa, Venus and Boven Hills Mountains in the north. In its seat is the lower area "Cultuurvlakte". The middle section is urbanized on the western side, the eastern middle side is





Sint Eustatius

largely green, free of buildings and currently not used for any specific cause. In this part are scattered subdivisions with dwellings, few in number and wide spread. In spite of its relative small size the island contains a wide variety of natural landscapes and habitats, ranging from cloud forest to near desert.

Oranjestad

The majority of the island's population lives on the flat "Cultuurvlakte" between the Quill and Boven, in the residential area of Oranjestad. To the west, radiating around Fort Oranje, is the historic town center of Oranjestad, with many historic buildings. Recently many of these buildings have been restored and the outdoor space has been refurbished, resulting in an attractive and distinctive town center. The center has several amenities, including restaurants, the government house, the public library and a number of shops. As these amenities are not concentrated, there is room for more.

Outside the historic town center, services and companies are located in the residential area, with the 'Golden Rock' district offering relatively many services. Apart from a few small-scale apartment buildings, building in this area consists mainly of detached houses, as traditionally people build a house on their privately-owned plot. Golden Rock has around 78 council rent houses.

Oranjestad is growing slowly but steadily. The built-up area is slowly increasing. Around the current built-up areas much of the land is par-

celled out. These plots are generally built-up privately and individually. The result is a fragmented and diverse built-up residential area (see map on page 16).

Lower Town

Lower Town fronts Oranjestad Bay and is of historic importance to Statia. During the Golden Age of Dutch overseas trade (18th century), Lower Town was built up with merchant buildings, houses and shops. Part of the area was reclaimed, and is now submerged. Lower Town used to be wider than it is today. Some dozens of meters from the shoreline, a wall can be found under water - the ancient breakwater. On the shoreline, both on land and in the sea, ruins of residencies still remain.

Lower Town lies below Oranjestad and is separated from it by the cliff, a white steep slope consisting of compressed volcanic ash. This cliff is distinctive for the image of this area. The northern part of the cliff has a green, tapered profile. To the south the cliff becomes steeper and has a stony surface.

Lower Town has some hospitality amenities: a few hotels, restaurants and diving schools. At the southern end Lower Town is the port, and adjacent the power and water plant. STENAPA's visitors center is also situated in Lower Town. The road connecting the port with Oranjestad, runs through Lower Town. The area on both sides of the road varies in width.

In the northern part of Lower Town the wide beach has narrowed due to the construction of the breakwater at the port; a short and narrow strip remains. The shoreline is cut into sections by the ruins of the merchant buildings, creating a unique image. The bay, with its submerged walls and ruins, attracts a wealth of marine life, offering an interesting site for snorkelers (snorkel trail).

Amenities

Apart from places of worship, there are a lot of services and facilities that are important for social, cultural and educational development, and for the quality of life. Without the claim of being complete, we mention the following social and educational facilities:

- 4 primary schools (about 320 pupils and 26 teachers);
- 1 secondary school with 275 students and 27 teachers;
- A Cruyff court;
- Community center and sports complex;
- Public swimming pool;
- Queen Beatrix Medical Center (2 doctors and several nurses);
- Public library;
- Social housing (78 homes);
- Auxiliary home (22 units);
- Prevention and youth care. The 'Plan for St. Eustatius' (2009) will be implemented in the near future (education programs and support).

A large multifunctional sports hall is an important facility for the community. A central place to get together in the open air for meetings/feasts/happenings etc. is Fort Oranje. For an island its size, Statia has a relative large supply of amenities. The quality of the services, especially education and health care, requires improvement.

Harbor

Statia has a small harbor, used for import of goods and fishing. The port has ample capacity to intensify harbor activities. There is, however, little surface space for container storage. Statia does not have a marina. Yachts use the mooring points at Oranjestad Bay. Apart from a restaurant, the port does not offer any tourist services, such as shops.

A recent examination of possibilities for relocating the harbor shows that, for financial reasons, this is not a viable option.

For now the harbor will be improved in its current location. The port development plan focuses on the improvement and expansion of the basic infrastructure of the port.

Objective is to provide calmer and safer berth and anchorage for vessels in the harbor. This includes extension of the current breakwater and dingy dock facilities for yachts, dive operations, and local fishing vessels.





Sint Eustatius

NuStar Terminals and industrial zone

NuStar Terminals is the biggest company on the island, situated in the hills in the northwest of the island. The activities include storage, blending, hydrocarbon processing and bunkering. The company features storage tanks, a long jetty and mooring facilities at sea. The storage tanks are mostly hidden from view from the island; Lower Town does not see them.

A small-scale industrial zone is located along the road to NuStar Terminals. It has a gas storage facility and a heavy equipment contractor as well as some vacant industrial buildings. This industrial zone is well accessible and is conveniently apart from residential areas. The zone has ample space for expansion.

Airport

The airport occupies the center of the Cultuurvlakte, its runway dividing it into a northern and southern part. The runway can take planes up to 75 persons. The terminal building at the airport is up for renovation. At present the hospitality services at the airport and terminal are scarce. The airport and the runway have possibilities for intensifying air traffic.

Statia's accessibility wholly depends on the airport. One small air carrier services Statia from St. Maarten and Saba, with in total 5 flights per day for a maximum of 16 passengers. This limits the accessibility of Statia.

Infrastructure

In general, the quality of the infrastructure on Statia is poor. Roads, the drinking water supply, the sewage system, the electricity and communications network have to be improved.

Nature

The quality of nature is an important asset to Statia; sustainable management is a prerequisite for tourist development. The small size of the island, the isolated location, proneness to (natural) disasters and environmental fragility¹ make Statia's nature vulnerable.

Flora

Even though Statia is small, it offers a variety of natural areas. Three different sectors on the island form protected nature areas: The Quill, Boven Mountains and Signal Hill. They are in the higher parts of the island and provide its green image. The vegetation in the three nature areas is totally different. Also, in comparison to the vegetation of Saba and St. Maarten, the vegetation of Statia is totally different.

A serious threat is the deterioration of primary vegetation types on the east side of the Quill. As

¹ Problems caused by:

1. Economical development (residential housing, industrial production, waste etc).
2. Degradation of geographical and natural characteristics, such as unique and fragile ecosystems.

it is not clear what the cause is, biological research will have to be executed.

Despite the fact that grazing continues, the vegetation in Boven Mountains and on the lower slopes of The Quill is recovering from overgrazing, following the reduction of the number of grazing cattle. This area is fragile by nature: prone to erosion due to the soil conditions, steep slopes, presence of gullies, and a thin vegetation cover of herbs and shrubs.

Fauna

The Boven area provides the habitat for various fauna species, such as the endangered Lesser Antillean Iguana and the endemic, also endangered, Red-bellied Racer Snake.

The protected areas of the Quill and Boven are assigned as Bird Life International's Important Bird Areas, international (regional) priority sites for bird conservation.

Sea turtles are protected by international treaties. The leatherback turtle, hawksbill turtle and green turtle nest on the beaches of Statia. All three species nest at the sandy Zeelandia Beach at Concordia Bay, while the hawksbill and green turtles also nest at Orange Bay and Kay Bay in the south. Sandy beaches are important for the turtle population, since turtles lay their eggs on these beaches.

Statia National Marine Park

Statia is one of the Caribbean biodiversity hotspots and one of the world's 25 areas with the highest biodiversity. In addition, the Statia Na-

tional Marine Park is one of the top five sites in the Caribbean concerning healthy corals, fish species diversity and size of specimens. The park covers the entire coastal area up to 60 m depth. Two Marine Park Reserves are located to the southwest and northwest coast. The majority of the diving sites are found in these reserves. The diving sites are of excellent quality and allow Statia to position itself as an attractive diving destination in the Caribbean.

Coral Reefs

Marine and coastal areas encompass diverse ecosystems and habitats, presenting a vital resource for socio-economic development.

The Countryside Council report "Coral Reefs in The Netherlands" (2009) concludes that the BES-islands hold a formidable ecological capital which, if used wisely, can create a sustainable source of income for the Stadians.

Coral reefs are the most abundant and complex ecosystems in the world, the tropical rain forests of the ocean. Coral reefs are home to more than a quarter of all marine species, but range in the most vulnerable and most endangered ecosystems on earth. Coral reefs are of crucial importance to fauna as they provide the nursing and feeding grounds to fauna areas many times their size. Where coral reefs only take up 0.25% of the ocean space, a quarter of all fish species depend on the coral reef ecosystem for their existence.

This gives coral its economic value as supplier of fishing grounds. The monetary value of Statia's





Sint Eustatius

coral reefs lies between US \$8 and US\$12 million (Economic Valuation of St. Eustatius coral reef ecosystems; Stata National Marine Park 2010). A report in 2000 indicated that the yearly income from coral reefs in the entire Caribbean region amounted to US\$3.1 to 4.6 billion, mostly from fishing and coastal tourism. Apart from that, coral reefs create a natural hurricane damage barrier for coastal ecosystems and areas.

The management - in a sustainable way - of these formidable terrestrial and marine ecological assets with their high biodiversity is a prerequisite for tourism development on Stata.

3.2 Stata's community

Culture

The colonial period created a heterogeneous community, wherein different cultures, religions and racial groups intermingle in remarkable harmony. Presently the majority of the Stadians are people of black African descent. About half of the present population is born on Stata. Of the other half, a large part originates from other Caribbean islands. A minority comes from The Netherlands, the U.S.A. and other countries. Most people speak English. Nowadays the island community has still a variety of religious, political and cultural traditions. Spiritual values are important to Stadians and many are member of one of the several churches. The most wide-spread religions on the

island are: Methodist Church, Seventh-Day Adventists, and Roman Catholic Church. Stata has a Caribbean atmosphere and hospitality and the people are relaxed, pleasant and open. The island is renowned among the Caribbean Islands for its low crime rate. The people are proud to be Stadians. They value being a close community. Family ties and family traditions are of great importance.

Population

In 2009, St. Eustatius has over 3.500 inhabitants, living in more than 1.000 households. Population growth has been relatively high over the past years (around 4%). Besides natural growth (the difference between the numbers of birth and death), migration accounts for the population increase. Establishment of the School of Medicine and expansions of NuStar have presumably been the most active factors in population growth over the past years. Most people come from the U.S.A., the Netherlands and the Dominican Republic. A contrary development is that people, especially youths, leave Stata for work or study-related reasons. In 2008 the average household size amounts to 2,92 persons. The statistics show a little increase of this figure over the past years, which indicates a shortage of dwellings.

Dwellings

The stock of dwellings in 2009 is about 1.050 (estimated), built over a long period of time, partly as apartment buildings and partly as pri-

vate houses - the major tradition in building. The largest concentration of dwellings is found in Oranjestad, Golden Rock/Bay Brow/ Concordia and Union. The quality of dwellings vary. A substantial part of the dwellings is of poor quality.²

Less than 10% of the stock (78 dwellings) are being let out by the Housing Foundation. The flow-through is low: about one home per year becomes available for a new tenant. As a result some homes are shared by more than one family, bringing the average number of persons per home to 5. There is a shortage of social housing; 35 candidates are on a waiting list.

3.3 Statia's economy

The economy of St. Eustatius is primarily based on the government, oil-transshipment, tourism (mainly diving, hiking, adventure and heritage travel), commerce, harbor activities and the medical school.

In a distinction between export based and non export based activities, the source for prosperity is mainly based on export based activities, generating income from outside which then is available for supporting non export based activities on the island. Presently, Statia's island economy depends on a limited number of export based activities of which NuStar Terminals and its suppliers are the most prominent. To a lesser extent, tourism and the School of Medicine con-

² In 2001: 8% bad quality, 5% very bad (source: Sensus 2001)

tribute to the island's income as export based activities, just as the (limited) activities in agriculture and fishing. These primary activities enable employment in suppliers and service companies (non export based activities), such as the energy and communications sectors, construction and services. By far the most important employer on the island is the government which is largely financed from taxation and levies.

The current distribution of employment is as follows.

	Number of jobs
Export based	315
Non export based	360
Government	340
Total	1,015

Source: St. Eustatius Strategic Development Plan; Background report Quick Scan Economy (2010)

The current level of economic activities is difficult to maintain on account of limited resources, limited industry, a poor infrastructure and the lack of a dynamic business environment. The island needs economic growth. To achieve this, an increase in economic activities and tourism is required to sustain the growing population.





Sint Eustatius

Employers and employment

In 2005, there were approximately 190 companies and institutions on the island, employing - over 1,000 people (commercial and public sector). The public sector with approximately 340 employees is one of the larger employers of the island, but finances are under pressure. Most of the businesses and institutions are small: employing only one or two persons. The medical school has about 120 students and 30 employees.

The unemployment rate is high, particularly among the young. Recently, the economic development of St. Eustatius has been stable, but lack of initiative creating new business opportunities may lead to economic decline in the near future.

NuStar Terminals

The main private employer of the island is NuStar Terminals. The company became operational in 1982, and offers direct employment to 140 islanders. Because there are also many other companies providing goods and services to NuStar terminals, the economic importance of this company is much greater for the island

Commercial business

Most other companies on the island service local demand. In 2005 approximately 15 construction companies employed almost 100 people. Other companies operate in the field of public utilities (Eutel, Gebe, etc.) and financial and business services.

St. Eustatius has a range of commercial facilities such as supermarkets and shops. In addition, there are approximately twenty-five restaurants, bars and lunchrooms, and other commercial facilities such as garage and car repair shops, hair dressing salons, etc.

Visitors to the stores and other commercial facilities are mainly local residents. Residents of St. Kitts, attracted by the low price level, come in the weekend by ferry to shop on Statia. Tourism provides local shops and other facilities with the extra income they needed to survive. Together the commercial facilities provide jobs for more than 200 persons. The actual employment is lower, since many stores and commercial facilities have limited opening hours - most owners of commercial facilities cannot get enough income from business and have to rely on additional income from other jobs.

Tourism

St. Eustatius offers tourists an agreeable climate and an exotic geographical location. Assets are nature, cultural history and heritage, diving, and an unspoiled and relaxed atmosphere.

Diving

Statia offers excellent diving conditions. Diving is one of the major tourist attractions. Warm water and underwater volcanic fissures and canyons provide a wide choice of diving experiences. On the western side of the island, partially submerged warehouses and the old breakwater provide can be explored by divers and snorkelers on

a short distance from the beach. They may also find many shipwrecks, which were laid to rest more than 200 years ago.

To help preserve Statia's marine life, the St. Eustatius Marine Park was established in 1996. There are three diving operators on the island offering complete Scuba diving packages (PADI), dives, resort courses, lessons, certification programs, equipment rental, accessories and snorkel tours. Despite the excellent diving conditions, only a small number of non-business tourists visit Statia purely for holiday purposes.

Nature

The Quill Crater is a popular tourist attraction. Hiking trails are demarcated on the Quill and it is possible to descend into the Crater. The largest trees on the island are found here, on account of humidity due to the altitude, and soil conditions. East of The Quill is a botanical garden, on a beautiful spot with a stunning view. Park Boven and Signal Hill also have hiking trails. These areas of outstanding ecological diversity offer an ecotourism experience. Besides the nature, the Boven and Signal Hill sectors have many historical remains that are still visible. Signal Hill is at present not open for visitors. STENAPA and owner NuStar Terminals are negotiating opening up this area for organized walks.

Stay-over tourism

The number of stay-over tourists on the island is limited, mainly due to the lack of facilities. There are no large hotels or hotel chains on the island.

Large tour operators have so far shown no interest to direct tourists to Statia.

The island has 5 hotels with approximately 75 rooms. At a utilization rate of 50% the total number of overnight stays is around 14.000 per year. The number of stay-over visitors is lower, as most visitors stay for more than one day on the island. A large part of the stay-over visitors come to the island for business reasons: employees of the NuStar Terminals (most North Americans), civil servants, politicians, consultants, etc.

Cruise tourism

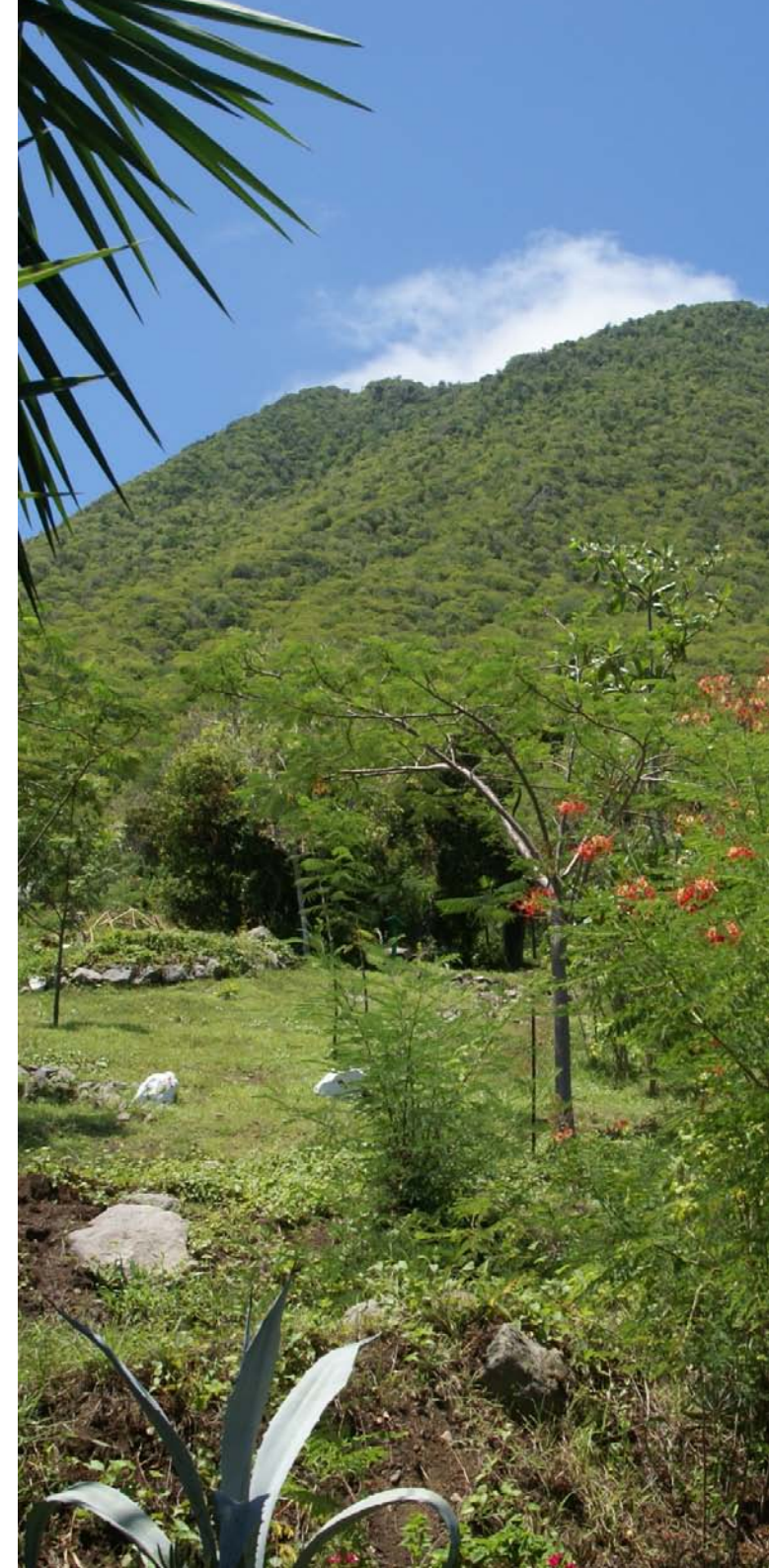
Cruise tourism is absent. In the eighties the cruise market played a modest role for St. Eustatius. Due to lack of suitable terminal facilities and tourist attractions, cruise ships do not call at Statia.

3.4 Statia's environment

Several types of activities pose risks for the environment, that have to be managed.

NuStar Terminals

NuStars activities can cause odour, noise and safety risks. Hindrance from the Terminals is limited because there are no houses situated on short distance, and it is located favourably in relation to prevailing winds. For oil-related activities where sea-ships are involved a distance of 1 kilometres to residential areas is recommended. Defining the final safety zone for NuStar Terminals requires further research. DCMR (Environ-



mental commission Rijnmond) will complete this research in the near future.

Waste dump

The waste landfill is located at the northern end of the airport runway. It is an open dump, of which the impact on the environment touches on hygiene, smell, landscape, and pollution of beaches and sea. A failure in the water drainage of the landfill may cause waste to float into the ocean in heavy rains, damaging coral reefs, sea turtles and other marine organisms. For a waste dump a distance of 300 meters to residential areas is recommended.

Airport

Around the airport, noise and safety risks lead to spatial limitations. In an "obstacle-free zone" of 75 meters along the runway building is not allowed. International safety requirements demand expansion of the "obstacle-free zone" to 150 meters (measured from the runway center line). To ensure the approach path of airplanes the maximum building heights (in the area in extension of the runway) are limited. The building heights are defined stepwise in the Spatial Development plan (from 0 m close to the runway up to 100 m away from the runway).

Power plant and water desalination plant

For activities as the harbor, the power plant, the water desalination installation and some other small companies, distances up to a maximum of 100 meters to residential areas are recommen-

ded to avoid hindrance from odour, noise and air pollution. If houses are built within these hindrance zones, special attention should be paid to the environmental situation and to possible measures to improve this situation.

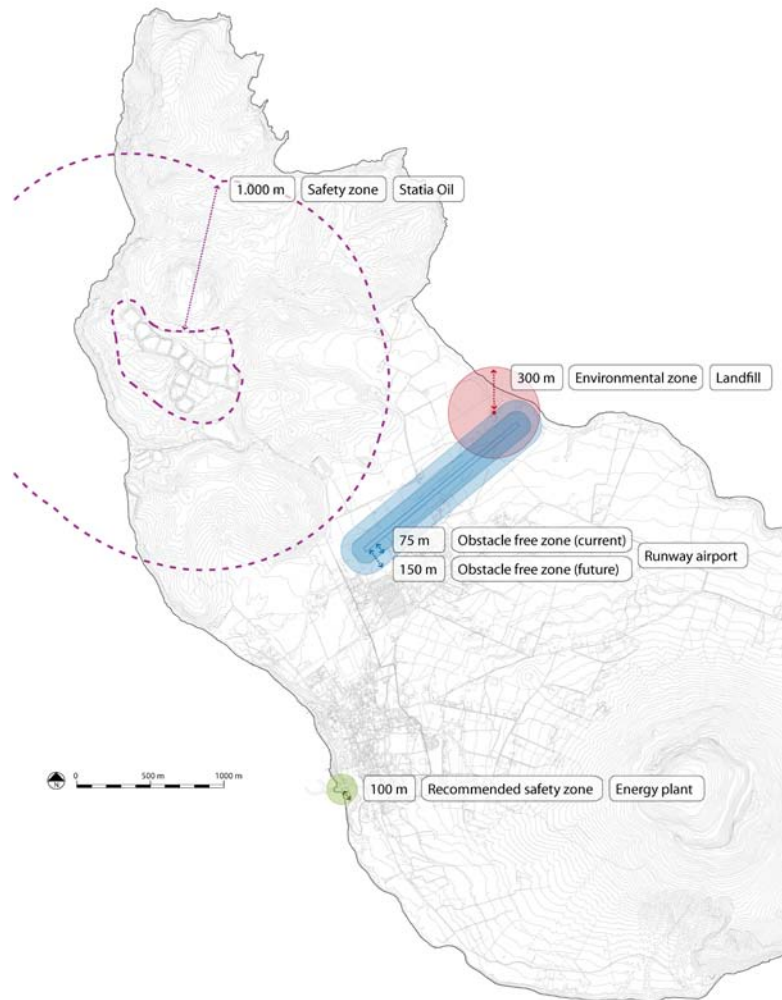
Coral reefs

On a worldwide scale, fishing causes damage to ocean life. Destructive fishing methods cause disturbance in the reef ecosystem. Taking out specific species interrupts the food chains - if algae eating fish are taken out, the coral reefs become covered in algae and die. Around 60% of the Caribbean coral reefs are threatened directly by fishing.

The reefs are at hazard from human stresses: excess sediment and nutrient discharges into coastal waters, occurring from deforestation and grazing, and from poorly managed coastal development. Soil erosion leads to soil runoff and covering of the reefs by sediment, obstructing photosynthesis. Agricultural pesticides and fertilizers and sewage spill also have a negative effect on the coral reef ecosystem. On Statia the coastal zones and reefs are extra vulnerable due to lack of buffering coastal eco-logical communities like littoral woodlands or mangroves.

Sea level and erosion

Sea level rising is expected in the future as a result of worldwide climatic change; this poses a threat to Lower Town. Erosion may cause the cliff to collapse and the soil to spill into the sea. These problems are difficult to combat and affect natural and human environments.



4 Statia's perspectives

Statia chooses to enlarge the social welfare of its inhabitants. Growth of prosperity is a vehicle to achieve a higher level of welfare, by investing in cultural identity, a sustainable and controlled growth of economy and employment, the quality of education, improving housing and living environment, and public health care.

4.1 Community

Cultural identity and feeling secure in a familiar environment are basic for prosperity to grow and well-being to improve. Stadians must be able to identify themselves with their Island. Family life, sports, health and religion play an important role in this. New developments, such as new economic functions or social amenities, must fit into and contribute to Stadian culture

Proud to be Stadian

Statia aims at a sustainable cultural policy. Cultural and religious traditions, standards and values, such as observing Sabbath and Sunday's rest, are recognized and respected. Education pays attention to the Island's history and its traditions, such as Statia Day and Emancipation Day. The traditionally strong family circle and circle of friends must remain intact. Religion provides a major contribution to social relations. Where possible, Stadian culture and identity will

be supported by public amenities (festivities, clubs and societies).

Population growth

A way to increase prosperity is economic growth. Our policy aims at Stadians being able to fill the job vacancies that come with the expansion of the economy. If the economy continues to grow the vacancies may have to be filled with foreign labor.

Statia wants to prevent sudden increase of foreign residents in a relatively short period, as this will diminish the percentage of Stadians, and cause problems with integration and segregation of population groups, leading to feeling of displacement and being out of touch with one's familiar environment. Therefore the growth of foreign labor has to be controlled and kept in pace with the growth of local labor force and the population.

New inhabitants should be able to integrate well into the local community. In that strategy, attracting Stadians from abroad is preferred. After all, they are familiar with the Stadian culture, habits and customs.

Places to meet

To stimulate the social coherence of the population and to maintain and strengthen the social network, a good number of meeting places is necessary. These include places frequented by people out of necessity or out of mutual interest. Next to Fort Oranje, these include squares, the Cruyff court, the gymnasium, schools, church,





Sint Eustatius

the public library, the clinic, shops, bars and welfare amenities. Realization of a market square can also contribute to the social coherence.

4.2 Education

A high level of prosperity starts with good education. Education - the acquisition of social skills and knowledge - creates opportunities for successful entrance in the labor force, contributes to the cultural identity and self-awareness, and to the quality of life in general. All levels of education have to emit these aspects. The educational program must be adapted to this.

Fight the brain drain

Currently, Stadians sparsely enter the middle and higher segments of the labor market, on account of lack in education or schooling. Statia has four primary schools and one school for secondary education that offers prevocational and senior general secondary programs. For high school education or college, Stadians have to leave Statia for one of the other islands, the Netherlands or the USA. Underemployment on Statia causes many students not to return after finishing their education. This brain drain, combined with the relatively low level of education of the labor force on Statia, creates a situation where foreigners are attracted to fill positions that demand higher education, causing projects to be initiated, financed and run by foreigners, and leaving the local people with the lower paid jobs or unemployed.

In the current situation students with secondary education are confronted with a mismatch between demand and (local) supply. The low esteem for manual labor leads to a too small number of young people with a technical education, or training in hospitality and tourism. This goes for Statia as well as on the other BES-Islands. In this situation filling vacancies demanding these skills is difficult, especially the higher levels. Apart from that, there is a preference for office jobs, especially with the government, prompted by the higher level of stability in the public sector.

To achieve a balanced economic growth, it is necessary to prevent the brain drain, to commit the present labor force to the island, and to balance supply and demand of labor by investing in the availability and the quality of education. A recent study by ECORYS³ for a better balance between education and employment on the BES-Islands provides recommendations.

Investing in quality

The struggle to prevent a brain drain focuses on an adequate and attractive working and living environment, and requires investments in education. Systems have been set up to monitor the progress of students, to monitor students that need social or extra educational care, and regu-

³ ECORYS (2009), Aansluiting Onderwijs -Arbeidsmarkt BES-eilanden: Handreikingen voor de toekomst. Rotterdam (Future Recommendations for Balancing Education and Employment BES-Islands).

lar audits of schools on the quality of the education (e.g. the schools' educational program and teachers). This is organized and financed by the Regional Service Centrum (RSC).

Language

Language constitutes a serious problem in the school system. The language of instruction on the primary schools is English, while on the secondary schools lessons are given in Dutch, as the final exams are in Dutch. Instead of bilingualism, this leads to arrears in both languages. The effort students have to spend on these subjects takes up time, which is better used on other vital areas for strengthening Statia's cultural, social and economic identity. A choice for one of the languages must be taken in order to achieve better school results. The choice for either Dutch or English languaged education will take further research.

4.3 Economy & employment

Lack of employment leads to a negative future prospect, and may cause social problems and poverty. Being able to create a career is the main goal of labor market policy. Upward mobility can be achieved in many ways, varying from finding a (better) job by oneself, starting one's own company, up to and including pursuing activities that increase employability such as traineeships or voluntary work. The path people choose depends on their personal ambitions and capacities and the span of their social network.

The government can influence the Island economy and upward mobility on the labor market by focusing on education, infrastructure, accessibility and opportunities for enterprise. Balancing education and employment makes it easier for Statians to find good jobs on the Island. Attracting more commercial activities creates more jobs for the local labor force.

Investing in a sustainable economy

The current level of economic activities is difficult to maintain on account of limited resources, limited industry, a poor infrastructure and the lack of a dynamic business environment. The island needs economic growth. To achieve this, an increase in economic activities and tourism is required to obtain a sustainable and controlled growth of employment. Filling job vacancies by foreign employees alone may impact the culture and social coherence. Agreements on the level of import of foreign employees must be made when negotiating new economic activities. If vacancies cannot or only partly be filled by Statians, labor force can be imported.

Economic growth requires constant attention to the welfare of future generations. They will be able to enjoy the unique cultural and ecological values of the islands as well. Therefore, no (new) economical activities will be allowed in areas of major cultural and ecological value. Like National Park The Quill, protected nature areas Boven and Signal Hill, the Marine Park Reserves and archaeological sites.



Increasing private enterprise

Next to finding a job, starting a company is a way of getting ahead on the labor market. The creation of small and medium sized enterprises is an important way to increase (youth) employment and stimulate entrepreneurship among the local population. It creates a perspective for making a reasonable living in the island, and prevents social decay and emigration. An increase in population and wealth creates more demand for commercial facilities. An increase in the number of tourists creates an additional impulse for local shops, restaurants and bars. Stimulation of autonomous enterprise was supported in the past by the Small Enterprise Stimulation Netherlands Antilles (SESNA), a program that was funded by the European Union and managed by SEF, the St. Eustatius Foundation. SESNA had a comprehensive program seeking to assist in establishing micro/small business support units over a five-year period. The funds however are depleted and the program has stopped.

Working is contagious

A characteristic of Oranjestad is the mix of (small) businesses and housing. Maintaining this mix offers young people the opportunity to experience work at an early age. The presence of companies strengthens the vibrancy and vitality of Oranjestad as well. A bonus to stimulate people to finding employment is raising the minimum wage per hour to naf 7.21. This has

been agreed upon by the Ministry of Social Affairs and Employment in 2009.

4.4 Housing and facilities

Improvement of housing and the living environment contributes to feeling at home in one's environment, and is the basis of social-economical progress. Improvements include better amenities, better quality of housing and a higher rate of safety and security.

Quality of dwellings

The stock of dwellings in 2009 is about 1.050 (estimated), built over a long period of time. The quality of dwellings vary. A substantial part of the dwellings is of poor quality (13%, source: Sensus 2001).⁴

Improving the quality of living requires investments in improving the quality of houses and demolishing slums and dilapidated buildings. The Housing Foundation must take the initiative for social housing. Private owners can be offered incentives for improvements of their houses, such as subsidies. Executing compulsory purchase orders is a final means for the government to purchase slum plots and reissue the land to the Housing Foundation or private builders or new owners.

⁴ In 2001: 8% bad quality, 5% very bad.



Availability of social housing

Less than 10% of the stock (78 homes) are being let out by the Housing Foundation. Target group are lower income community members. The flow-through is low: about one home per year becomes available for a new tenant. As a result some homes are shared by more than one family, bringing the average number of persons per home to 5.

There is a shortage of social housing; 35 candidates are on a waiting list. The Housing Foundation has plans to develop 12 lots along the Weg naar White Wall with aid of a Dutch housing corporation. This location has a capacity of 110 lots. A considerable part of the housing program on Statia will be developed as social housing, to be able to accommodate the lower income community members. The housing program has to be focused on starting families and elderly. The Housing Foundation has already been in contact with Dutch housing corporations to exchange information about the priority investments this requires.

Amenities

Amenities such as infrastructure (electricity, water supply, communication), playgrounds and sports facilities, shops etc. contribute to the appreciation of the living environment. Especially, infrastructure needs improvement. Residential areas demand paving of dirt roads. Supply of clean drinking water is a must. The installation of a water distribution network is in preparation.

Another goal is to create more places and sites for people to meet in order to strengthen the social structure - like squares with playgrounds and sports facilities, parks and health centers.

4.5 Health care

Health care on Statia is limited. There is a small medical center that offers primary health care while programs for the youth and the elderly have to be developed further. Prevention policies lack and facilities for the disabled are limited. Health care is a basic right: it must be accessible to all, physically as well as financially. Improving the health care system on Statia is an important goal.

Over the next years, the government will invest in a basic health care system in which the health care professional is close to the residents. This may help to signal and prevent both medical and social problems.

Collective health insurance

An important step in making health care financially accessible has been taken. From the moment Statia is a special municipality of The Netherlands, every person will be collectively insured for health care. The health insurance is to be implemented by the Regional Service Center (RSC), established by The Netherlands to implement the transition. The objective is to combine premiums for national health and social security.





Sint Eustatius

The premiums will be incorporated into the flat tax⁵ which is to be introduced.

A multi-functional health care center

Next to enlarging the financial accessibility of health care, it is important to improve the supply of health care on Statia. Considering the size of the island, smart solutions are required to offer a proper quality in health care. A good example of this is the already instigated privatization and expansion/rebuilding of the Queen Beatrix Medical Center into a multi-functional health care center. The medical center is to be combined with the existing home for the elderly, and expanded with ambulant care/out-patient care and home care. With the expected growth in the number of elderly/retirees in mind, care for the elderly and the handicapped must also be incorporated in the new health care center.

Investing in medical staff

Attracting medical knowledge and experience from abroad and purchasing modern health care equipment is a necessity to improve health care. The SDP aims at upgrading the current staff with courses and traineeships. This requires highly-trained and experienced foreign specialists to invest in training the current staff. Cooperation with the Medical School offers possibilities for upgrading the staff and for students to gain practical experience.

⁵ In a flat tax system or proportional tax system every income is taxed with a constant rate.

Good health care prevents social problems

An major aspect of health care policy is prevention. Many problems such as unemployment, youth crime, domestic violence and child abuse, may be prevented. This includes programs for youth and family care (child care, child raising information and advice for parents), adequate and enough recreational facilities (sports and cultural), child-friendly neighbourhoods, early signaling and solution of problems, youth care, and youth rehabilitation. Recently a youth and family center is opened at Statia.

5 Strategic aims

5.1 Sustainable growth of population and housing

The Social Economic Initiative (SEI) postulates a population growth to 6,000 -7,000 inhabitants in 15 – 20 years in order to create a solid basis for economic and social investments. To achieve such a population growth a large increase of jobs/employment and settlement of retired people is necessary. It is uncertain if the necessary economic impulses, necessary to achieve this growth, can be implemented in the future. The impact of a population growth to 6,000 - 7,000 inhabitants on spatial qualities and social composition have not been explored, but are expected to be considerable. The SDP chooses for an economically and socially more modest, realistic and sustainable growth of the population to 5,500 inhabitants in 2030. This increase makes a significant economic growth possible.

Growing to 5,500 inhabitants

Population growth is determined by natural growth and settlement. Settlement is influenced by job and employment opportunities, and the settlement of (retired) elderly people. Expansion of the School of Medicine may cause an influx of students and staff members. An increasing tourist industry means more jobs, which will partly be filled by immigrants.

Three models are used to show the relation between growth of population, growth of jobs, residential needs and spatial and management consequences, and eventually between ambition and attainability.

1. Natural growth

The natural growth path gives a modest result: from 3,500 inhabitants now to just over 3,500 in 2020 and 3,800 in 2030.

2. Trend extrapolation

Extrapolation of the recent trend results in a future population of about 5,100 inhabitants in 2020 and 6,700 in 2030. This latter progress line is ambitious and requires a large increase of both jobs/employment and settlement of retired people (living-economy).

3. Sustainable development perspective

A realistic and sustainable perspective aims at a growth of employment to about 1,625 jobs (presently: 1,015) and a corresponding number of inhabitants of 4,500 in 2020 and 5,500 in 2030 (see graph 5.1), sustainable development pers-

Graph 5.1 Population forecasts

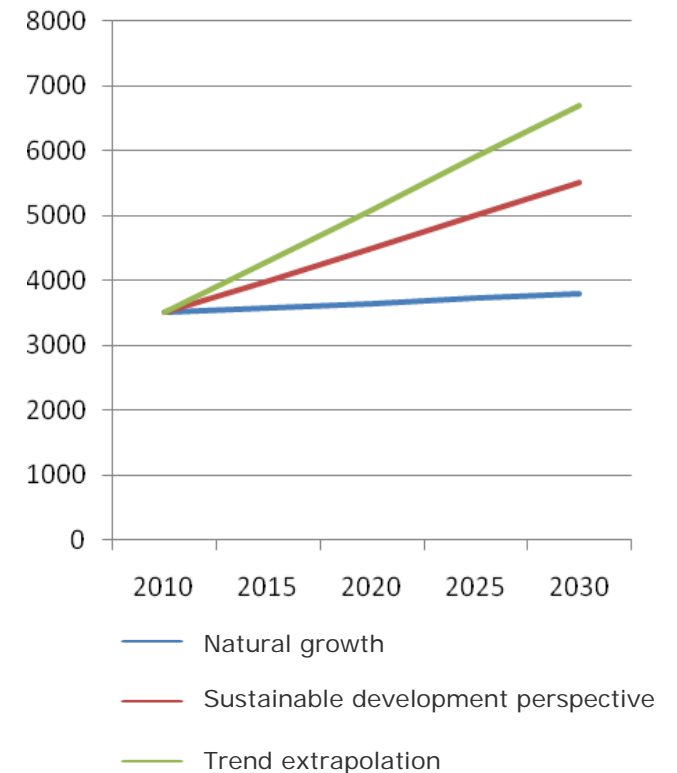


Table 5.1 Increase of dwellings corresponding with population growth 2010-2030

Period	Natural growth (3,800 inhabitants)	Sustainable development perspective (5,500 inha- bitants)	Trend extrapolation (6,700 inhabitants)
2010-2020	170	450	650
2020-2030	60	350	550
Total	230	800	1,200
Social housing	90	240	360

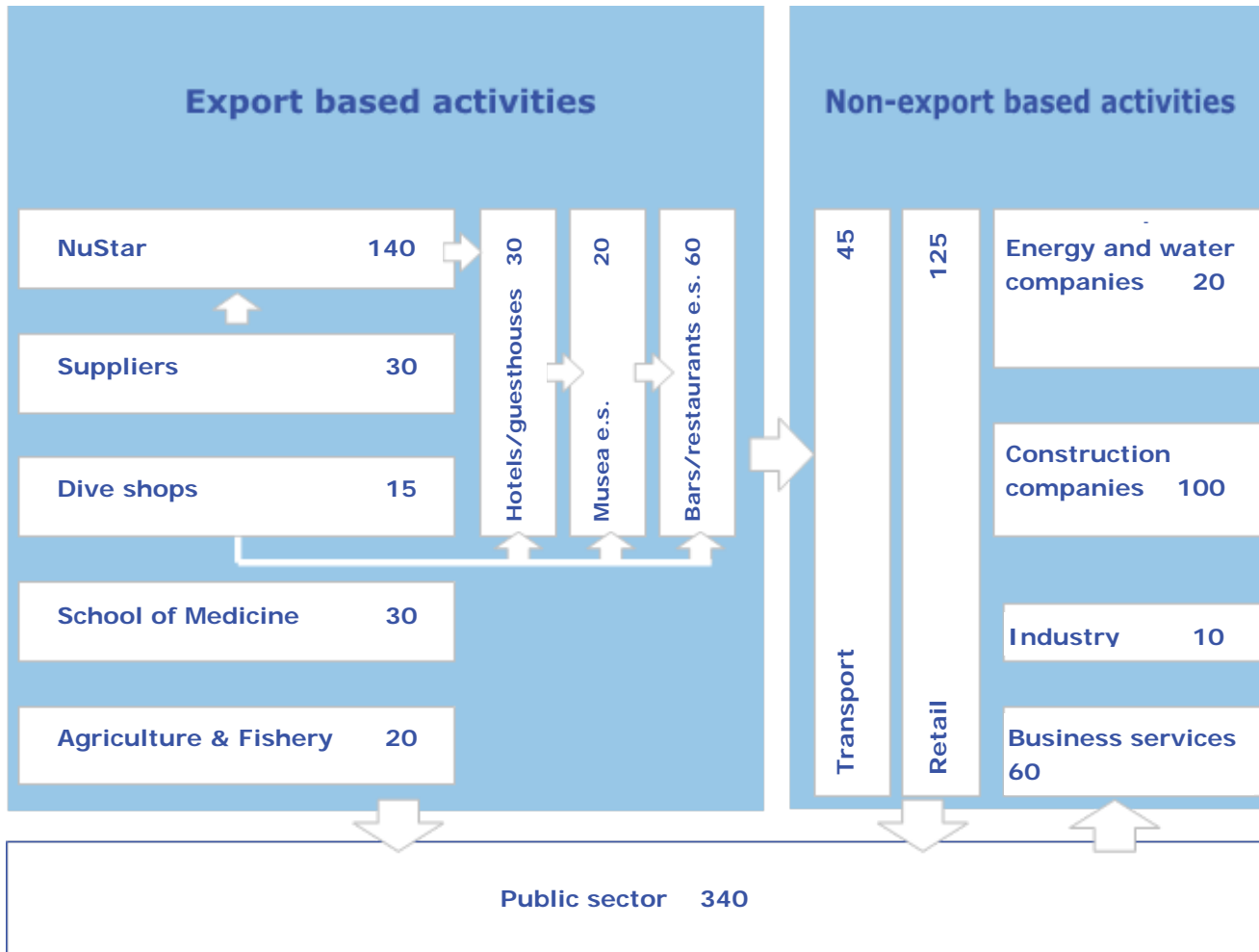


Table 5.2 Current distribution of employment

	Number of jobs
Export based	315
Non export based	360
Government	340
Total	1,015

pective). This growth leads to sustainable development of the island, preserving the existing qualities, while keeping the land use developments within the manageable scope and the population structure in balance.

Changes in future age distribution cannot be predicted, although in all categories (children, elderly, labor force), increase is expected. However, the age distribution can significantly be influenced by unpredictable factors like the increase of students or the settlement of elderly people.

A corresponding residential program

The future residential numbers are connected to the envisioned population growth and dependant on economic development. In table 5.1, the projected increase of dwellings is given, in relation to the three models of population prognosis. The sustainable development perspective leads to a program of 800 homes in the period 2010-2030, corresponding with 5,500 inhabitants. With regard to the income distribution on St. Eustatius a substantial part of the housing program has to be developed as social housing. Point of departure is a mixed program, focusing on starting families and elderly.

5.2 Economy

To stimulate the necessary economic development, it is essential to focus on those economic activities that actually generate income on the island. In a distinction between export based and non export based activities, the source for prosperity is mainly based on export based activities, generating income from outside which then is available for supporting non export based activities on the island.

More tourists, students and retirees

With the current profile of the island economy in view, touristic development and expansion of amenities such as the School of Medicine have the better possibilities for growth. Both sectors are currently present on the island, but the potential is not fully used.

Tourists vacationing on the island, pensioners enjoying their golden days on the island or students attending the School of Medicine will increase the demand for care and wellness facilities, as well as food supply and other amenities and facilities. A growth in visits to the island will create an increasing demand for energy, communication and recreational and hospitality facilities. A growing economy also enables more government service and support.

Tourists and other guests

Tourism has the possibility to become a stronger economic pillar. The most important reasons for tourists to visit Statia are diving, heritage and eco-tourism. In order to profit from the touristic potential, it is necessary to improve the quality of the amenities and the service level.

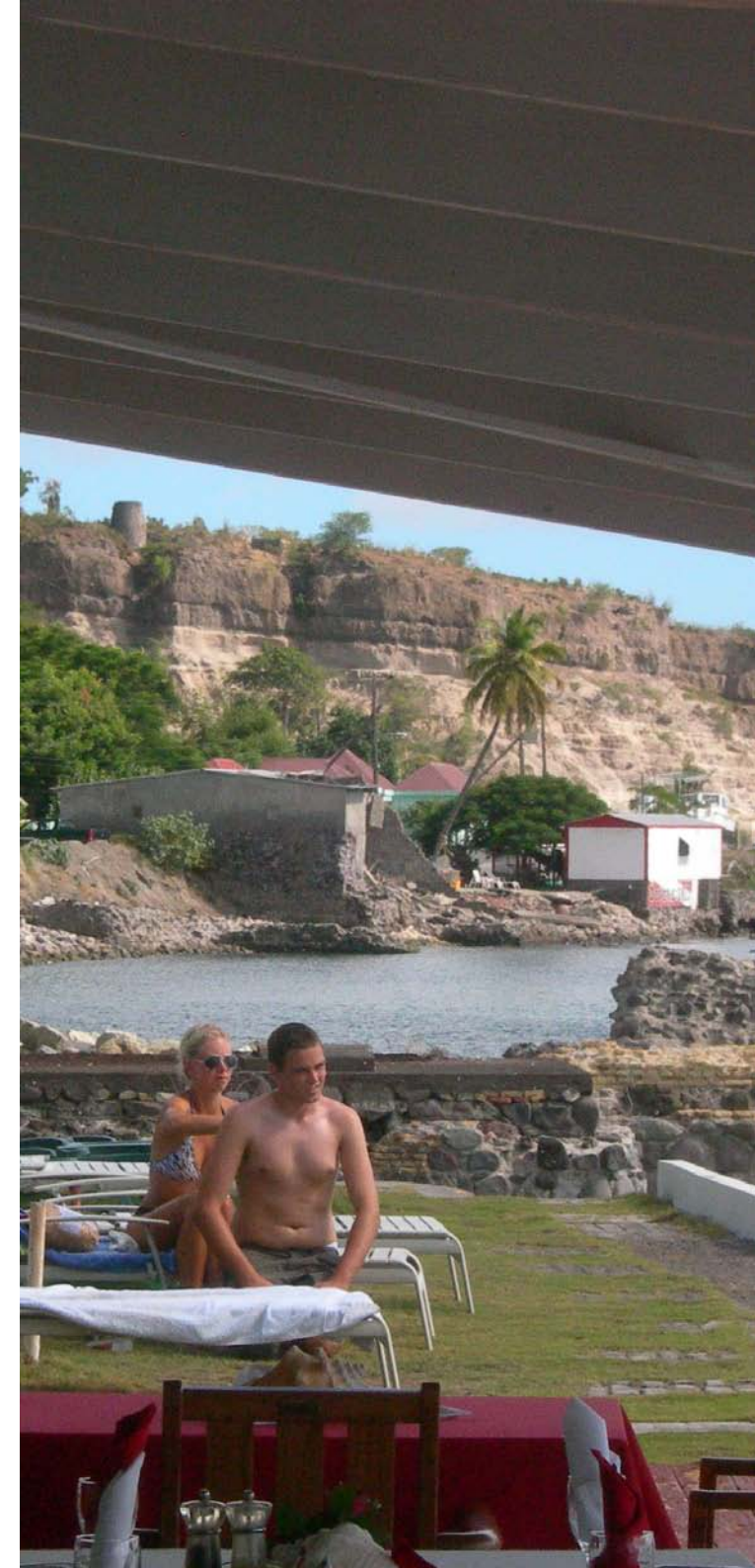
Development needed to attract more tourism

At present tourism on Statia is not developed to the island's potential. The volume of incoming passengers increases over the years, but in a very moderate pace. In order to attract more tourism to the island a variety of (spatial) developments are necessary and possible.

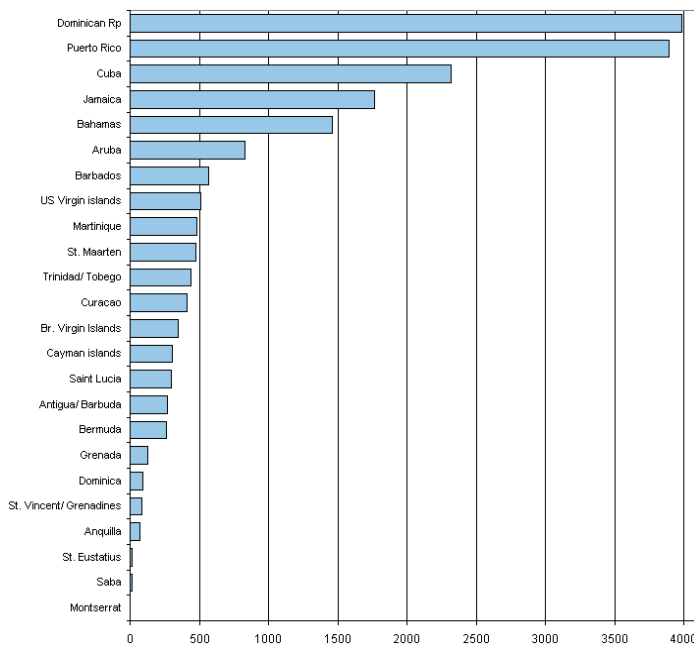
- Extension of hotel room capacity (from 75 to 300);
- Development of Lower Town to increase the capacity for tourism: this includes extra plots for hotels, improving and expansion of Oranje Bay Beach, a jetty and mooring dolphins for yachts etc.;
- Development of activities and facilities (shops, restaurants, information points, dive centers, hiking and historical tours);
- Redevelopment of public buildings and other plots in the historic center;
- Increase the number of retirees and the construction of second homes;
- Improvement of infrastructure (better roads, drinking water supply, sewage system, electricity and communications network);
- Improvement of accessibility (more flights, larger airplanes).

Expansion of hotel capacity

Hotels and guesthouses on Statia employ approximately 30 employees. Roughly triple this number of jobs is offered in related businesses such as suppliers, car rentals, dive shops etc. An increase in the number of hotel rooms will lead to a increase in tourism related employment. Supplementing touristic amenities will further stimulate the growth in employment. Extending hospitality capacity is necessary to create sufficient leverage for amenities to promote Statia as a touristic destination. Examples of these amenities are souvenir shops and the



Graph 5.2 International tourist arrivals



(Source: UNWTO World Tourism Barometer 2009)

supply of restaurants and other hospitality services.

Improvement of market position: more beds and direct flight connections

In the current situation, with a limited supply of beds, the island is not or hardly interesting for intermediaries or travel agencies to enter the island in their program. The market position of Statia in the Caribbean is depicted in the image, showing the number of international tourist arrivals (based on data of the WTO). The figure shows that (according to the number of arrivals) tourism on Statia actually is not or hardly at all developed.

Presently, a visit to the island is relatively expensive, caused by, among other factors, the absence of a direct flight connection with markets in the USA and Europe. Potential tourists have to make an extra effort and costs to reach the Island from their hub Sint Maarten. It is almost impossible to avoid this effort. For the American and European market Statia will always depend on the stop-over on Sint Maarten or in the future possibly Saint Kitts and Puerto Rico.

Development of small scale hotels

Keeping this in mind, and looking at the size of the island and the existing qualities, a strategy aimed at development of large scale hotel facilities is not recommendable. It is better to develop smaller hotels, with a room capacity of 30 to 70 rooms. They can offer plenty of pos-

sibilities for tour operators to promote Statia as an attractive destination.

Commercial facilities

An increase in population (\$5.1) and wealth will create more demand for commercial facilities. An increase in the number of tourists will create an additional impulse for local shops, restaurants and bars.

Presently shops and other facilities are scattered across the island. If day trippers, holiday makers and other visitors to the island do not know where the shops are located, the retailers miss out on potential turnover. In order to increase the economic potential of this type of activities, spatial concentration is a feasible option. Concentration makes the presence of shops more visible and reciprocal economy of scales and synergy can be realized.

School of Medicine

The School of Medicine generates income for the island. Students come from abroad and contribute to the prosperity of the island by spending on housing, personal care etc. The School of Medicine currently has around 120 students but has the ambition to grow to around 500 students. The school does not (yet) have a reputation comparable to similar schools in the Caribbean and still leaves room for improvement. The Strategic Development Plan aims at a doubling of the current number of students.

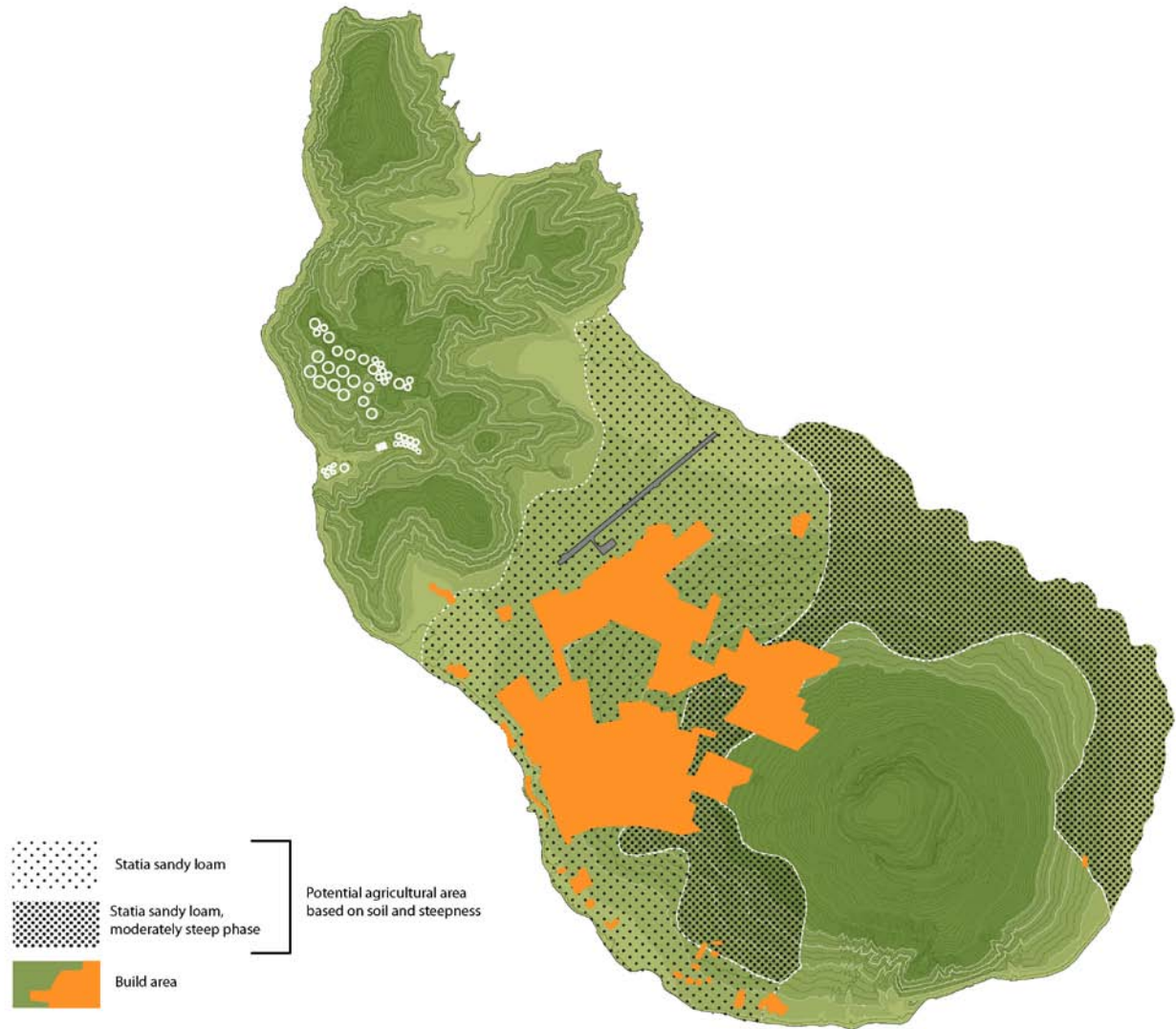
NuStar Terminals

NuStar Terminals is the largest private contributor to the local economy and it is expected that this position will remain stable. The room for further expansion on the island is limited. NuStar has plans to expand their activities. These plans are still conceptual and need to be discussed with the government.

Agriculture & horticulture

Island agriculture and horticulture supply only a small part of the local demand. Statia imports a substantial share of its food at relatively high costs. An evident possibility for self sustainance is to develop parts of the island’s land for agriculture and horticulture - just as it used to be in the far past. Especially the sandy loam areas are suitable for agriculture/horticulture. Due to limitations on account of limited size, food quality standards and lack of food processing industry, the opportunities for agriculture are mainly aimed at a local support income, or decrease of local expenditure.

Sustainable development aims at balancing the geographical and natural characteristics with the economical, touristic and residential development. Agriculture and horticulture may not affect the quality of nature and the environment. Sustainable agriculture needs knowledge, which presently is not available on the island. The development will necessarily be small scale: to prevent erosion, salt spray and wind damage, only small parcels can be made.





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Agriculture requires water. Developing agriculture and horticulture entails collecting rain water. The average rainfall of 1,100 millimeters per year is sufficient, but is presently not available. Part of the agricultural development will be gathering and fencing of cattle; free roaming cattle cause erosion and degradation of vegetation.

Sustainable horticulture a possibility under certain conditions

Sustainable horticulture also requires investments in the water system. The interviews show that a minimum of 8 hectares of horticultural land is necessary to meet current island demand. The Strategic Development Plan aims at a reserve of 15 hectares for horticulture, which need to be protected from wind damage and salt spray.

To establish one or more mixed horticultural farms (with a mix of produce) research of potential is a requirement. An option is to attract Dutch experts, for example the Netherlands Senior Experts (see www.pum.nl). Sustainability is served by farming in a closed system: collecting used water and preventing the biocides and pesticides from washing into the groundwater and surface water (ocean) or to enter the natural biotope through the air. A buffer zone of 100 meters between horticulture and ocean is recommended.

At this moment, Stadians are not accustomed to eating fresh vegetables since these are not readily available. One way of teaching Stadians to

appreciate home-grown produce in a bottom-up approach is establishing school vegetable gardens where school children learn to grow agricultural products, and are taught (to prepare) a healthy diet. An entrepreneurial development scheme could serve to encourage and guide people to develop their entrepreneurial skills in this area (e.g. through modern techniques).

Fishery

A challenge for the future is to continue looking for a good balance between the economic interests of the fisheries and the preservation of the marine environment. This calls for dialogue and coordination between the different stakeholders. Compared to the island economy as a whole, the stakes of fishery are limited. This is expected to remain so in the near future.

5.3 Employment

Perspective of employment growth

The companies and services on Statia generate presently a total of around 1,000 jobs. This total is more or less equally distributed over the primary sectors, the service sectors and the government. The stakes of these sectors shift when the contribution to Statia's Gross Domestic Product (GDP)⁶ is considered. Statistics of the CBS⁷ indicate that the GDP for Statia in 2004

⁶ The GDP is the total income earned annually in a country, including wages, income through interest, rent and lease and profit.

⁷ <http://www.central-bureau-of-statistics.an>

(more recent data are not available) amounted to nearly 100 million Antillian Guilders (55 million US\$). The private sector contributed around 85% with around two-thirds of the total number of jobs and the government around 15% with one third of the total number of jobs). With the reported opportunities and the present development potential the estimation is that the number of jobs will increase to 1,625 jobs⁸. Converted to the GDP, this may increase the total island economy by 60% (table 5.3).

Increase of employment: invest in tourism, retirees and School of Medicine

An increase in employment will most likely be the effect of further development of tourism (from approximately 75 to 300 rooms), combined with a growing number of retirees (from approx. 50 to 200) on the island and expansion of the School of Medicine (from 120 to 240 students). This will generate new income for the island which will benefit other sectors. In table 5.3 these types of activities are represented by the heading 'services'. An increase in income in the private sector will also increase the leverage for expanding the (semi) government, enabling tasks to be executed that were left unattended. The resulting effect will be a great deal larger than just the jobs created primarily in tourism.

⁸ Based on the current sectoral structure and the mutual relations between the different sectors on Statia, a calculation model has been created to calculate structure changes in the island.

Hidden employment

Presently, the government is, regarding the number of jobs, rather large. One reason is that many public functions have been created that only slightly contribute to the island income. In fact, the current situation is one of hidden unemployment. Therefore, the government will not keep pace with the future growth in other sectors. This has been duly considered in the estimates.

Limited alternatives to raise employment

Statia does not have many alternatives to substantially raise employment and the level of prosperity subsequently. NuStar Terminals might increase its activities on their current terminal site in the short term, but further automation will not lead to an substantial increase in job opportunities. NuStar is also investigating possibilities for expansion outside the current location. This may lead to extra employment, but the ideas are still in discussion with the government. Promoting innovations and the subsequent industrial activity on the island will demand a considerable effort. The domestic market is modest, materials and supplies will have to be imported, while the final products must be shipped out for sale. This makes the island not unfavorable as a site for industrial production.

Table 5.3 Potential growth of employment

Sectors	Present number of jobs	Future number of jobs
Primary	315	525
<i>NuStar</i>	140	150
<i>Tourism</i>	125	300
<i>School of Medicine</i>	30	45
<i>Agriculture</i>	5	15
<i>Fishery</i>	15	15
Government	340	472
Services	360	628
Total	1.015	1.625



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Development of the agricultural cluster is imaginable, but its effect on employment will be modest. Tabel 5.2 derives from an increase in acreage from 5 to 15 hectares. The fishery sector has been at the same level as it is now in table 5.3.

Towards a sustainable future for Statia

An increase in economic activities and the related increase in employment is expected to contribute to the prosperity on the island. Economic growth will generate more income, enabling division of the costs for the public sector for one, over a larger population group. An increase in economic activities will generate an economy of scales and efficiency profit. They need to be met with by waste disposal, energy supplies, communication and internet facilities. The level of prosperity will raise if the available labor force is implemented more efficiently (consider the hidden unemployment in the public sector) and labor participation is further increased. Growing economic activity will also generate more competition and lead to better quality and a lower price level. This will have a favorable effect on Statia's purchasing power. Deriving from a comparable level of prosperity per head to the current situation, the reported growth in employment (and a proportional growth of the island income) will suffice for a growth in population to approximately 5,500 inhabitants.

A sustainable future needs a well-managed balance between economic and natural capital. This may even lead to not actually implementing all economical potentials.

5.4 Infrastructure

Investments in infrastructure are inevitable for economic, touristic and residential growth

With regard to the poor state of the present infrastructure and the future economic, touristic and residential growth, investments in infrastructure are inevitable. Most of the roads are paved but in bad repair. For a sustainable future, investments in the quality and capacity of the road network and the airport have to be done. Statia has just one airline connection with St. Maarten by small airplanes (maximum 16 seats). Expansion of the number of air links from other islands and countries to Statia is essential. Furthermore, the airport terminal is outdated and in need of redevelopment.

Relocating harbor not realistic

To alleviate the Lower Town touristic area from heavy traffic between the harbor and the rest of the Island, the possibility of relocating the harbor has been investigated. For financial reasons, relocating is not a viable option.

Road freight data show a demand of road freight 134 truck drives in 24 hours, measured when sand and gravel vessels were being offloaded. A peak demand of 1.5 is derived from these data, since most drives will take place during daytime. This amounts to approximately 4 trucks per hour in each direction.

Improvement of moorings

Accessibility of Statia for yachts is limited because of the few moorings at Oranje Bay and the lack of facilities to land with a dinghy. This will be improved on the short term.

Water, electricity, communication and internet networks

Construction of a water distribution network and an underground electricity and communication network is necessary. Surface communication, electricity and internet lines are vulnerable to hurricanes, and have a negative impact on urban and (semi-)natural landscapes. Construction of the water network is planned for 2010.

As the internet lines are still analogue, reliable and fast internet is also lacking. A project to improve the internet connection is also planned.

5.5 Nature and ecology

For a sustainable development of Statia, managing the balance between the geomorphologic and natural structure and the economic and residential development is required. Both the terrestrial and marine environments of Statia are

attractive for tourists. Their protection and adequate management are important prerequisites in order to sustainably develop Statia. This implies that diving tourism cannot grow without limits, and agriculture and horticulture will be made subject to restrictions to prevent damage to soil and coral.

Protection of nature

Protection of large and continuous natural areas is required in order to ensure effective biodiversity conservation in the long-term. The uniqueness of The Quill in the Caribbean region and the unique vegetation types require adequate protection and further research in order to be able to manage and promote this unique area effectively. This will benefit both flora and fauna of the island and serve also to improve the tourism marketing aspects of the island. Protection and restoration of other important natural areas of the island is needed to provide the bigger and threatened bird species of the island survival chances on the long-run. Corridor areas will have to serve as linking zones between the protected nature areas.

Prevent erosion

To prevent for the negative impacts of erosion (both terrestrially and marine) a program must be designed in order to prevent further erosion and to allow the rainwater to penetrate into the soil.





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In this context free roaming cattle (goats, cows, sheep, donkeys) will have to be fenced. Roaming cattle threaten the vegetation of Statia. Building will also have to be regulated to prevent erosion.

Weed the Corallita

In order to enhance the natural value of the (semi-)natural areas in the east of the island the introduced species Corallita (*Antigonon leptopus*) needs to be eradicated. This plant was once introduced for its magnificent pink flowers, but is overgrowing the indigenous plants resulting in their death. The most efficient method to eradicate this species is to dig the whole plant out of the ground and to burn it. The applicability of this method in Statia is under study at present.

6 Physical development plan

6.1 Sustainable development

The island's urban development has historically mainly taken place in the western part of the island. The east of Statia is largely been spared from urban developments, leaving a green environment with sparse human presence. This is one of Statia's characteristics and qualities. Urban development is therefore mainly assigned to the residential areas around Oranjestad. This area has enough fill-in space to allow for erecting the major part of the 800 dwellings. Outside this area possibilities for residential development are limited, but not altogether ruled out.

Water management

Water management is a critical factor in sustainable development. To meet the need for drinking water, rain water must be preserved and collected (in the soil or in underground reservoirs). Possible developments must be considered with regard to their water needs. In any case, a water purification plant is required to supply sufficient drinking water.

Energy

Development of new (touristic) services and dwellings is an opportunity to use alternative energy sources. The island's climatic conditions makes the use of solar and wind energy an op-

tion. The possibilities of geo-thermal energy are still under investigation. Combination with Saba or Nevis may create possibilities.

Heritage and archaeological remains

Heritage and archaeological remains contribute to Statia's identity and offer opportunities for creating a historical image as a tourist asset. A set of rules will be devised to protect remaining relicts of Statia's history.

Protection of grounds with potential (hitherto unknown) archaeological remains will take the form of a mandatory research before developments that may destroy buried heritage. The Spatial Development Plan following this SDP will indicate the areas for further research.

Indicated in the next paragraph are the planning developments per area with the most important conditions.

6.2 Development possibilities per area

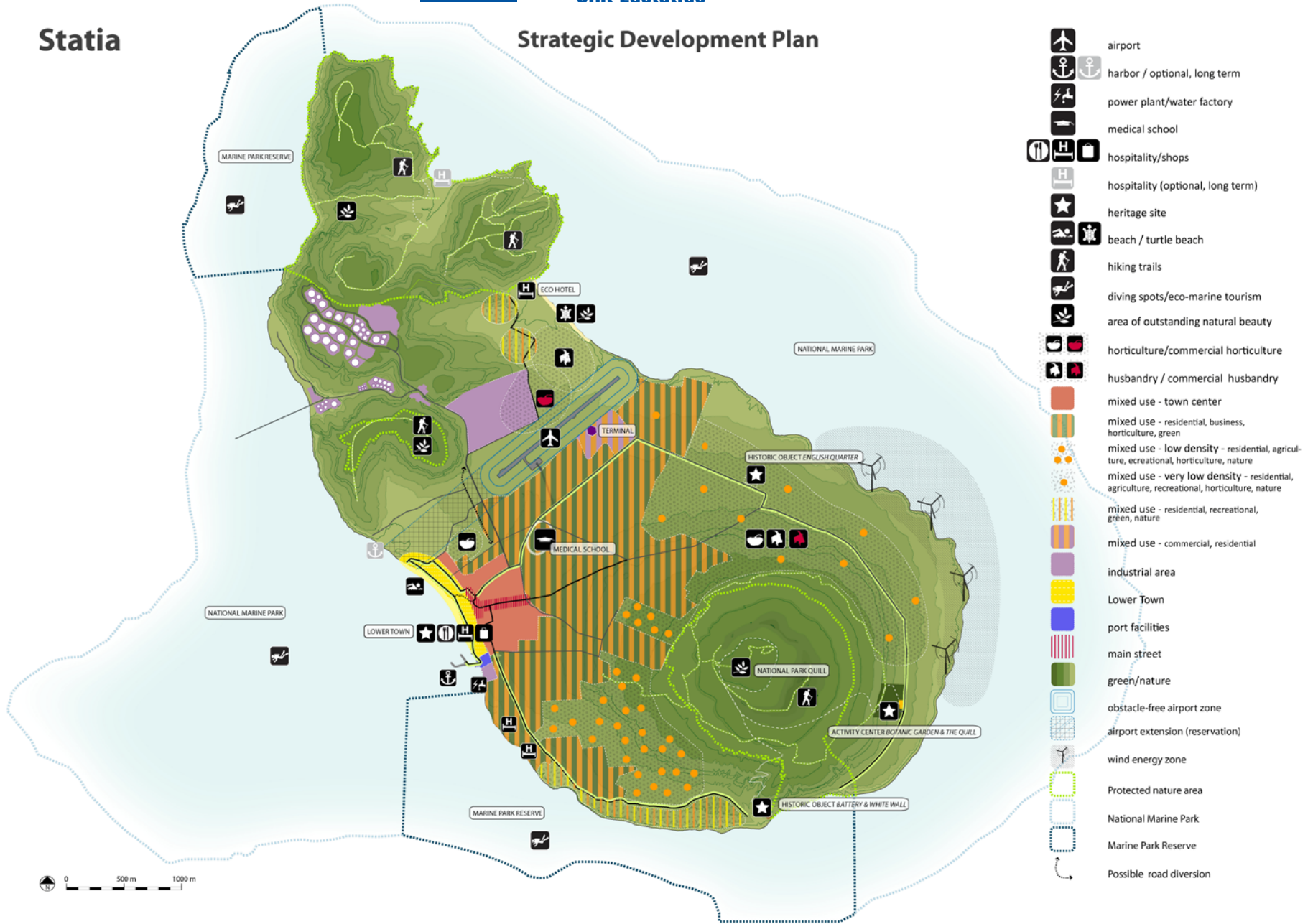
Protected nature

The protected nature areas (The Quill, Boven and Signal Hill) enjoy protection based on the Eilandsverordening Bescherming fauna en flora (A.B. 1997 no. 8) and Eilandsbesluit houdende algemene maatregelen regelende de fauna en flora (A.B. 1997 no. 7). These natural areas are major contributors to the sustainable development of the island. Better marketing will bring The Quill and Boven forward as a tourist asset. Active nature development will enhance the na



Strategic Development Plan

Statia



- airport
- harbor / optional, long term
- power plant/water factory
- medical school
- hospitality/shops
- hospitality (optional, long term)
- heritage site
- beach / turtle beach
- hiking trails
- diving spots/eco-marine tourism
- area of outstanding natural beauty
- horticulture/commercial horticulture
- husbandry / commercial husbandry
- mixed use - town center
- mixed use - residential, business, horticulture, green
- mixed use - low density - residential, agriculture, recreational, horticulture, nature
- mixed use - very low density - residential, agriculture, recreational, horticulture, nature
- mixed use - residential, recreational, green, nature
- mixed use - commercial, residential
- industrial area
- Lower Town
- port facilities
- main street
- green/nature
- obstacle-free airport zone
- airport extension (reservation)
- wind energy zone
- Protected nature area
- National Marine Park
- Marine Park Reserve
- Possible road diversion

tural qualities of Boven - like replanting indigenous plants, which would also increase the resilience of the area.

National Marine Park

The National Marine Park and the two Marine Park Reserves are protected by law. They are - Statia's major tourist assets. According to connoisseurs the quality of diving sites of Statia can create an economically viable tourism niche market. Dive tourism is considered the tourism market with the highest potential for the island. The coral reef areas allow for an increased number of divers.

Other natural and green areas

Outside the protected nature areas, adequate management is needed for the two most important sea turtle nesting beaches on Statia: Zeelandia Beach and Kay Bay. Developments that may impact these areas will not be allowed in the vicinity of these beaches, as the turtles are protected and the turtle beaches are an asset for development of ecotourism.

Lower Town

Lower Town will be further developed as a center for hospitality. The beach will be raised by sand-filling. The use of reef balls will keep the sand from washing away. Another option is to use a low capacity dredge and yearly maintain the beach.

Architecture that fits in historical frame

The ruins of the former buildings of tradesmen are to be restored or stabilized, or rebuild to be used as hotels, shops and recreational facilities, to recreate the former rich history of this area. The architecture of new buildings in this area will have to fit in the historical frame: carefully detailed brick buildings, with roof ridges, window frames and fascia. Only small-scale hotels will be allowed in Lower Town. Height zoning will be limited to three floors and long walls are not allowed. Building volumes will be kept small in accordance with the historic character and the buildings must be located and oriented to allow unspoiled view over the water and public access to a substantial part of the beach (northern part). This part of the beach is very important to Statia's inhabitants for swimming, hanging out and the Eastern festivities.

Extra hotel rooms

In order to investigate the possibilities for these developments a sketch design has been made. This sketch design shows that Lower Town offers both space for expansion of the existing hotels as well as three to four new hotels. New restaurants, bars and other (hospitality) retail are also possible in this area. Lower Town offers space for a total of approximately 200 hotel rooms (for a part already in existence). Space for another 100 is available within the residential area, at Zeelandia Bay and along the Weg naar White-wall.





Establishing a tourist office in this area is essential. Here guided trail hikes can be booked, e.g. the nature hikes to The Quill or Boven or a historic walk through Oranjestad. The site of the current tourist office in Fort Oranje can be re-used as a restaurant or bar.

Future traffic density can be handled

The port will, for now, remain at its current location. As a result, heavy traffic to and from the harbor will continue. As the traffic density is low, this will not impede touristic development. The demand of road freight will even lessen, as a buffer storage facility for sand and gravel is built. Future relocation of (part of) the activities of the port however, will not be made impossible.

Development of Lower Town will increase traffic density. Table 6.1 shows traffic generation with existing functions as well as with future functions. The total traffic generation will amount to a maximum of approximately 2,200 motor vehicle movements per natural weekday.⁹

The numbers show that even when Lower Town is developed to plan, traffic density on the road through Lower Town will remain quite low.

Traffic-slowing road design will prevent speeding, pedestrian crossings and separate pedestrian walkways - shaded by palm trees - will be included to create a well-planned and safe traffic situation.

Port

The port presently has a sufficient capacity for mooring vessels to accommodate the economic growth forecasts of the SDP. The area for container transshipment will be expanded on the area south of the port. The water purification plant and the energy company will stay in this area.

The present port allows small cruise ships to moor. On short term the port will be improved by

⁹ This has been based on publications no. 256 and 272 of the CROW, the Dutch national knowledge platform for infrastructure, traffic, transport and public space. These numbers are classified by location for cities and villages in The Netherlands. Because transport by car is relatively high on Statia (the climate being too hot for walking and lack of public transport), the highest number in the class for 'remainder of built-up area' has been used. This will depict a worst-case scenario.

adding a yacht jetty, mooring dolphins, extension of the breakwater and building a dinghy dock and amenities for visiting yacht.

Port-related facilities can be accommodated around the port - like a small shipyard for (minor) ship repairs, retail such as ship chandlers, a supermarket for daily supplies and a fish-restaurant. This will attract nautical tourists to land on Statia. In the port area a fish market (daily catch) can be accommodated, to create a transition between the port and the tourist area in Lower Town.

Town Center

The town center is a beautiful part of Oranjestad. The clear street plan and restored historic buildings make it an interesting area for tourists to visit. The historic part of the town-center is designated as protected cityscape. To improve the attractiveness of the town center the policy is to concentrate tourist amenities, such as restaurants and shops, around the Fort Oranjestraat. The town center's historic remains, for example along Synagoge Path need to be restored and used for public facilities.

Residential area /mixed use

Available space and existing amenities make expanding Oranjestad the first option for residential development. The indicated area has enough space to accommodate the major part of the need for extra dwellings (around 800, to be added to the present 1,050), and preserving its character of a patchwork of built and green



space, detached houses on plots. The proposed residential area of Oranjestad is similar to the residential area as proposed in the preparatory resolution (voorbereidingsbesluit).

The available plots differ in such a manner that they may cater for groups of people by offering possibilities for different types of homes. This encompasses social housing (to be developed by

the Housing Foundation), middleclass and more expensive houses, homes for first-time buyers, old-time pensioners etc.). The area is primarily for residential use in various densities, but also for green and open space, small-scale horticulture and gardens. This area can also be used for



Sint Eustatius

small businesses and bed & breakfast / small hotels.

Central public places to meet each other

Public spaces such as squares and parks will be built on central locations within this area, designed in such a way that there is plenty of shade with seats and playgrounds. In this way, these places will function as places to meet and socialize. These areas will contribute to the quality of living, as they create open space and not all space will be built-up. Near the Van Peereweg shopping strip, building a market place is an option. Located centrally in the future residential area it is possible to build a mini mall for a variety of shops. This mall can be designed as an indoor market square. A location near the Korthalsweg – Sandy Road crossing is a proper location, because it is easily accessible by car and located centrally.

Importance of zoning residential density

To prevent the whole of Statia from being covered with houses the residential developments in the surrounding areas need to be zoned in density. A lower density development area is proposed around the new terminal building and across the road at the B.W. Biesheuvelweg. Lowering the residential density towards the Atlantic Ocean is recommended.

Mixed use - Weg naar de White Wall (seaside)

This area is indicated as a low density residential and hotel area. In this area houses can be built in such way that the sea will be visible from the public space (i.e. the road). Therefore the density, building percentages and height of the buildings will be restricted. Also hotels may be built in this zone (like Statia Lodge).

Mixed use - Weg naar de White Wall (Quillside)

This area is indicated as a green area with low density residential development (housing and offices / small businesses/ hotel accommodations), combined with horticulture. As this area is important for the green image of Statia, the building possibilities will be restricted to preserve the green image.

Mixed use - North of the Quill

Green area with low residential density

This area has a key role in the green image of Statia. The area is indicated as a predominantly green area, with a mix of natural land, horticulture and husbandry, and very low density building, both recreational (hotel) and residential (including farmhouse). Restrictions will be made to density and volume, and also with regard to architectural style: in this area the SDP aims at a reconstruction of a historical décor.

The shore from Zeelandia to the Quill (a zone of 350 meters from the coastline) will be kept free from buildings in order to preserve the beautiful green coastline.

Current development possibilities respected

In this area are a few places where houses - either in small groups or as scattered homes - sit in a green space, such as along the road to the botanical gardens. In the SDP the existing residential development possibilities in these areas are respected.

Mixed use - Zeelandia

This area is indicated as a green area with low density residential development. Present developments may be expanded following existing agreements. On the (former) hotel location a new (eco)hotel may be developed. An important condition to these developments is that the turtle beach at Zeelandia Bay and Kay Bay will not be harmed.

Venus Bay

Priority will be given to development of touristic possibilities in Lower Town, Oranjestad, along the Weg naar de White Wall and Zeelandia. Future touristic development of Venus Bay will be limited on account of protected natural qualities of the Boven area. Limitation restrict the area (only the low and flat area), building (low density and small scale) and the occupants (few, to limit traffic).

Recreational facilities

Small scale tourist facilities

As mentioned above, apart from the tourist development of Lower Town, there is room for small scale tourist facilities across Oranjestad, including small hotels, bed & breakfast or similar facilities. The seaside of Weg naar White Wall has room for eco-lodges, comparable to the existing Statia Lodge. This area is also zoned as low density residential area. This zone has space for one or two extra ecolodges. Zeelandia Bay is an excellent location for an ecohotel.

Heritage as marketing strategy

The historic buildings and ruins on Statia offer the possibility to recreate the historical décor of the Island. They must be preserved and further restored. Guideline for this should be the Monument List. These buildings are unique tourist attractions that can be used in an elaborated marketing strategy for the island. Tourists can take walks (guided or not) along the historic buildings of Oranjestad.

Airport

New location for the terminal

The airport's obstacle-free zone must be doubled to 300 meters (150 meters on both sides from the runway center line) to comply with the new international standards. This requires relocating the terminal building. A new location is proposed east of Concordia. Relocating the terminal offers opportunities to renew the current outdated terminal building and fit it in an appealing environ-





Sint Eustatius

ment. A new terminal building can be combined with retail and hospitality facilities and adjacent office buildings.

The area can be transformed into an entrée to Statia that presents a favorable first impression to visitors .

No extension of runway needed

Extending the runway is not necessary as yet. Nevertheless on the map a reservation is made for extension of the runway. The airport has sufficient capacity to receive the growing number of flights and passengers. On the map a reservation is made for possible elongation of the airstrip in the future. The SDP restricts development in the area where elongation should be accommodated.

NuStar Terminals

NuStar Terminals is a major pillar under the Statian Economy and will stay at the current location. The environmental contour for NuStar Terminals will be anchored in an environmental license. Future development of the company may not conflict with the designated residential areas. The development options for Nustar are still in discussion with the government. At least no development will be allowed on the hills, as they enjoy a protected status. Their scenic qualities, and their function as a screen between the terminal buildings and the rest of the island are essential assets for touristic development.

Campus / Medical School

The Medical School has a growing potential. The Medical School is planning to build a campus on Korthalsweg, which will improve the school's attractiveness.

Industrial activity / prison

Space for future development of industrial activity is reserved near the existing industrial zone on the road to NuStar Terminals. As industrial activities may cause hindrance to nearby residential areas, development will be concentrated. Small scale industrial activities can be accommodated in the town center and the residential area. This area will also accommodate the new prison of Statia.

Waste disposal management

In the future Statia will have dual waste management. Disposable waste will be shipped to be destroyed in an incinerator. For waste treatment a waste treatment plant must be built. The industrial zone provides a suitable location.

Horticulture and husbandry

Horticulture

8 to 15 hectares of horticultural land can supply the local demand in horticultural produce. A soil suitability map shows where land is suitable for farming (see page 37). To enable development of horticulture, 8 to 10 hectares have been reserved north of the airport. This area is combined with the obstacle-free zone of the airport, enabling full use of this area without disturbing

airport activities. Adjacent to the current primary schools, a few hectares are reserved for horticulture, that may also be used as school gardens.

Indicating areas for horticulture does not rule out horticultural activities in residential areas.

Livestock farming

Free roaming cattle affect the landscape by grazing the vegetation, tearing down the ancient stone walls and causing erosion. The grounds east north of the airstrip / Zeelandia are indicated as suitable for keeping grazing stock fenced. Water supply and shade will have to be provided. The area north-east of the Quill is suitable for (small-scale) commercial husbandry.

Wind energy

A possible location for a small number of wind turbines is indicated on the map along the Atlantic coastline, south of English Quarter. The wind is constant, the area has the opportunities to integrate the wind turbines into the landscape. It is also possible to place wind turbines in the ocean, close to the coast line.





7 Implementation

The Strategic Development Plan does not only allow or restrict land use, but also aims to stimulate new developments and strengthen prosperity.

Implementation of the SDP, for instance development of Lower Town and expansion and redevelopment of the airport, largely depends on market initiatives, that need government support, direction and coordination. Cooperation of market/developers and government will implement the SDP. The first role of the government is to stimulate and facilitate. A well-structured and decisive governmental organization is elemental in implementation of the SDP.

Apart from development, a major aim of the SDP is active maintenance. Active maintenance - both of law and matter - will contribute to the prevention of undesired developments, both in nature areas and residential areas.

To view the implementation of the SDP, the following aspects are considered:

- Organization and instruments, with crucial roles for the Island government, the civil organizations and the execution and support organizations;
- The dynamic character of the SDP, with an emphasis on navigating the development of Statia rather than supplying an extensive list of development projects;

- Social implementation to create (future) leverage for development.

7.1 Organization

Success of the SDP depends wholly on its organization. Many plans have been written for Statia, few have been implemented - partly caused by lack of capacity in the organization and partly by governmental decision-making.

The SDP offers a framework for governmental decision-making. Next to that, a professional organization is needed to stimulate, facilitate, check and maintain development. To ensure that this organization has sufficient capacity, policies of civil services and departments will have to be harmonized. The executive organization needs both to fit to the current organization structure of Statia and to the experience and mind-set of the Stadians.

The Island government

The government has a facilitating role in the implementation of the SDP, by creating opportunities for the development and directing non-governmental initiatives. The government will stimulate economic growth by promotional activities, advertising Statia as an interesting location for investment and a profitable site for tourism and industry, and by creating a fair development climate, such as offering interesting tax rates, government grants, a fair land policy and a long-term consistent perspective. An 'internal' government task is to create general in-

vestment conditions by maintaining the existing spatial qualities and improving them to add to the touristic qualities of the island.

Economy

Economic development is one of the highest priorities for Statia. An Economic Department is being introduced; one of its tasks will be to overview that developments actually contribute to employment for Stadians. It will also be drafting and executing economic policy, in general as well as for sectors such as tourism, services and industry, stimulating economic development and helping to start up economic initiatives. This includes spreading information to possible investors in the fields of economic policy, regulation and (establishment) procedures.

Autonomous enterprise has been stimulated by the Small Enterprise Stimulation Netherlands Antilles (SESNA) and the St. Eustatius Foundation (SEF). The SESNA program has terminated. The Economy Department will have to initiate or stimulate a similar program.

Tourism

The Tourism Department will, in cooperation with stakeholders on the island, draft a tourism master plan, based on the policies of the SDP, to be able to harmonize ideas and initiatives, and develop strategies for specific sectors (e.g. education, dive operators, criteria for hotel development, small businesses development). Topics in the master plan will have to be the accessibility of Statia - by boat or plane - and the improve-



Sint Eustatius

ment of information facilities, like tourist information centers and signs. A focus is needed on the inadequate quality of the present hospitality facilities, and on hospitality education. This latter focus required a combined effort from the Tourism Department and the Education Department.

Education

The Education Department has the task both to improve the quality of education and to adjust education to island employment. The Ministry of Education, Culture and Science (OCW) is implementing a student result tracking system, to monitor educational results and to be able to relate education to employment.

Social welfare

The Social Welfare Department is responsible for improvement of welfare facilities and the creation of a multi functional health care centers and a center for youth and family. In cooperation with the Education Department, the staff for these centers will be trained.

Planning Bureau

The Planning Bureau will organize and guide execution and implementation of the projects mentioned in the SDP. The Bureau will cover the government projects, which they will initiate and coordinate. Another task is to assess whether projects are suitable for submitting to Usona and other donors. For private initiatives, the Bureau acts as the first contact and it will coordinate the

communication for the proposals between the private stakeholder and the civil and governmental organizations. This will enable structured and efficient realization of developments. The Planning Bureau will be expanded for these purposes.

DROB

The spatial planning department DROB is currently understaffed, and has to be expanded urgently. To implement the SDP, to assess spatial plans in relation to the SDP and to maintain according to the SDP, it is essential that this Department is in full force.

7.2 The SDP and other instruments

This SDP creates a relaunch of Statia's development and is not exhaustive. The SDFP will have to be elaborated into specific policies and projects. Essential in the implementation is the development of following planning instruments.

Spatial Development Plan

Concurrently with the Implementation of the SDP, a Spatial Development Plan for the entire island will be adopted, creating the legal framework for existing and future land use. As a zoning plan it will determine what land use (or mix of land uses) is allowed in which area, and what the conditions for building are. The developments stated in the SDP will be facilitated by the Spatial Development Plan. New development proposals will be assessed by the Planning

Bureau and DROB to ascertain its compliance with the Spatial Development Plan.

Land policy

To facilitate implementation of the SDP, simultaneous with the Spatial Development Plan, the go-vernment's land policy instruments are charted. The following instruments are included:

- Instruments to diminish possible negative effects for landowners, who have limited possibilities for development;
- Instruments for seizure of issued lands;
- Instruments for compensation with land use realization.

Planning of public space and planning quality for Lower Town

Lower Town is the most prominent tourist development site of the island. This requires an elaborate planning, in which the government has the tasks of implementing the framework, creating a long term perspective that can be reached in steps, planning the public space, and evoking, stimulating and facilitating initiatives.

Main spatial structure for residential areas

Residential areas are presently being developed without an overall development plan. This puts both the spatial structure of these areas and the quality of the infrastructure at risk. Zoning the residential areas in a zoning plan creates control on mix (function) and density. Besides, a plan for the main structure for new residential areas will have to be adopted by the executive council,

safeguarding accessibility and a proper public space.

7.3 The dynamic SDP

This SDP doesn't aim at a final image for Statia, but offers an instrument to stimulate and guide Statia's developments: management of the future. It does not contain an exhaustive list of projects, nor does it cater to all spatial and functional projects necessary for a more prosperous Statia. Developing insights and changing conditions may call for adaptation of the SDP. Adaptations - adding new proposals, adjusting present ones - are welcome if:

- They respect and strengthen the Statian identity, culture and social relations;
- The economic effects benefit the island and its inhabitants;
- They contribute to a sustainable development of Statia, balanced between the fragile geographical and natural characteristics and the economical, touristic and residential development;
- They do not interfere with the spatial and cultural historical qualities of Statia and fit in a proper water management.





7.4 Social leverage

This SDP is based on elaborate research. Prior to composing the SDP, a large number of stakeholders have been interviewed. Among these were Stenapa, Statia Oil, the Medical School, Se-car, the Housing Foundation, GEBE, Steba, the airport, hotels and diving schools. Based on these interviews, a SWOT (Strengths, Weaknesses, Opportunities and Threats) analysis has been executed and the Note of Outlines and Choices has been composed, in which the development possibilities for Statia have been investigated. They have been presented to the population in a Town hall Meeting and to a number of the aforementioned stakeholders.

The SDP is an elaboration of the Note of Outlines and Choices and the SWOT analysis. The results of the Town hall Meeting and discussions with stakeholders and civil servants have set the course for development. The concept of the SDP has been presented in a second Town hall Meeting and open consultations have been held. Based on their results and the outcome of a third Town Hall Meeting the SDP is completed. For ready consultation of any information, a website is being designed for the SDP. This website contains information about the process and the contents of the SDP.

7.5 Financial feasibility

During the implementation of the projects, their financial feasibility will be verified. The major part of the development possibilities depend on private initiatives (for example the development of Lower Town). Possible use of subsidies and tax exemptions will be further investigated where applicable.

Appendix 1

In the first Town Hall Meeting the development options for Statia were discussed on the basis of a series of statements, leading to the selection of the following most promising development options:

Population

To maintain the standard of service provisions, a population growth is needed. Three sources - natural growth, influx of foreign retirees and other immigration - have to be balanced, as natural growth alone will be insufficient. From conceivable population growth scenario's, a moderate scenario was chosen as realistic, both to be able to balance government incitement power and growth ambitions, and to prevent social stress. To house the growing population, residential development will be zoned, to balance scenic qualities (patchwork), traffic (roads), waste treatment (sewage), and mixed use. To attract retirees, specified residential development must be facilitated.

Social provisions

Medical and youth provisions and programmes need improvement - both to take care of the local population and to a growing number of retirees.

Residential development

Although residential development possibilities will remain in many areas, the focus will be on the vicinity of Oranjestad. A zoning will be instituted to allow the majority of extra houses to be erected in this main residential area, and to limit residential development elsewhere. In all residential areas mixed use will be possible - with businesses, horticulture, recreational and hospitality facilities. The zoning proposal will be based on the Voorbereidingsbesluit.

Economic growth

To raise the level of prosperity and to maintain the level of amenities, economic growth is needed. Four pillars are promising: tourism, agriculture/horticulture, service to (foreign) retirees and local entrepreneurship. All of them need development zones.

Tourism

Statia has opportunities to elaborate the tourist attractiveness for ecotourism and those who seek diving opportunities, history and quietness. To accommodate them an increase of hotel facilities is needed, which will also increase the number of jobs on the island. Lower Town provides the most suitable location. South of the Weg naar de White Wall lie opportunities for development of ecolodges. Similar development possibilities - on a lesser scale - will be facilitated near Zeelandia. To attract tourists, the available natural and historical assets and qualities need to be protected and developed.

Oranjestad

Expansion of shopping and hospitality facilities will be stimulated in the center of Oranjestad, to add to the local and tourist qualities.

Nature

For reason of nature conservation, and to create a high quality ecotourist asset, the Quill and Gilboa/Boven will be protected from anything but small scale tourist developments.

Food produce

To create jobs, to be able to provide the Island with local produce, and to be able to re-erect the historical decor, agriculture and horticulture offer opportunities, that need to be researched and allocated. Successful food produce may even lead to export. Modern agricultural science and ancient agricultural relics may be merged. For hygienic reasons cattle breeding will be limited in residential areas.

Harbor

A harbor replacement study did not show an immediate need for replacement. To raise attractiveness, development of port facilities will be facilitated (yacht mooring, repair facilities, shops).

NuStar

Expansion and transformation of NuStar will be limited by environmental and scenic zoning. Development possibilities of Lower Town and the conservation of scenic and natural qualities will prevail.

Airport

To meet international standards, and to improve Statia's welcome, enlarging of obstacle-free zones will be combined with a new terminal and commercial facilities. Extension of the airport may be needed in the future and will not be made impossible.

Medical School

Development – on initiative of the school - of a campus will be allocated and facilitated.

Waste treatment

A technical waste management study will be the base to allocation and development of an waste treatment plant, which will put the present land fill out of use.