# UNESCO'S MAN AND BIOSPHERE PROGRAMME (MAB)

# MIDDLE CURAÇAO BIOSPHERE RESERVE

# A COMMITMENT TO CONSERVATION AND DEVELOPMENT

The MAB programme is an intergovernmental scientific program that aims to establish a scientific basis for enhancing the relationship between people and their environments. It combines the natural and social sciences with a view to improving human livelihoods and safeguarding natural and managed ecosystems, thus promoting innovative approaches to economic development that are socially and culturally appropriate and environmentally sustainable.

Curação National Commission for UNESCO has been actively promoting the introduction and establishment of the Middle Curação Biosphere Reserve vision in the Country for the last 7 years.

# ZONES

#### WRITTEN BY CIARETTA PROFAS

MAB combines natural and social sciences, economics, and education to improve human livelihoods and safeguard natural ecosystems, thus promoting innovative approaches to economic development that is socially and culturally appropriate and environmentally sustainable.

The name of the Middle Curaçao Biosphere Reserve is based on the Middle Curacao Formation, which originated through a reorganization of the geological features that were formed thus far, some 65 million years ago. The "Middle-Curacao" beds occupy the western part of the central area of the island and consist of sandstone, shales, and conglomerates.

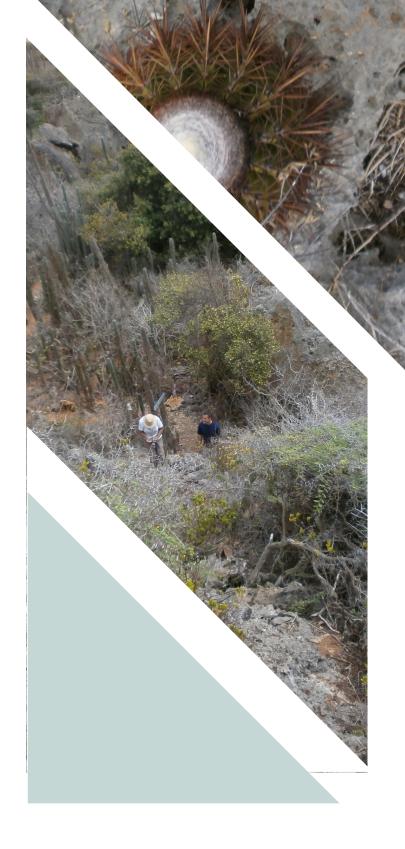


# ZONATION

#### WRITTEN BY CIARETTA PROFAS

The zonation of the MCBR is based on the island zoning plan locally known as the EOP ("Island Development Plan") designated in 1995 and ratified by the Island Government in 1997. Although the plan requires further adjustment, it does serves as an excellent tool for zoning and management of the MCBR. Thereby, the EOP has similar objectives as the Seville Strategy framework, such as regulation on land use, and conservation of the natural environment and natural resources. Furthermore, specific areas within the MCBR are even been designated as important bird area (IBA) and some areas have even been designated as Ramsar sites.

The MCBR has to serve three functions (conservation, development, and logistic support) as stated in the Statutory Framework of the WNBR through suitable zoning recognizing core areas, buffer zones, and transition areas. The core areas consist of a terrestrial (3356 ha) and a marine zone (1332 ha), and the buffer zone consist of a terrestrial (1288 ha) and marine area (1057 ha), and the transition area consists solely of the terrestrial area (2464 ha). The overall area of the MCBR is 9497 hectares.





## PROPOSED AREAS

#### Proposed core areas:

- 1. Malpais, Klein-en Groot Sint Michiel, including the Ramsar area.
- 2. Rif Sint Marie, Hermanus, including the Ramsar area.
- 3. Middle and Lower limestone terraces North Coast.
- 4. Highest terrace to the West and South of Tera Cora.
- 5. Coastlines both north and south.

The core area consists of the valuable natural and landscape section of the north coast (the coast of Hato), significant parts of the south coast (Rif St. Marie, Mal Pais, St. Michiel), the plateau south of Tera Cora, the coastlines at both north and south and the marine area at east point (Oostpunt). These areas are for preservation and restoration of the natural, historical, cultural and landscape values. Although some buildings and facilities are allowed in the conservation areas including those for extensive day recreation in the outdoors that does not disproportionately affect the values for which the area is designated. Some of these areas are even designated as Ramsar sites (Rif St Marie, Mal Pais/St. Michiel) and are of international importance under the Ramsar Convention.



### PROPOSED AREAS

**Proposed Buffer Zones:** 

- 1. High terrace (Open land) to the north of the Westpuntweg.
- 2. Porto Marie, San Sebastian, Jan Kock (Open land areas).

The Buffer Zone consists of the high terrace to the north of the Westpuntweg (Siberie), Porto Marie, San Sebastian, Jan Kok. The Island development plan categorizes the buffer zones as open land although portions of these grounds are for touristic and rural residential purposes. The open land areas are for potential developments in the future. At this time these lands are not too developed as these are not deemed desirable. Thereby development is allowed only to a limited extent, whereby they assess whether the development is necessary as opposed to preserving the open space. The development of buildings and other facilities are allowed with the objectives of landscape, cultural, nature conservation, and traffic purposes.

The portions of the grounds that are for touristic purposes are for developing recreational facilities focusing on tourism-oriented facilities although special provisions in the field of trade, services, and fishing can also find a place in this destination. In addition, other unique projects that are particularly beneficial to Island development are also possible. The sections of grounds specified for rural residential purposes are for development of residential accommodation at very low density.

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## PROPOSED AREAS

#### **Proposed Transition Zones**

- All residential areas (Stedelijk woongebied): Sint Michiel, Julianadorp, Souax, Gato, Grote Berg, Harmonie, Tera Cora, Daniel, Sint Willibrordus and Coral Estate Rif Sint Marie.
- 2. All industrial areas (Industrie gebieden): Oil terminal, Landfill, Free Zone Airport.
- 3. All areas under discussion ("Witte vlekken"/ Open land) Harmonie(?), Weitje .

The transition zone consists of all residential areas (Hato, Tera Kora, Grote Berg, St. Willibrodus, St.Michiel, Sami Liber, Jandoret, Zegu, Gatu, Souax, Seri Kandela), all industrial areas (Meiberg, the oil terminal, landfill, airport free zone) and all areas under discussion (Harmonie, Weitje). According to the island development plan, the residential and industrial zones are intended for further development and expansion. The industrial areas are for maintenance and further development of industrial and artisanal activities. Development of buildings and other facilities are allowed for industrial, artisanal, transhipment of goods, wholesale, transportation, public utilities, traffic, port, and defence purposes. Section grounds of the areas under discussion are for residential purposes.

# CONTRIBUTION OF THE BIOSPHERE RESERVE TO

## SUSTAINABLE DEVELOPMENT



The MCBR already presents the opportunity to serve as a model for sustainable development in the region.

The MCBR is of high significance for conserving biodiversity in the eco-region at national, regional and international level; the area is immensely rich in diversity of species, ecosystems, and landscapes and form part of the Caribbean Islands Biodiversity Hotspot, RAMSAR convention and Important Bird and Biodiversity areas (IBA).

At the east point of the island's the MCBR features one of the main hotspots that harbour among the healthiest and most diverse fringing coral reefs in the Caribbean despite the global destruction of coral reefs. These reefs have supported the fishing industry of the island and have been the basis of the lucrative marine tourism industry of Curaçao in recent decades.It also has an exceptional conservation value thus serving a range of valuable and vital ecosystem services such as coastline protection, providing habitats and shelter for many marine species, and water filtration.







# APPLICATION PROCESS AND OBJECTIVES OF THE FUTURE BIOSPHERE RESERVE

The Man and Biosphere National Committee is leading organization of the proposed Biosphere Reserve in close collaboration with National Commission on Curação for UNESCO.

The application process for the nomination of the area is being conducted under a participative approach engaging and motivating participation from all youngsters, local and regional stakeholders, as well as cooperation in other Biosphere Reserves, from Sint Kitts and Nevis, and Trinidad and Tobago.

The main objectives within the MCBR is to contribute to the SDGs, to stimulate learning and research, community forums & engagement, and capacity building, networking with other BRs, which is an added value to life and economy of people and commitment of the MCBR.