

Use of digital information technologies for adaptation of the effects of climate change in touristic coastal zones of The Dominican Republic

Locality: Bayahibe, Dominican Republic.

Main Data - Bayahibe:

Province	Higüey
Date of creation	September 09, 1907
Coordinates	18.37°N 68.84°O
Latitude	18.37°N
Altitude (m) minimum	-1
Altitude (m) maximum	18
Climate [ref]	Aw Savannah Tropical
Temperature (°C) prom. / min./ max.	27.8 /21/31.0
Mean Relative Humidity (%)	82.52
Rain (mm/year)	822
Population	2,260
Density (h/km ²)	576
Occupied surface (km ²)	5.2
% Gross Domestic Product	1.2
Main Distances	<ul style="list-style-type: none"> • 54 km SO of Punta Cana • 144 kms SE of Santo Domingo

Specific Objectives

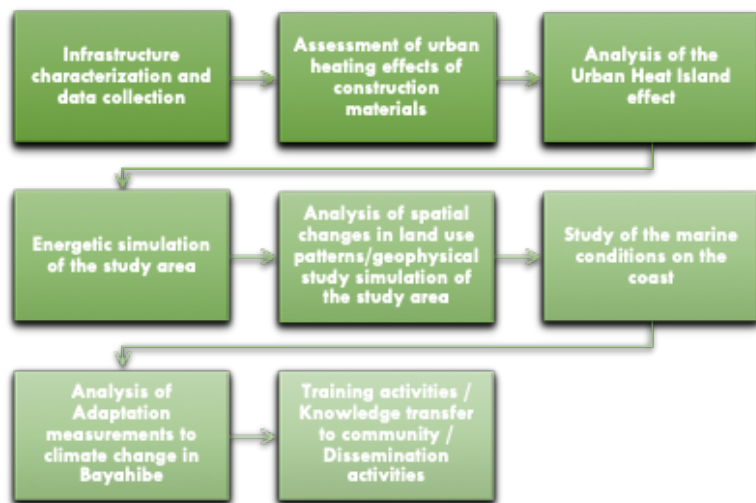
1. Increased use of digital technologies and/or machine learning applications to detect, analyse, and forecast the effects of climate change.
2. Increased understanding of climate change effects and adaptation strategies.
3. Increase in coastal settlement management plans and public policies informed by digital technologies for adaptation of the effects of climate change.

Target Groups

(Local and National Stakeholders):

- Bayahibe Municipality
- La Romana-Bayahibe Tourist Cluster
- Ministry of Tourism
- National Council for Climate Change
- Ministry of Environment and Natural Resources

Methodology



Expected Results:

- Development of an app with the location and information of the infrastructures
- Catalogue of construction materials with their characteristics indicating their effect on urban heating.
- Temperature maps of the study areas during an annual cycle displayed in the application
- Energy simulations of the city during an annual cycle displayed in an application.
- Evolution of land use patterns displayed in the application and land characteristics
- Marine variables displayed in an application
- Adaptation scenarios to climate change



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Madre y Maestra



National Council for Climate Change, Dominican Republic



Ministry of The Environment, Dominican Republic



La Romana-Bayahibe Tourist Cluster



Bayahibe Municipality District, Dominican Republic



Ministry of Tourism, Dominican Republic