

CUBA

1- Key vulnerabilities

- Existence of coastal human settlements, several of them in low areas with high risk of floods by sea penetrations.
- Vulnerability to extreme hydrometeorological events.
- Low availability of water resources, prolonged droughts and existence of coastal aquifers with risk of salinization.
- Ecosystems with different levels of affectation (beaches, reef ridges and mangroves).
- Threats to biological diversity.
- Low agricultural yields in fundamental crops of the national diet and low soil productivity.
- Species of flora and fauna with risk of extinction and proliferation of exotic invasive species.
- Deterioration of hygienic-sanitary conditions in human settlements.

2- SDGs being addressed by the country

The Government of Cuba is paying attention to all SDGs, which is reflected in the guidelines for the national economic and social policy, in the conceptualization of the country's economic and social model and in the development projections and planning until 2030.

3- National policies on adaptation; mandates/directives etc.

In April 2017 the Council of Ministers approved the State's Plan to Face Climate Change, which has a high component of adaptation as prioritized strategy for Cuba.

4- Priority adaptation themes/sectors

- Water resources
- Agriculture
Land use planning and human settlements
- Construction
Coastal areas and marine resources
- Biodiversity and wildlife
- Public health

5- Progress on NAPs

The Government of Cuba approved in 2007 the Program for Facing Climate Change, which was an important step for the integration of this topic in policies, strategies, plans, programs and projects that have been implemented.

In the period 2014-2015 the *Guidelines for Facing Climatic Change* and a derived action plan 2016-2020 were elaborated, whereas in April of 2017 the Council of Ministers approved the State's Plan for this purpose. Derived from this one, territorial and sectoral plans for adaptation are currently being developed by local governments and agencies of the Central State's Administration, respectively.

In parallel, many scientific-technical national programs have been developed, which incorporate important projects related to climate change adaptation.

Among the results of these projects, the following can be mentioned:

- The first assessment of the impact of climate change in Cuba and the derived adaptation measures for prioritized sectors.
- Development of new climatic models.
- Improvement and development of new and diverse systems of early-warning about the threat of hazardous weather events.
- Modeling and evaluation of scenarios of the impact on Cuba's coasts of the predictable sea level rise for the years 2050 and 2100; diagnosis of the state of the coastal natural resources and impacts on the terrestrial and marine biodiversity.
- Studies on danger, vulnerability and risks of the floods due to heavy rains, coastal penetrations and heavy wind effects.
- National Scientific Program "Climate Change in Cuba: Impacts, mitigation and adaptation".
- Implementation, from 2009, of the project "Dangers and Coastal Vulnerability 2050-2100", which consisted of a group of investigations, whose results have been the basis for future predictions of climate change, the dangers and vulnerabilities and the adaptation measures for the Cuban coastal zone.

The results obtained have been included in different publications. Among them:

AMA-INSMET-GEF-UNDP: Climate change in Cuba. Vulnerability, impact and adaptation. Multimedia, Havana: Editorial AMA.

Republic of Cuba. Second National Communication to the United Nations Framework Convention on Climate Change. Havana, 2015

The Government, through its Financial Economic Commission, subscribed to the Council of Ministers, supports the process, mainly in terms of investment approval. Also, the annual investment expenditure plan for environmental protection prioritizes investments for adaptation to climate change. To ensure the necessary legal support, a decree-law for facing climate change is being elaborated.

6- Ongoing national adaptation initiatives

Several initiatives have been carried out, including the following:

- Identification, based on the results of the developed research and studies, of the prioritized areas and places to take action throughout the national territory.
- Prohibition of the construction of new housings in threatened coastal settlements.
- Planning of the relocation of the settlements and threatened infrastructures.
- Implementation of protective measures for sandy beaches, mangrove swamps and coral reef ridges.
- Improvement of soil conditions, introduction and development of resistant crop varieties to the new scenario of temperatures.
- Reorganization of agricultural areas according to regionalization of crops, soil productivity and availability of water.
- Use of more efficient irrigation systems.
- Reduction of crop areas near the coast or affected by saline intrusion.
- Enhancing the contribution to climate change adaptation of national and sectoral programmes currently in implementation: National Forest Programme, Programme for Rational Use and Water Saving, Programme for Soil Improvement and Conservation, Programme to Combat Desertification and Drought (based on sustainable land management), Programme to Combat Disease Transmitting Vectors, among others.
- Establishment of priorities for conservation and protection at local level of species exposed to the impacts of climate change. Rehabilitation and restoration of ecosystems degraded by anthropogenic and climate change effects.
- Specialization of the reforestation of different ecosystems considering adaptable species. Permanent moratorium to mangrove exploitation.
- Plan of adaptation for the north coast of Havana.