

ANALYSIS OF MARINE, COASTAL AND INSULAR VULNERABILITY TO CLIMATE CHANGE IN THE COUNTRY.

Problem / Opportunity:

Colombia has been building the Third National Communication to tell the world that the country is facing climate change so that interested parties can guide the development of national public policies.

Along the Colombian coast there is already evidence of impacts caused by climate, these are expressed in terms of erosion, flooding and saltwater intrusion. According INVEMAR (2003), approximately 55% of the population of the Caribbean coast and 45% of the Pacific coast will be exposed to a rise of the sea level for the year 2100; the 90% of the rise would be located in the municipalities. In addition, DANE (2012) noted that climate variability floods have caused historically the largest number of disasters during 2010-2011 period that caused damage to more than 2 million people.

In order to generate elements for the Third National Communication (ratified by Law 164 of 1994 and 629 of 2000), we propose the development of the analysis of marine, coastal and insular vulnerability aims to climate change on a geographical scale of 1: 100,000. Which includes analyzing information on sea surface temperature, rise of sea level for coastal areas of the country, information on coastal erosion, marine acidification, and the possible effects of climate change on marine ecosystems and coastal and socioeconomic status.

It is noteworthy that the project is part of the strategies outlined in the National Development Plan 2014-2018 "All for a new country," specifically to the objective 3 "achieve resilient growth and reduce vulnerability to disaster risks and climate change". It is also consistent with the objectives and goals in the PNAOCI (MMA, 2001) and the National Climate Change Policy (CONPES 3700).

General objective:

Preparation of Vulnerability analysis for climate change of marine, coastal and insular areas in the country under the conceptual and methodological framework set out in the Third National Communication on Climate Change (TCNCC) of Colombia, facing the United Nations Framework Convention of the United Nations Climate Change (UNFCCC) as an input for vulnerability chapter.

Specific objectives:

- ✓ Identify and collect updated information as input for analysis of insular, coastal and marine vulnerability to climate change, according to the conceptual and methodological framework set out in the Third National Communication.
- ✓ Analyze the information collected and perform the populating of indicators and rates of insular, coastal and marine vulnerability to Climate Change.
- ✓ Place indexes and indicators filled in the vulnerability analysis.

Products planned:

1. A document with the work plan for the project that describes at least activities, products, schedule and methodology.
2. A document containing the compilation and analysis of existing information in Colombia about: indexes and indicators selected under the methodological and conceptual framework of TCNCC. Including at least, information nationwide on surface temperature, sea level rise for coastal zones, information on coastal erosion, marine acidification, and the possible effects of climate change on marine and coastal ecosystems with emphasis on mangroves and coral.

3. A document containing descriptive cards for each index and indicator of the vulnerability of coastal, marine and Insular component that integrates metadata and traceability of the collected information.
4. A document containing the analysis of the coastal, marine and insular vulnerability matrix with indicators and indices filled in accordance with the methodological and conceptual framework.
5. A document containing the location of the coastal, marine and insular vulnerability analysis on climate change (scale 1: 100,000).
6. A document with the analysis of coastal, marine and insular vulnerability to be included in the Vulnerability of the Third National Communication on Climate Change Chapter, in accordance with the guidelines established by the Coordinating Unit.
7. A document synthesis of structured products according to the report required from the TCNCC and edited in language that facilitates dissemination to the general public and decision makers, accompanied by a document type scientific article in Spanish and English.

Influence Zone of the Project: Colombian coastal zones.

Duration: 10 months in 2016 with completion by December 22, 2016.

Investment:

INVEMAR: \$ 120.349.252 COP

UNDP: \$ 349.967.955 COP

Entities involved in the project:

INVEMAR and UNDP

Coordination of the Project:

Names: Paula Cristina Sierra, Anny Paola Zamora Bornachera.

E-mail: paula.sierra@invemar.org.co; anny.zamora@invemar.org.co

Researchers:

Anny Zamora, Diana Romero, Desiré Hernández.



Los Córdoba (Córdoba). Source: gallery INVEMAR.