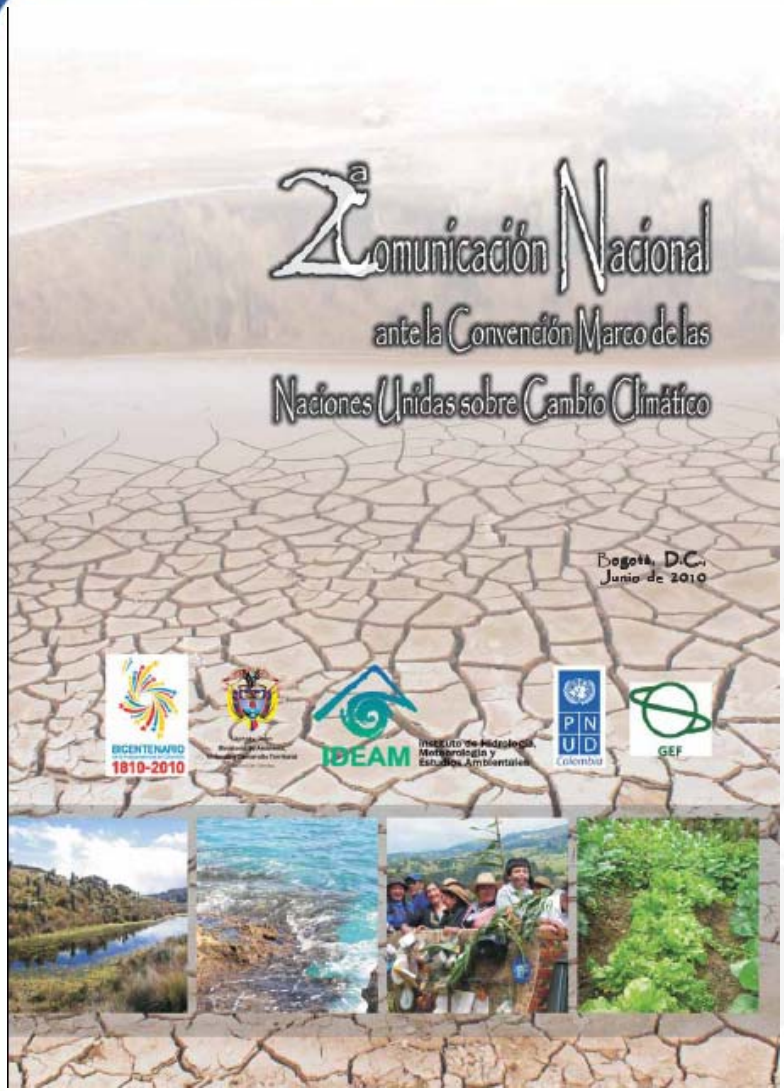


SECOND NATIONAL COMMUNICATION OF COLOMBIA TO THE UNFCCC

Maria Margarita Gutiérrez

Deputy Director

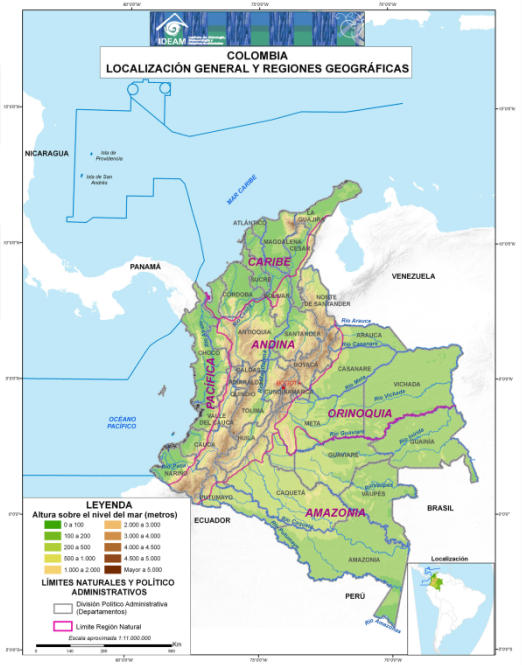
Environmental Studies office

Institute of Hydrology, Meteorology and Environmental Studies

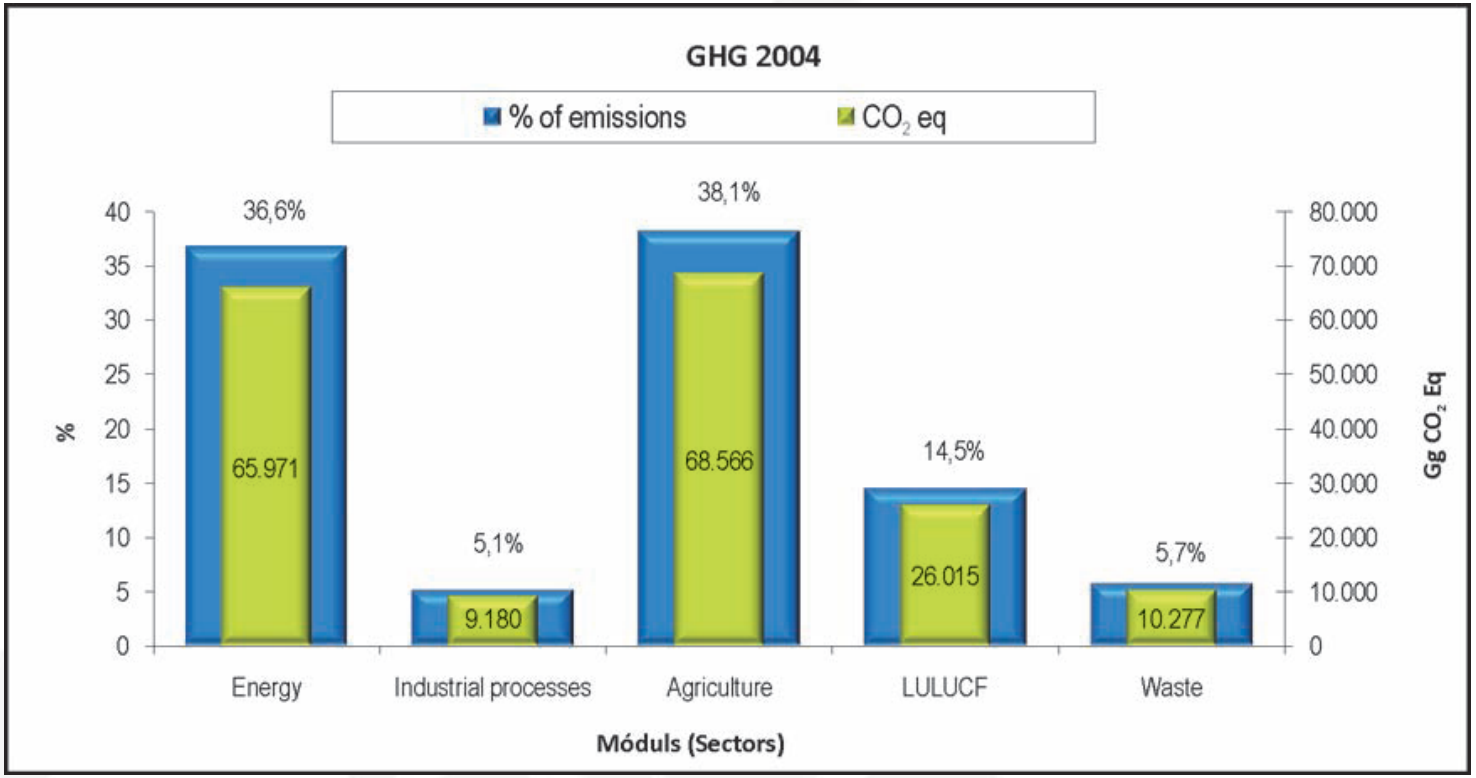
mgutierrez@ideam.gov.co

Introduction

- Colombia's total area is 2,070,408 sq.km
  - 1,141,748 sq.km of mainland
  - 926,660 sq.km of territorial waters
- The continental mainland area is divided into five natural regions: Caribbean, Pacific, Amazonia, Orinoco and Andes, and there is an island region in the territorial waters of the Caribbean.
- In political terms, the territory is divided administratively into 32 Departments, which are in turn are subdivided into municipalities.
- Colombia is located on the equatorial/under the influence of the intertropical confluence zone (ITCZ), also is also favourable to the influence of processes which occur in the tropical Atlantic, the Caribbean, and the tropical Pacific.
- Average annual rainfall is 3,000 mm, with real evapotranspiration of 1,180 mm, and annual average run off of 1,800 mm.
- The population of in 2008 was 44,450,216, being the second most populous country in South America and the fourth in the Americas.
- The structure of the population is : mestizo 51.51%, white 35%, black 10.6% and indigenous 3.4%.
- The economy achieved recovery in GDP growth since 2000, corresponding to per capita GDP increases of US$2,126 (2000) to US$2,566 (2007).



Greenhouse Gas Inventory



The contribution of GHG is composed as follows:
CO_2 50%, CH_4 30%, N_2O19%
leaving 1% for the remaining GHG, which are not in the Montreal Protocol, such as HFCs, CFCs, and halocarbons and SF_6

Greenhouse Gas Inventory:

Categories Sources

Energy	Transport	12.1
	Energy industries	8.5
	Manufacturing and construction	7.3
Agriculture	Enteric fermentation	18.5
	Agricultural soils	18.1
LULUCF	Soil CO_2 emissions	4.1
	Conversion of woodlans and pasture	9.2
Waste	Solid waste disposal in the ground	5.0
Other	**Accumulated main sources:**	**79.8%**

According to the GHG inventory for 2004, **Colombia contributes 0.37% (180,010 Gg) of world total emissions** (49 Gg) and individual emissions per capita are below the world average, and very far below values recorded by Europe, western Asia and North America.

Mitigation

NATIONAL POLICIES AND PLANS ASSOCIATED WITH MITIGATION

- Colombian National Environmental Council:
  - Policy Guidelines on Climate Change, 2002.
  - Conpes 3242, 2003: sale of environmental services for Mitigation
- Mitigation Climate Change Group at the MAVDT
- MAVDT issued resolutions 551 and 552 of 2009:
  - CDM projects.
  - Technical Committee on Climate Change.
- National Development Plan (NDP) 2002-2006.
- National Development Plan (NDP) 2006-2010.
- Colombia´s Vision II Centenary 2019.
- Multilateral cooperation agreements.

SECTOR STRATEGIES AND PLANS

- Agriculture Sector
- Energy Sector
- Waste Sector
- Land Use Sector-use change and forestry (LULUCF)

Mitigation

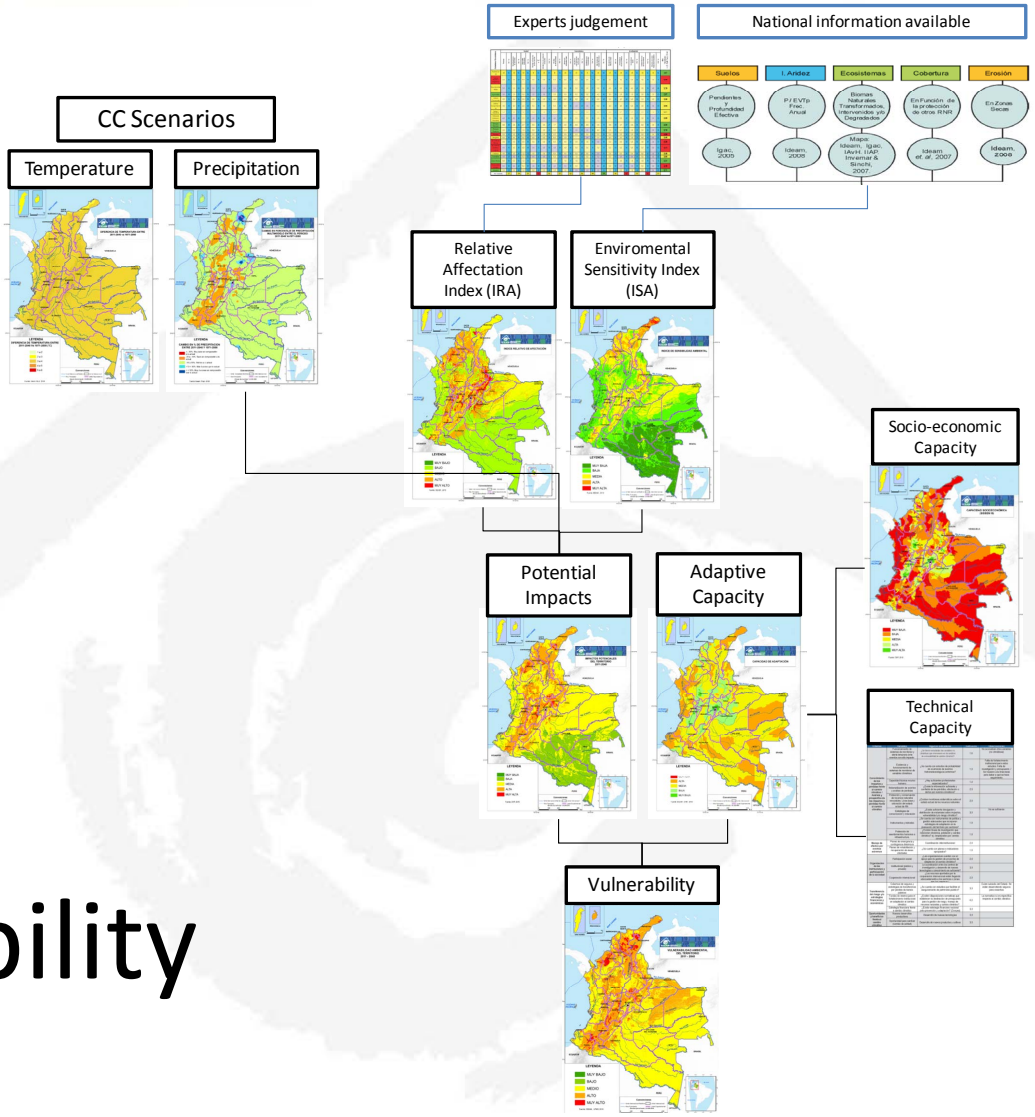
CDM Projects

Energy (31.25%)
Industrial (31.25%)
Waste (17.36%)
Forest (11.8%)
Transportation (8.3%)

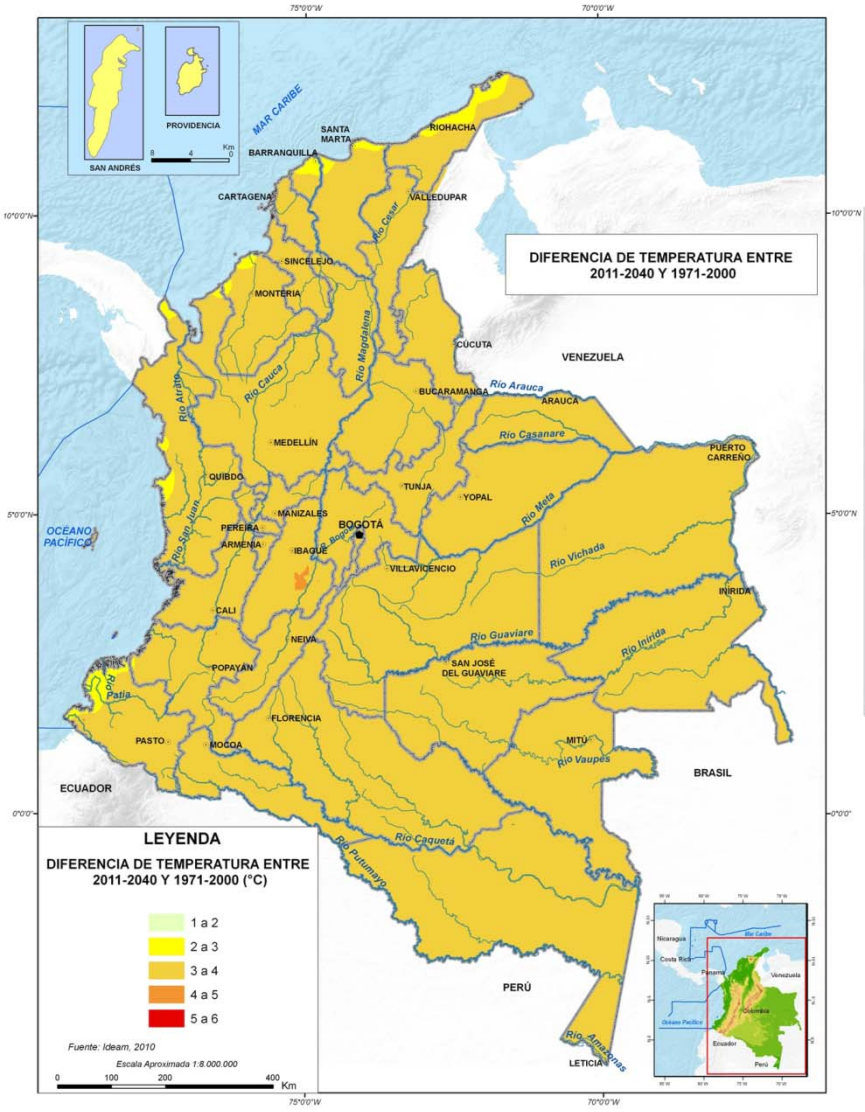
Until December 2009:

- National portfolio of 144 projects.
- 49 have national approval.
- 20 are registered with the UNFCCC.
- 6 have CER.

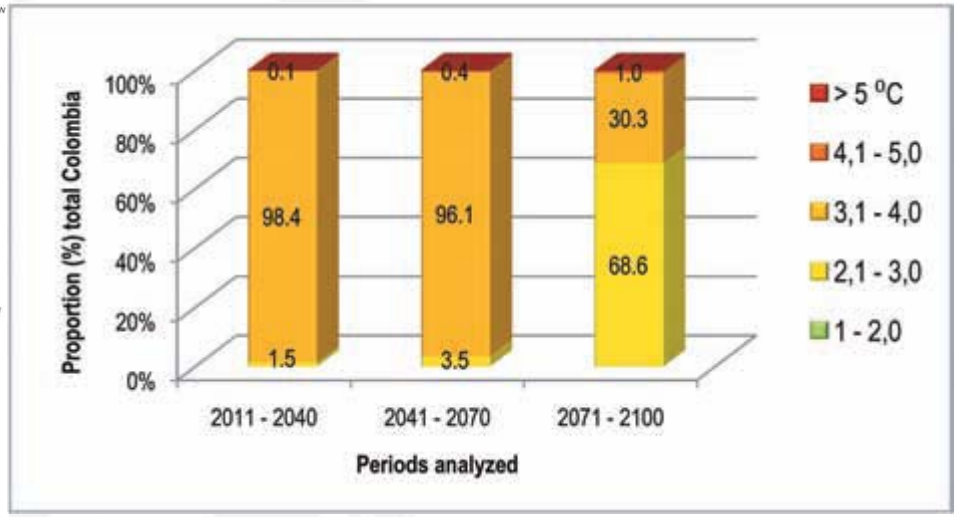
- The potential annual reduction in total GHG emissions from CDM projects is aprox.16.402.496 t CO2 eq, which could lead to potential revenue to the country of about USD $ 152,000,000.



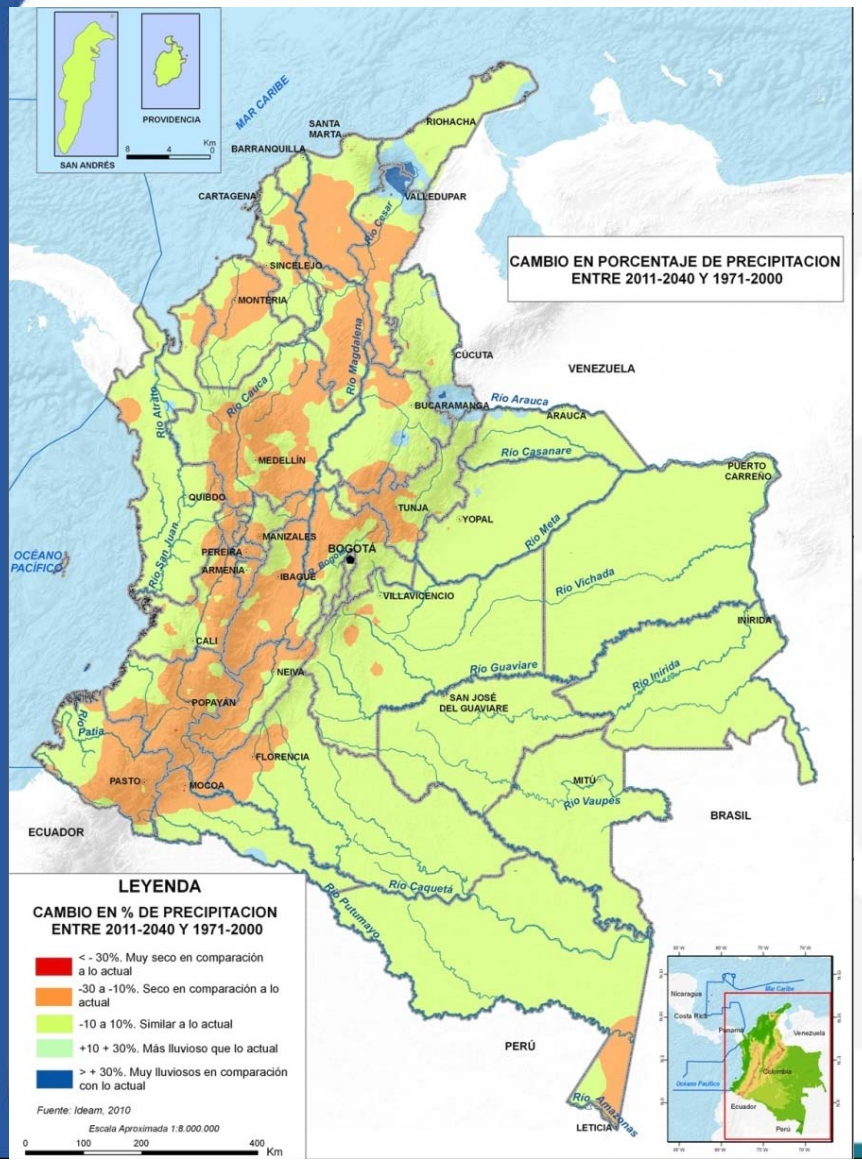
Vulnerability



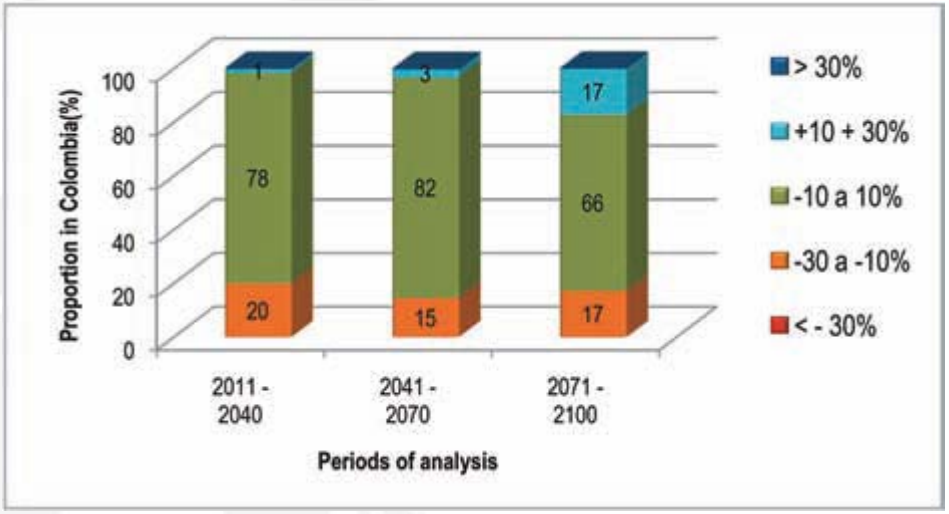
Temperature



In the remainder of the century in much of the country would have an increase in average temperature above 2ºC.



Precipitation



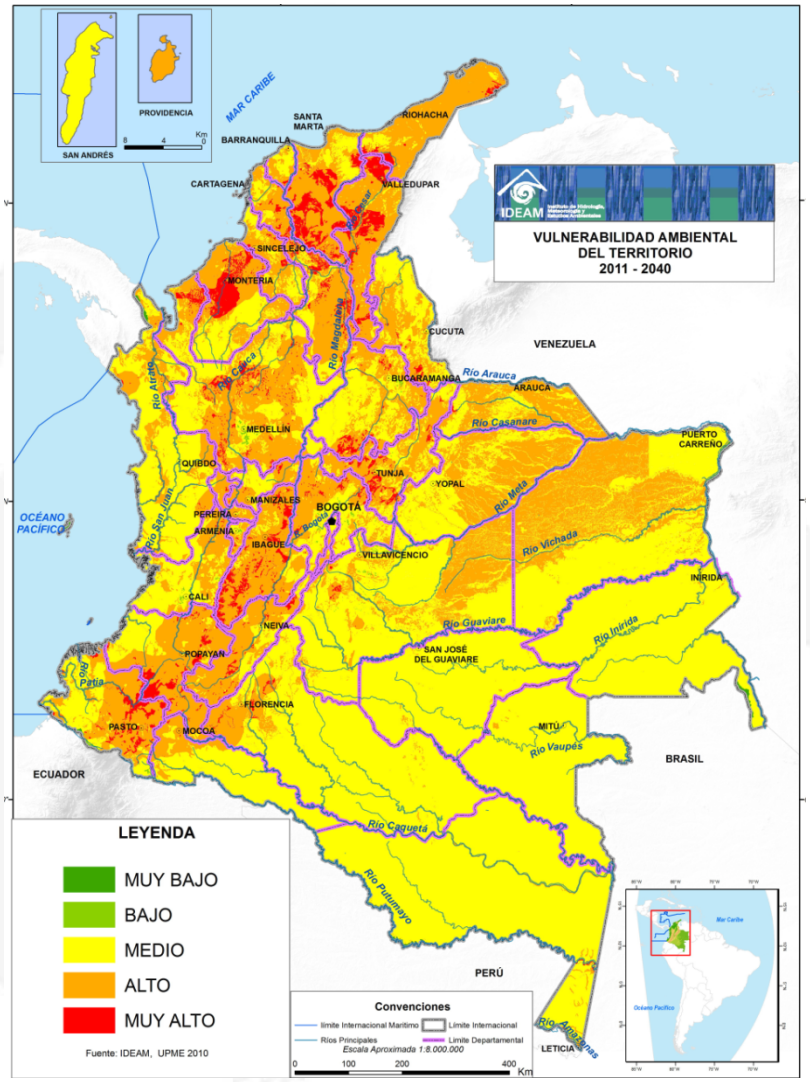
For the period 2011 to 2040, 20% of the country would have a reduction in mean annual precipitation from -10% to -30%.

Libertad y Orden
Ministerio de Ambiente, Vivienda y Desarrollo Territorial
República de Colombia

IDEAM
Instituto de Hidrología, Meteorología y Estudios Ambientales

II Congreso Nacional del Clima 2011
La Adaptación de Colombia

Vulnerability



Adaptation

Successes of the pilot projects for adaptation in Colombia:

Definition of Vulnerability in the Bio-geophysical and Socio-economic Systems due to a Change in Sea Levels at the Coastal Areas of Colombia

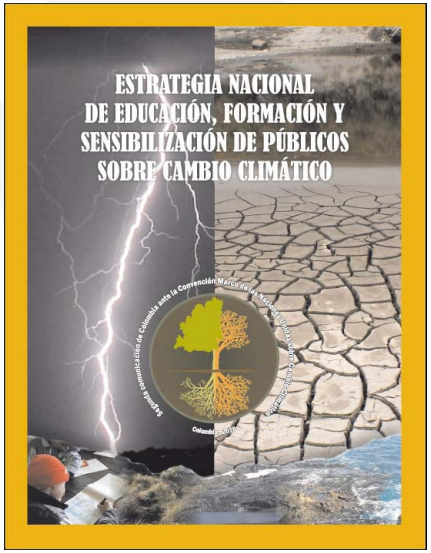
National Pilot Project for Adaptation to Climate Change (INAP)

Joint Programme: Integration of Ecosystems and Adaptation to Climate Change in the Colombian Massif

Art 6.

- Paula´s Trip (for kids)

- National Strategy for Education, Training and Public Awareness on Climate Change



Key challenges

In the process of preparation of second and/or third national communication(s):

- To develop a comprehensive vulnerability analysis and consistent with the national reality and was not fragmented by the lack of resources to do so.
- For the IDEAM as project coordinator, was a challenge to involve institutional, technical and efficient, relevant entities to each of the components.
- The limited time and limited staff supporting in the final stage of the project to ensure the publication of the document.
- The information updated and available in sufficient detail for calculating GHG emissions at a more detailed level.
- The changed of Coordinator and Administrative Assistant of the project in halfway, due to circumstances beyond the project.

Key challenges

In use of the guidelines and methodologies:

- It doesn´t specify how to do vulnerability assessment.
- Establishment of differences between concepts, such as: threat, exposure, sensitivity, capacity to adaptation and the way of treat them.

- Lack of standardize information and time series
- Few experts that manage methodologies
- High diversity on national circumstances faces Colombia whit a great challenges

Lessons learnt and/or innovations and best practices

- Encourage the participation of different entities in the process and facilitate good relations in order to obtain information and validation of the document.

- Having permanent staff for the consolidation of the information components allows the consistency of the document and provide validation.

- Since the beginning of the project, it should be hire an Administrative and Finance Assistant and a Technical Assistant Project. This will allow a more agile and efficient performance of the Project Coordinator and the implementing entity.

- A mistake to avoid is not having a Technical Assistant of the project, to support the process from the beginning. The Coordinator requires a person to support the consolidation of the large amount of information collected and the logistical activities.

- Facilitate interagency coordination and scenarios of concertation allows final goods results.

Next steps

Colombia is working in the PIF for the TNC and it is expected to be sent to the GEF next semester.

Expected advances in TNC:

- Regional vulnerability assessment of the territory, and sectoral vulnerability assessment
- National vulnerability assessment of biodiversity and costal and marine ecosystems.
- To show National Adaptation Plan of Colombia
- Response measures analysis
- Develop a Systematic Observation program focus on Climate Change and Integrated with the national Earth observation Program
- Cost-effective analysis of the impacts of the CC and possible adaptation measures
- Special publications of TCN for policymakers and the general public

Thank you!

Link to download the SNC:
http://www.cambioclimatico.gov.co/segunda-comunicacion.html