

# **CLIMATE CHANGE THREATS ON BIODIVERSITY IN BURUNDI**

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# OUTLINE

## O. INTRODUCTION

I. Threats of the climate change to the terrestrial ecosystem

II . National vision

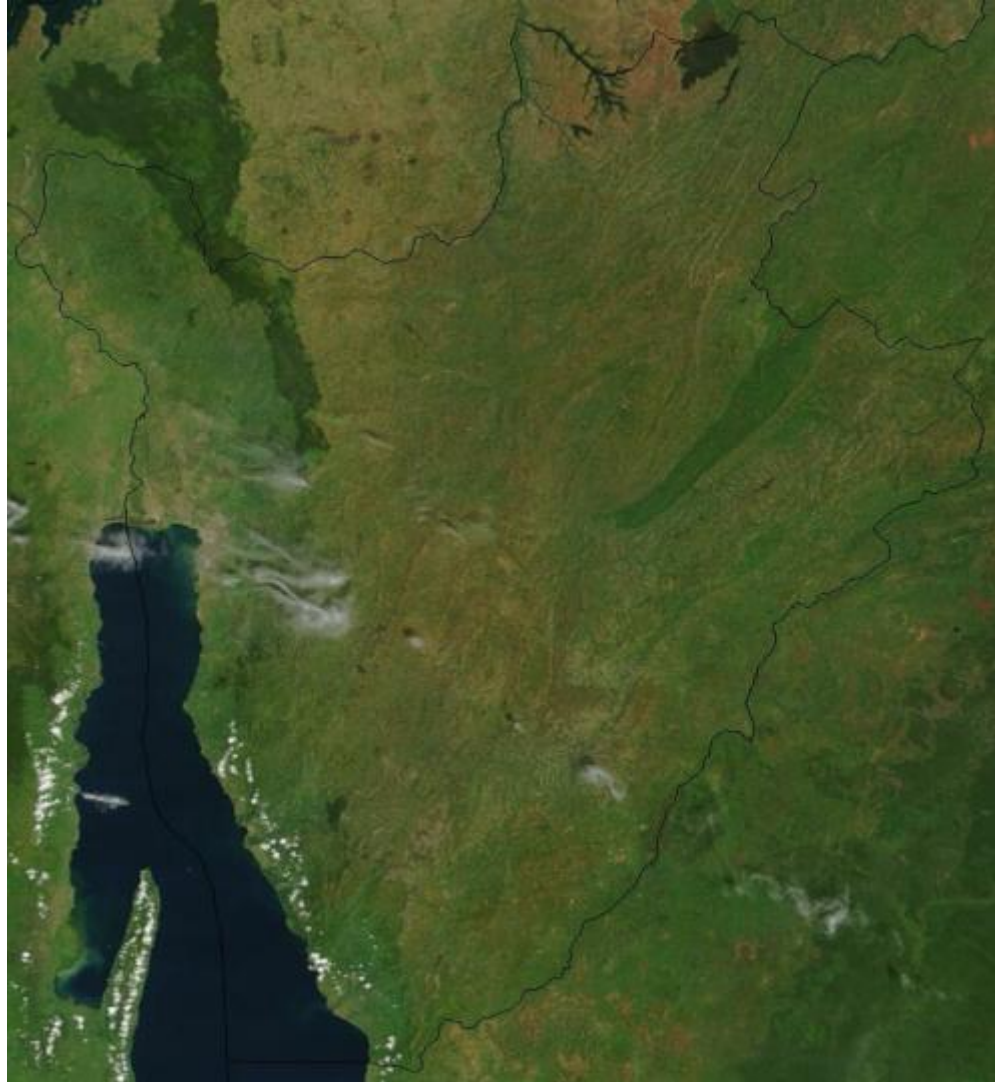
III. Impact of climate change on environment:  
Gatunguru case.

IV. Conclusion

# O. Introduction

- Burundi, small country with 27834 km<sup>2</sup>.
- With a population of approximately 9million,
- Under developed, GDP per capita \$ 141.
- The biodiversity of Burundi offers a great richness of the natural ecosystems, plant and animal species.
- Burundi has 4 ecosystems: terrestrial, watery, forest and no forest.

# Burundi land cover (Satellite image)



# I. Threats of the climate change to the terrestrial ecosystem

According to the Ministry of territorial planning and environment(2001),within the first National Communication regarding the UN convention on climate changes, today's environmental situation in BURUNDI shows 3 major problems:

- I, degradation of soils;
- ii,degradation of forestry resources;
- iii, and human environmental degradation.

## II . National vision

The national vision is stated as follows :

« All layers of the population are properly informed about values of biodiversity and the risks they run, involved and engaged in its conservation and sustainable use to the welfare of present and future generations »

**Ministry for Land Management, Tourism and Environment, 2007.**

National Adaptation Plan of Action to climate change, NAPA

# National strategies to mitigate threats

The strategy for the conservation and sustainable use of biodiversity is based on the following eight areas:

- Conservation of biodiversity ;
- Sustainable use of biological resources;
- Equitable sharing of responsibilities and profits in the management of biodiversity;
- Development of science and technology such as Biotechnology (STI policy 2011);
- Education and public awareness ;
- Training and research ;
- Cooperation and exchange of information.

# Threats: Several causes

- Human high pressure (Demography)
- Global warming
- Landscape fragmentation
- Poaching
- Burning
- Over grazing
- Pollution (sanitation,...)
- Policy not clear (Legal and administrative aspects of the management of the environment)
- Etc...

All those threats are interconnected!!!!!!!!!!!!!!



# Current climate variability and climate change

- Analysis of the temporal evolution of **precipitations** in Burundi during the last 60 years shows a cyclic character, at intervals of more or less 10 years, of alternated periods of surplus with those of rainfall deficit compared to the normal.
- Analysis of the change in mean of **temperature** shows a persistent rise of temperature compared to the normal. The average temperature in the area increased from 0.7 - 0.9° C since the 1930s.
- Since 1999, it has been observed a strong variability of rainfall with a trend towards a long dry season from May to October (6 months) in the lower altitude( Bugesera) areas and the central Burundi.

Burning (Wild fire and management fire) in Ruvubu National Park, June 2008



## EROSION in KANYOSHA, Bujumbura

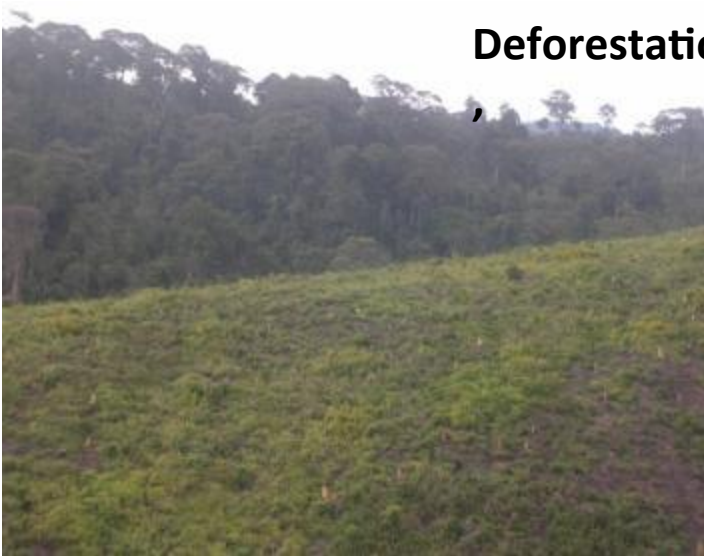


# Human well being contrasts:

Human environmental pollution is related to the precarious state of the sanitation



**Deforestation**



**Sand exploitation (,Gold exploitation)**





### III. Impact of climate change on environment: Gatunguru case.

- In the night of the 9th to 10th February 2014, Gatunguru quarter in northern Bujumbura town, has been destroyed by stormy rains .
- The mountain stream( Gasenyi), up side of Bujumbura, uprooted and rolled stones , big trees and crops, destroyed 92 houses (1600 became homeless), damaged roads, 118 injured and 46 died











Flooding on  
mountain (above  
Gatunguru)





Flooding ctd



**Burial of victims of Gatunguru**



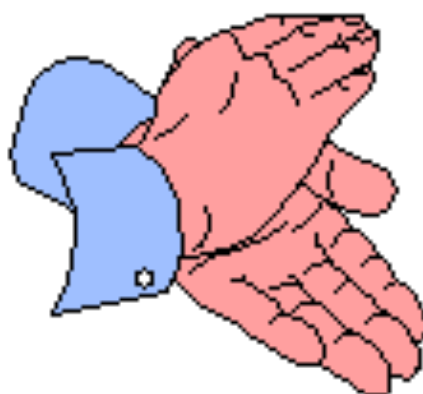


# IV conclusion

- We must do whatever is possible to mitigate and to adaptate climate change's threats because our lives depend on;
- We have to strengthen research on climate change and to network together;
- To reinforce regional and international cooperation.



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