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A spatial assessment of REDD+ policies in Brazil and the Congo Basin: the REDD-Pac project

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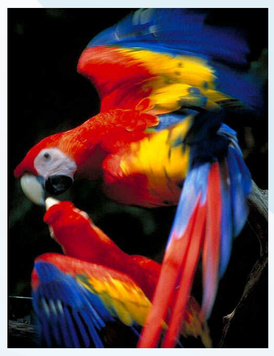
REDD pac

Nov. 2011- Nov. 2015

- ***Identify REDD+ policies that are economically efficient, socially acceptable, can safeguard and enhance ecosystem values and help meet the goals of the Convention on Biological Diversity***
- ***Provide a global forum for sharing and improving global data on forests and deforestation drivers, and developing best practices for national REDD+ and land-use planning***

Background

BRAZIL



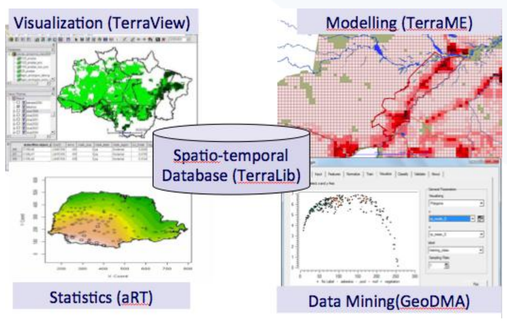
- Global forests have lost 130 million hectares between 1990 and 2009 and carbon emissions from deforestation represent around 12% of total global greenhouse gas emissions (FAO 2010; Van der Werf et al. 2009).
- The Reducing Emissions from Deforestation and forest Degradation (**REDD+**) Initiative has been launched since 2008 with the idea that international community should transfer money to developing countries which make **efforts to reduce deforestation and improve forest management**
- Brazil and the Congo Basin encompass **60% of the total tropical forest area** (FAO 2011) but their deforestation profiles are quite different:
  - Brazil has experienced high historical deforestation level but the recent trend is a reduction of the deforestation rate
  - Congo Basin has experienced low historical deforestation level but the recent trend is an increase of the deforestation rate
- **Understanding land use change processes and how different REDD+ policies are likely to influence land use change is essential for enabling development of REDD+ policies:**
  - **that promote economic development**
  - **that safeguard and enhance biodiversity and other ecosystem values and help countries to meet the objectives of the UN Convention on Biological diversity (CBD)**

CONGO BASIN

Expected Outcomes

DATABASE

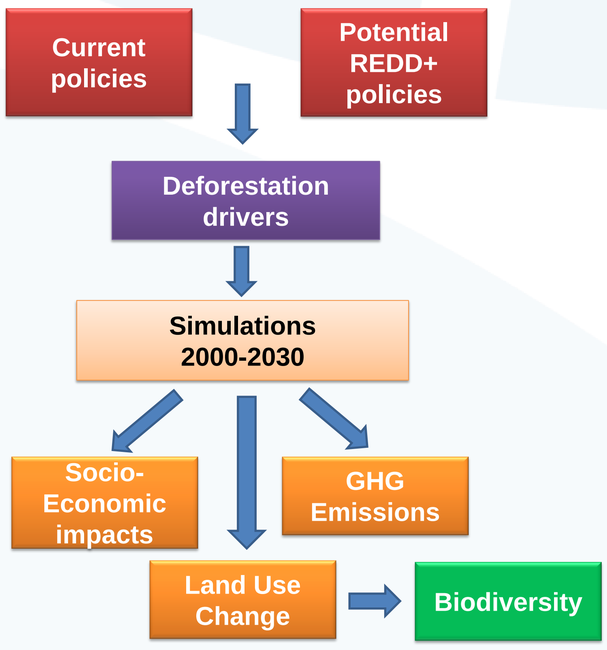
- The project will leverage INPE's experience with **TerraView/TerraLib/TerraMe framework** to build the joint REDD-PAC database



- **Land cover maps:** INPE will improve its geospatial technologies and develop new methods to determine the land uses in each Brazilian biome and an hybrid land cover map will be built at IIASA for the Congo Basin
- Moreover, information will be gathered at the finest resolution possible about :
  - the **legal status of the land** e.g. protected areas, forest concessions, indigenous reserves etc..
  - the **current land-use policies**
  - the **enforcement** of the land use regulations
  - **land-based sectors** i.e. agriculture, forestry, mining, and bioenergy
  - **demography**
  - **infrastructures**
  - **GDP**

Regional / national land use MODELS

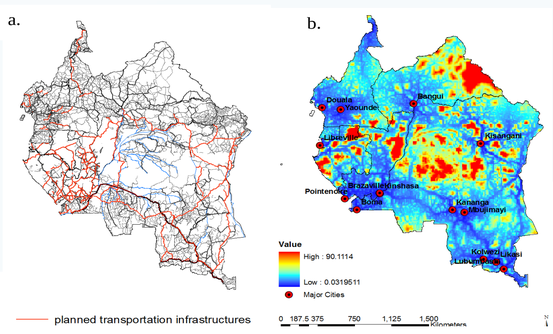
- The project uses **GLOBIOM**, a global, partial equilibrium model including the agriculture, forestry and bioenergy sectors. It is developed at IIASA as a basis to further develop national/regional models
- Detailed land representation will allow representing **national/regional specificities** while **national-international consistency** will be ensured through the linkage to the global model
- The land use model will use as input results from biophysical models and will be linked to other models from INPE and UNEP-WCMC (biodiversity models, cellular-automata models, etc…)



SCENARIOS

- Scenarios will be of two types:
  - a **no-additional policy scenario** that only takes into account the policies which are currently implemented
  - scenarios that test the impact of **different policy options**, including REDD+ policies

Example of scenario*: Realization of new transportation infrastructures in the Congo Basin (a.) and resulting transportation time to the closest city (b.)*



- Scenarios will be defined through a **consultative process with local stakeholders** and workshops will be organized to present the results to the same community

Federal Ministry for the Environment, Nature Conservation and Nuclear Safety