



Main research activities of ERAIFT in tropical forest in Biosphere Reserves

Lima, March 15th, 2016

Baudouin MICHEL
Director of ERAIFT
baudouin.michel@ulg.ac.be
www.eraift-rdc.cd

Introduction

Part I: The ERAIFT

- Description
- Roles

Part II: Main research activities

- BR of Yangambi
- BR of Luki





PART I: ERAIFT



E.R.A.I.F.T Regional post-graduate training school on Integrated Management of Tropical Forests and Lands



United Nations Educational, Scientific and Cultural Organization



Man and the Biosphere Programme



United Nations Development Programme



Kingdom of Belgium



European Union



Democratic Republic of the Congo



University of Kinshasa



Wallonie-Bruxelles International



Regional Post-graduate Training School on Integrated Management of Tropical Forests and Lands

The foundations of ERAIFT

□ The foundations ERAIFT are based on the approaches used by the Man and Biosphere Programme (MAB) and its Worldwide Network of Biosphere Reserves . The systemic approach promoted by the School is interdisciplinary, participatory, holistic and integrated.

□ ERAIFT's mission is to train a new type of qualified specialist for the management of tropical forests and territories in Sub-Saharan Africa. Training provided by the school is at a postgraduate level.

Curent Structure of ERAIFT





ERAIFT: UNESCO Category 2 Centre

- At the end of the 38th session of the 197th General Conference held in October 2015, resolution to confirm ERAFT as UNESCO Category 2 Center .
- The new status of ERAIFT signed in November 2015 in UNESCO Paris by DRC and 10 Member States
- The signature in Paris of the RDC-UNESCO cooperation agreement during the
 199th session of the Executive Board from 4 to 15 April 2016

ERAIFT in figures

9 promotions

1999-2001 (22 degrees), 2000-2002 (19 degrees), 2003-2005 (23 degrees), 2007-2009 (19 degrees), 2010-2012 (27 degrees) 2012-2013(28 degrees), 2013-2014 (27 degrees), 2014-2015 (34degrees), 2015-2016 (29 students)

204 managers trained during the first eight promotions (197 Master's, and 7 PhD)

56 managers are currently being trained

(32 Master's, and 24PhD)

23 Countries of origin of students:

Angola, Belgium, Benin, Burkina-Faso, Burundi, Cameroon, Comoros, Republic of Congo, Ivory Coast, Gabon, Guinea, Haiti, Madagascar, Liberia, Mali, Niger, Central African Republic, DR Congo, Rwanda, Sao-Tome, Senegal, Chad, Togo.

Associated Countries of ERAIFT

Students Belgium Comores Burundi Angola Burkina Cameroon Benin Faso * Haïti Ivory Coast Gabon Guinea Liberia Madagasca Congo * * Central Africa Mauritania Sao Tome & Rwanda Mali Niger **DRC** Republic **Principe** *

Associated Countries

Chad

Togo

Senegal

ERAIFT's Training

- ☐ Training at ERAIFT in Integrated Management and the Economics of Tropical Forests leads to the following degrees:
- Mater's Degree (DESS);
- Philosophiæ Doctor (PhD);
- The Master's degree from ERAIFT was recognised by the African and Malagasy Council for Higher Education (CAMES) during its regular session held at Abidjan (Côte d'Ivoire, 2001). This degree is equivalent to a Master of Research ("Master 2" according to the License-Master-Doctorate (LMD) system of the Bologna Decree).

Partners Techniques of ERAIFT

- MOU and partnerships signed with:
- Congolese Institute for the Conservation of Nature (ICCN)
- The International Centre on Space Technologies for Natural and Cultural Heritage (HIST) (China, Beijing)
- Royal Museum for Central Africa (Belgium)
- The Royal Institute of Natural Sciences (Belgium)
- The University of Laval (Quebec, Canada)
- The Federal University of Pará (Belém, Brazil)
- The Indonesian Institute of Sciences (Indonesia)
- The University of Marne-la-Vallée (France)
- The Agricultural University of Hanoi (Vietnam)
- The network of protected areas in Central Africa (RAPAC),...

ERAIFT: The Research

- Promoting systemic and holistic approach
- To develop partnerships with National Centres of Excellence (CBS, ICCN, INERA, UNIKIN, UNIKIS, UNILU, ..), Regional Centres of Excellence (Garoua Wildlife College, ENEF, OFAC, RIFFEAC, RAPAC, University of Dschang and University of Yaounde 1(Cameroun), University of Franceville(USTM, Gabon)...) and International Centres of excellence (Indonesian Institute of Sciences, Hanoi Agricultural University, Federal University of Para, Laval University(Canada), Liege University(PACODEL, Belgium), University of Paris-Est Marne la Vallée(France), HIST (Bejing),
- In DRC, 20 ongoing research projects in partnership with ICCN in 3 of the 5 World Heritage sites (Garamba National Park, Salonga National Park, Virunga National Park) and in 2 Biosphere Reserves (Biosphere Reserve of Luki and Biosphere Reserve of Yangambi).



ERAIFT: the Research

- In the Congo Basin, research projects in Burundi (1), Cameroon (5), Gabon (1), the Republic of Congo (3), Central African Republic (1) Chad (1)
- Research funding on competitive basis (Call for proposals, Call for projects ...) and "coaching" of researchers working in the protected areas of the Congo Basin in partnership with RAPAC and WCS (training program)
- Two seminars per year assessing the results and dissemination



Use of results

 Use of research results as an instrument for decision, available for Policy Makers and Policy Deciders, to support the formulation, monitoring, evaluation of development policies, sector policies (Environment, Energy, Rural Development, Agriculture), projects and programmes (REDD+,..)



Présentation de la zone d'étude 80 cour Lagranie Notate de voltage Statute de volt

PART II: MAIN RESEARCH ACTIVITIES



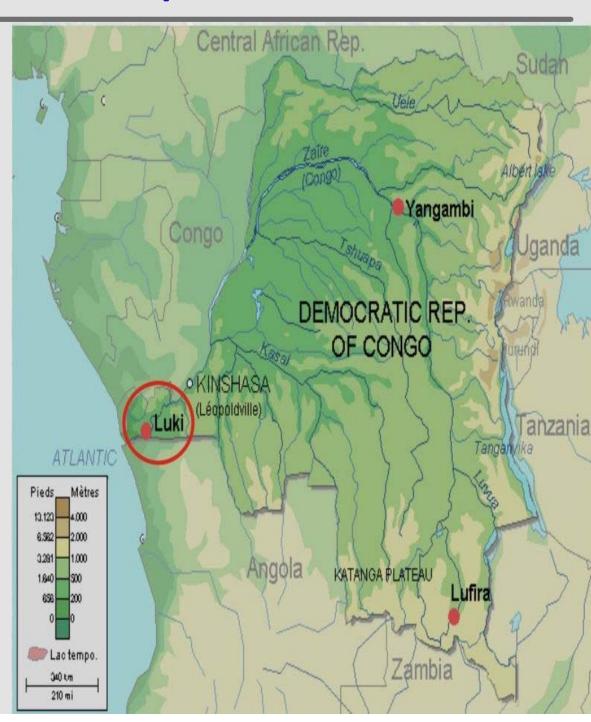




- Very large country: 2 345 000 km²
- Low populated : 30 hab/km²
- High forested: 1 500 000 km²
- Low deforested : 0.25% per year
- Hydroelectric potential: 13% of the world
- Mining: cobalt (28% of world's supply), copper (6%), industrial diamonds (18%)
- Ranked 176th for its Human Development Index (UNDP, 2014)

Biosphere Reserves in DRC

- ☐ Lufira (Haut-Katanga Province, 17.000 ha),
- Luki (Kongo Central Province 32.800 ha)
- ☐ Yangambi (Tshopo Province,250.000 ha).



Biosphere reserve in RDC (2)

Pressure on biosphere reserves is well established. Population growth ,low agricultural productivity, Mining activities expose these protected areas for all types of practices impacting very negatively on the alleged natural resources.



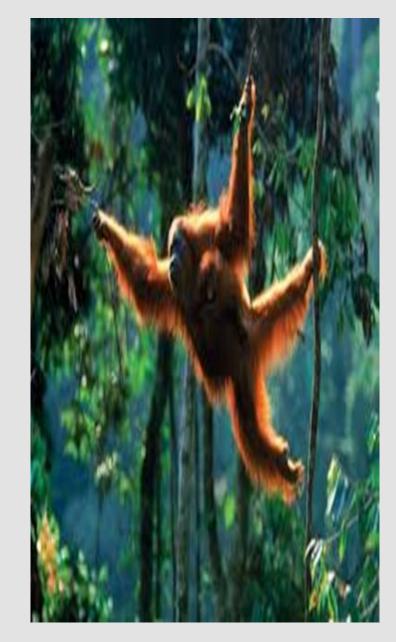


ERAIFT is working in reconciling the different functions of these biosphere reserves (development, researcheducation and conservation) in collaboration with policymakers and local communities for sustainable management.

Main research activities (1)

□ Currently, ERAIFT is active in two Biosphere Reserves of the DRC: Luki and Yangambi.

In collaboration with local communities, it contributes to the reduction of human pressure on natural resources and contributes to improving the food sovereignty of riparian communities.



Main research activities (2)



- In collaboration with KU Leuven, RMCA and Ulg, ERAIFT will contribute to the socio-economic analysis, consumption patterns, governance and evaluation framework and scenario analysis in BR of Yangambi
- ☐ ERAIFT is developing tools and support methods for Policy Makers and deciders with the financial support of the 11th EDF in the Democratic Republic of Congo in the Yangambi BR and in the 4 National Parks financed by the 11th EDF. Three components are targeted

slide 20

Main research activities (3)

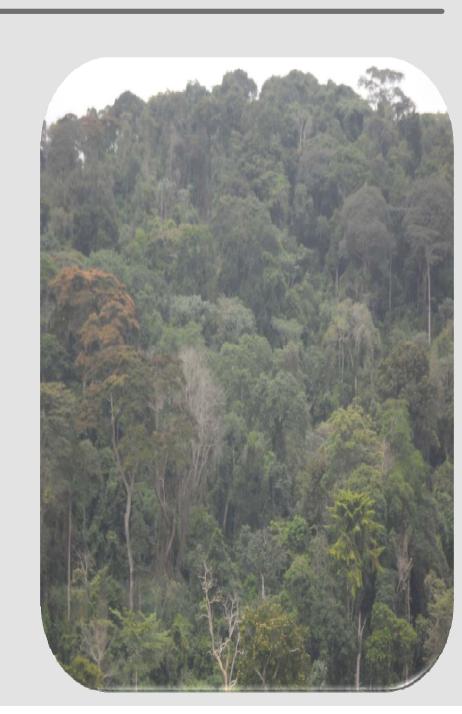
1. Socioeconomic component

The main objective is the analysis of the characteristics social, family and socioeconomic of communities in and around the Yangambi Biosphere

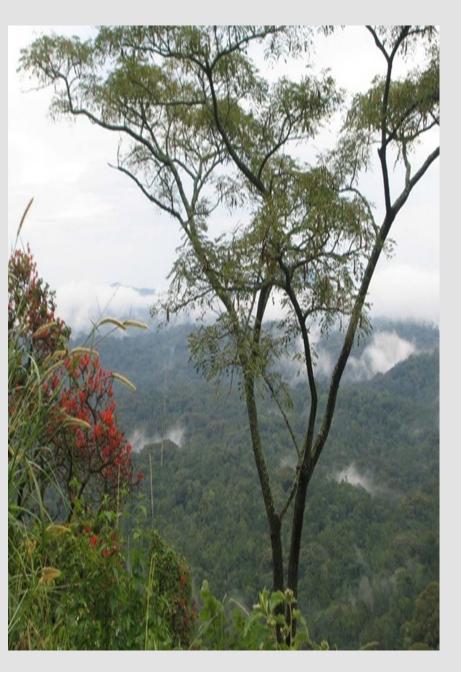
2. Spatial analysis component

The main objectives of this component are:

 Analyze spatial distributions of certain phenomena such as human pressure on the Yangambi Biosphere integrity and their resources (flora, fauna, water...)



Main research activities (4)



- Describe the organization of the structures, components of physical space and socioeconomic, characterize and locate
- Analyze the economic landscape
- Based on the results of socio-economic surveys, propose a restructuring of the economic landscape which ultimately should help to redirect the flow and polarization of activities and people away from protected areas

3. Component Mapping

The Main objectives are mapping:

- The initial state of occupation and land use on the Yangambi Biosphere;
- The human colonization
- Infrastructure (roads, schools, health centers, markets ...)
- Human activities (agriculture, mining and slide 22 quarrying ...)

Main research activities (5)





- ☐ ERAIFT is involved in the implementation and the monitoring of two flux towers measuring the level of greenhouse gases in the BR of Yangambi
- Implemented with the technical support of the University of Ghent and WWF. Financial support is provided by Directorate General for Development (DGD) of the Kingdom of Belgium delegate to the European Union. It will be implemented from 2016 to 2020.

