

2nd African Forum On Urban Forests

Green Horizons: Shaping the Future Resilience of African Cities through Urban Forests

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Brakes and levers to the success of an alluvial forest restoration operations in the lower oueme valley in Benin Republic DAHODO Médard





Plan de presentation

- Introduction
- Objectives
- Characteristics of the study area
- Methodology
- Results et discussions
- Conclusions et perspectives







Introduction

Trees and forests are essential resources (Pasiecznik and Reij, 2021) in the fight against climate change. Contain 662 billion tonnes of carbon

Absorb more carbon than they emit

Cover nearly 31% of the Earth's land surface

But FAO assessments show that 10 million hectares per year from 2015 to 2020 are deforested

Inaction in the face of continued forest degradation will have serious consequences in the coming decades

put an end to deforestation and preserve forests

restore degraded land and develop agroforestry

use forests sustainably and create green value chains.





Objectives

Main objective:

Restore ecosystems and ecosystem services linked to the peri-urban alluvial forests of the lower Ouémé valley in Benin.

SO 1: identify a sustainable intervention strategy for alluvial forests

SO 2: involve local communities in the planning, restoration and monitoring of the trees planted

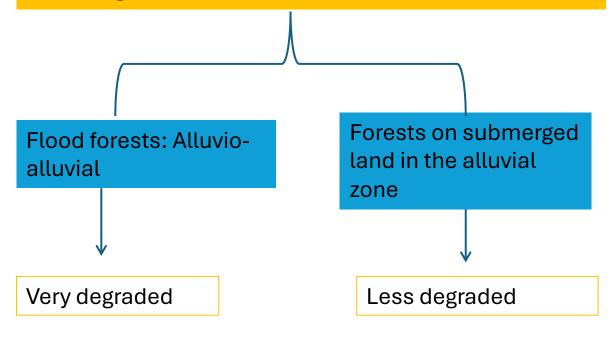
SO3: Analyze the positive and negative points of an alluvial forest restoration activity





Characteristics of the study area

Alluvial forests are doubly affected by this degradation: human pressure and climate change



Undertaking reforestation activities is crucial to save these forests



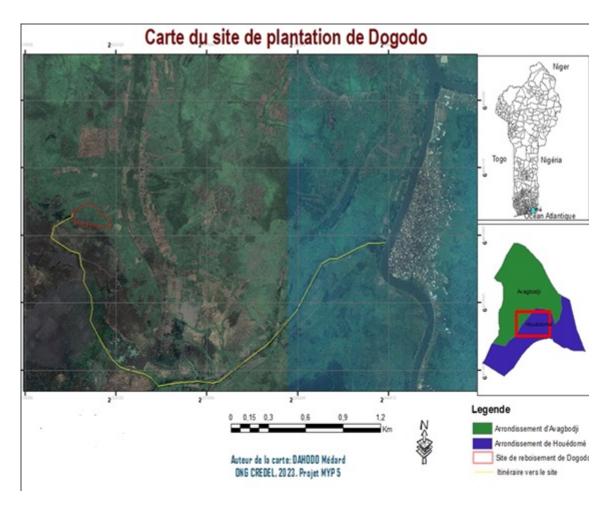




> Research questions

Some research questions:

- ❖ What are the forest species that once existed in the various forests and are no longer found there today due to water pressure?
- ❖ Can the recognition of customary rights of indigenous populations over forests have an influence on the sustainability of restoration activities undertaken?
- Can guided forest restoration in a project approach restore customary conservation practices and vice versa?
- ❖ Does the establishment of a management mechanism guarantee the monitoring of natural alluvial forest maintenance as can be the case with a plantation for economic exploitation?







Méthodologie

- Methods in 4 stages, namely:
 - Holding a workshop in the form of a mobile consultation group.

Setting up restoration activities.

Planning management.

Data collection and technical analysis of the activity





Méthodologie

- Holding a workshop in the form of a mobile consultation group
- ✓ Take stock of the application of management rules developed during previous restoration activities in order to redefine new bases for sustainable management mechanisms.
- ✓ Analyze community perceptions of the state of forest degradation and strategies to combat it.

- ✓ Estimate/quantify the degraded portions to be restored in the various targeted forests
- ✓ Define strategies for the involvement of women and young people







Methodology

Implementation of restoration activities

✓ Recruitment of companies specializing in reforestation work

✓ Use of local pioneer forest species

✓ Defining customary compromises to intervene at the level of degraded cores and for their extension on former forest areas







- Methodology
 - Planning management
 - ✓ Definition of community management rules

✓ Implementation and monitoring of developed management plans

✓ Taking endogenous conservation measures to consecrate forests







- Methodology
- Data collection and technical analysis of the activity
 - ✓ Community discussions: Focus groups

✓ Individual surveys

✓ Data processing: SWOT analysis

✓ Forest mapping: use of GIS and satellite images.







> Results

Main species used

Sites	Common name (in french)	Scientific name	Number of plants
9 forests			
	Caïlcédrat	khaya senegalensis	2 000
	Fromager	Ceiba Pentandra	1 500
	Iroko	Milicia excelsa	500
	Samba	Triplochiton scleroxylon	1 000
	Limba	Terminalia superba	1 000
		Pterocarpus	
	Pterocarpus	santalinoides	1 000
Total			7 000







> Results

- Main Strengths of the activity
 - Customary prohibitions on forests;
 - Community forest domains;
 - * Recognition of customary law by public authorities;

Existence of a participatory management plan for certain forests;

close monitoring make possible by forestry agents and they implication to the activities







- > Results
- Main Weaknesses of the activity
 - ❖ Desacralizations;
 - ❖Floods;

❖ Vegetation fires;

❖ Deforestation;







- Results
- Main opportunities of the activity
 - Reforestation projects targeting the forest
 - Community availability to support reforestation actions







> Results

Main threats of the activity

Climate change;

Straying cattle;







Conclusion and perspectives

- ✓ The restoration of alluvial forests in the lower Ouémé valley is a beneficial action to restore this deforested area to its former glory.
 - ✓ Peri-urban area, less than 20 km as the crow flies from Cotonou, it is a refuge for urban avian biodiversity beyond Lake Nokoué
 - ✓ It is the respiratory lung of the large cities of southern Benin (Cotonou, Abomey-Calavi and Porto-Novo).
- ✓ It is necessary to extend the action to make the alluvial plain a forest area.







Thank You.

