

Miombo Woodland in Katanga: From science aspects to Management approaches

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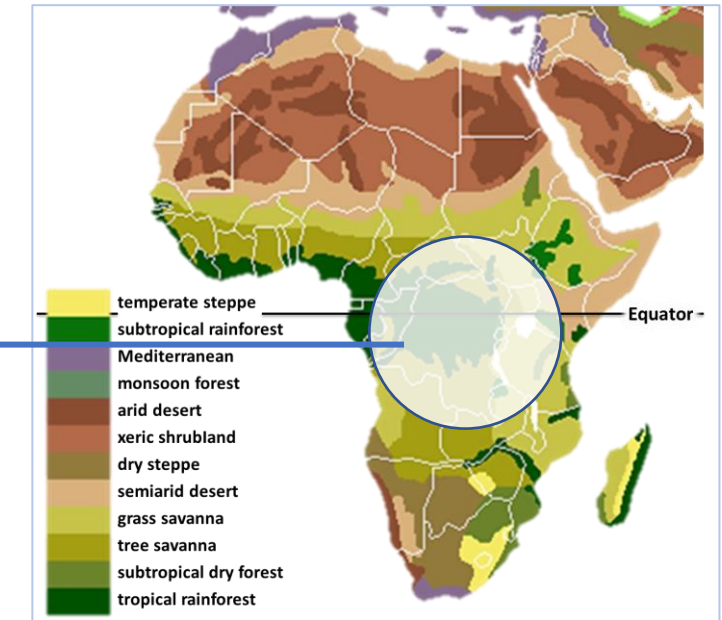
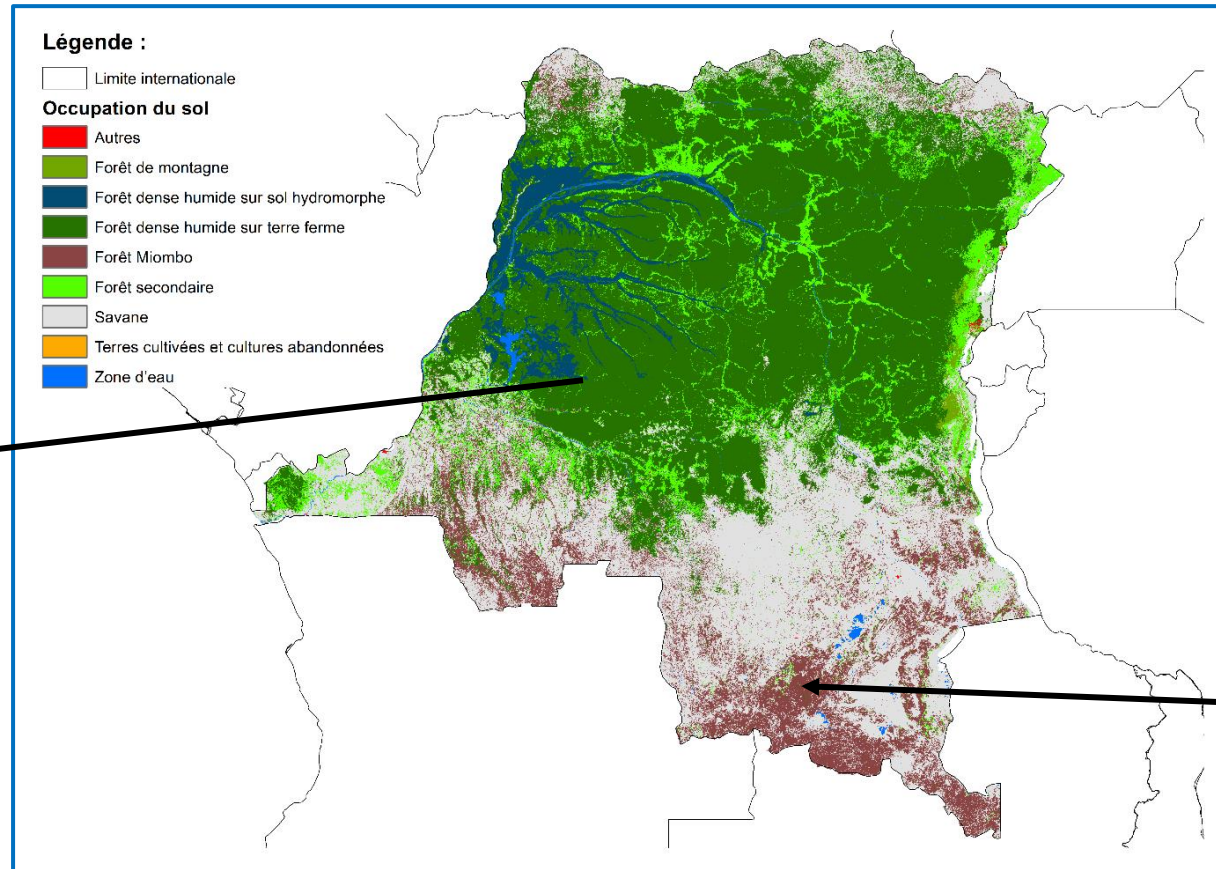
Content

1. Forest in DRC
2. Miombo woodland in Katanga
3. Scientific research on Miombo
4. Management of Miombo in the context of Katanga
5. Conclusion

1. Forest in the D.R. Congo

Mostly DRC's forest are 2 different types:

1. Dense rainforest of the Congo Basin (56% occur in DRC)



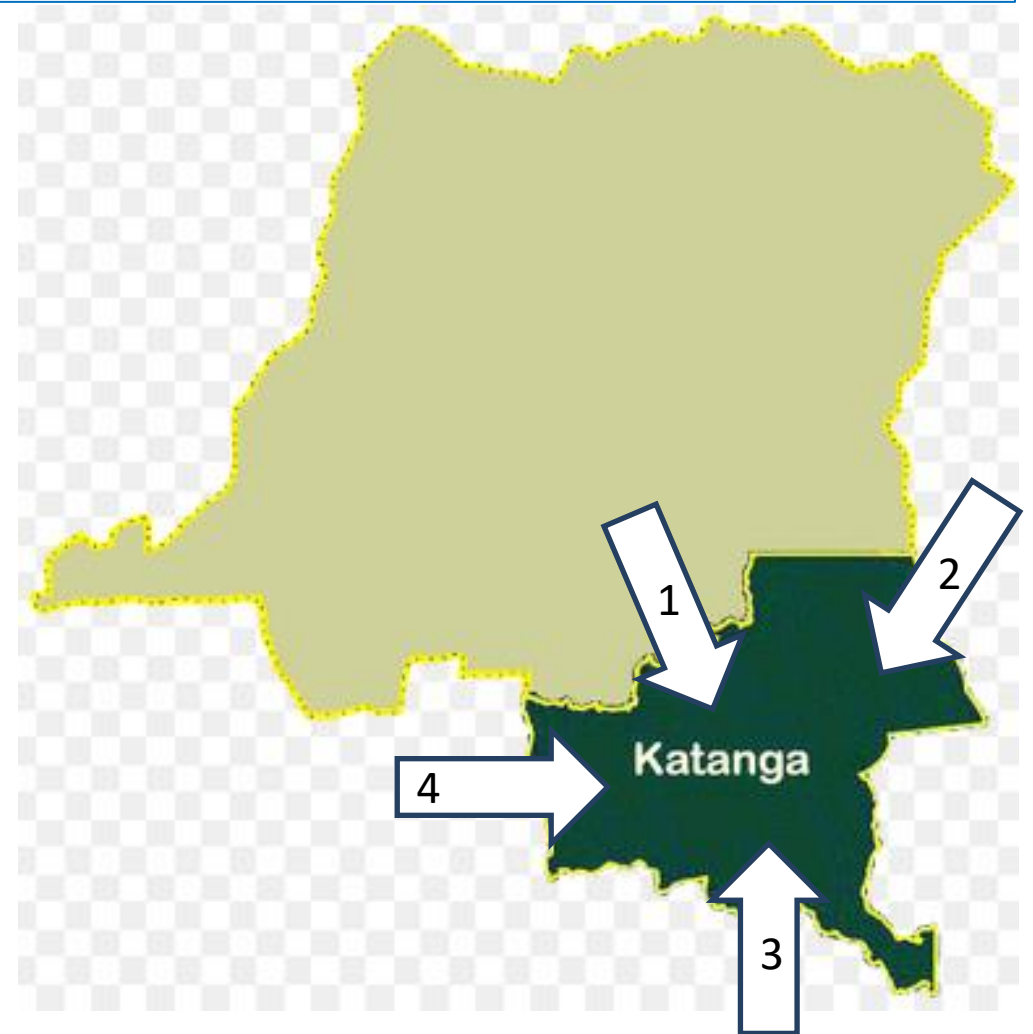
2. Open Forest (Miombo Woodland)

2. Miombo woodland in Katanga

Origin of the Katangese flora
(Duvigneaud, 1958).

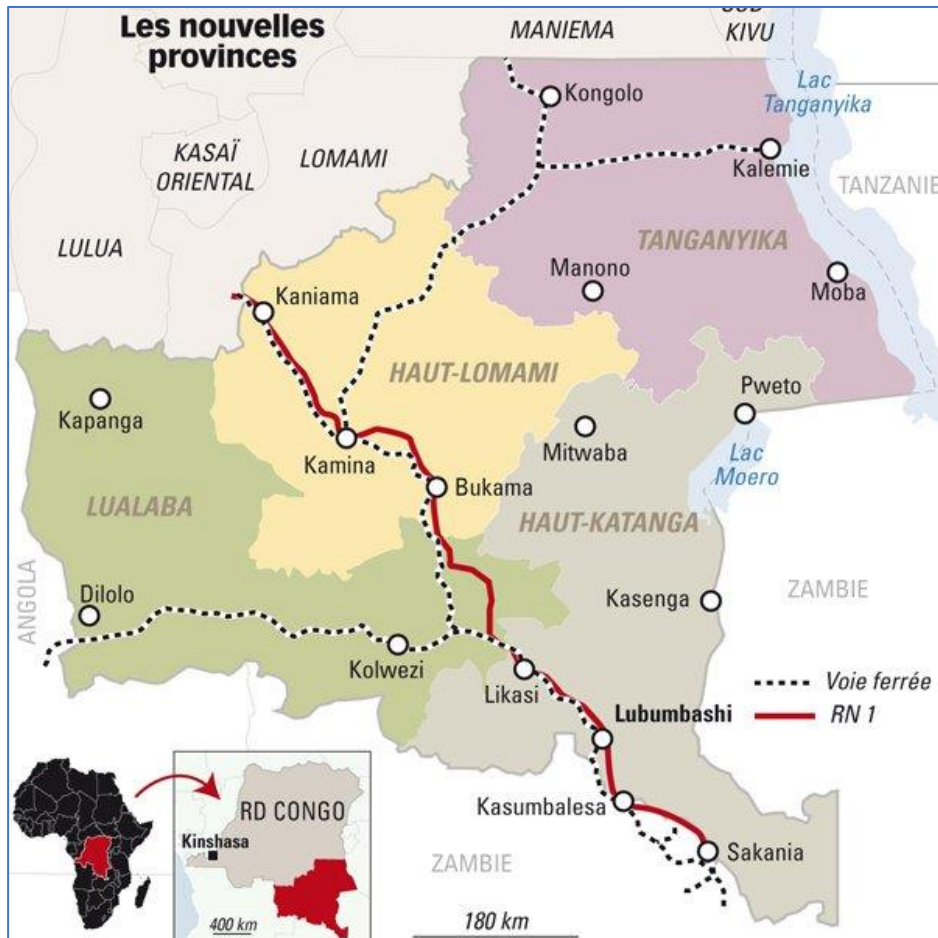
1. *Guineo-Congolese element,*
2. *Afro-Oriental and Afro-Montane elements,*
3. *Zambezi element, including a « Lunda" sub-element*
4. and a Katanga-Zambian sub-element

Great diversity both in vegetation and wildlife conditions



2. The Vegetation of Katanga

Depending on the topography, miombo can be divided into two types:



1. Miombo of the Lubumbashi plain

Elevation : sup 1000 – 1500 m

2. Miombo of Bas Katanga

Elevation : < 1000 m

*Guineo-Congolese element,
Afro-Oriental and Afro-Montane elements,*



3. Scientific research on Miombo

Scientific research has developed over the last 10 years on issues related to

1. Ecology and sustainable management of Miombo
2. REDD+ and climate change: National Forest Monitoring System
3. Community forestry: 20 local community forest concessions have been put under community management with 210,000 ha protected by law. Unilu is a partner in this project (<http://www.fao.org/africa/news/detail-news/fr/c/1272525/>)
4. Creation of the Miombo Forest Observatory (<https://www.ofcc-rdc.org/>)

3. Scientific research on Miombo

Scientific research has been conducted over the last ten years on the following issues : (<https://www.ofcc-rdc.org/>)

Permanent plots

Training on field

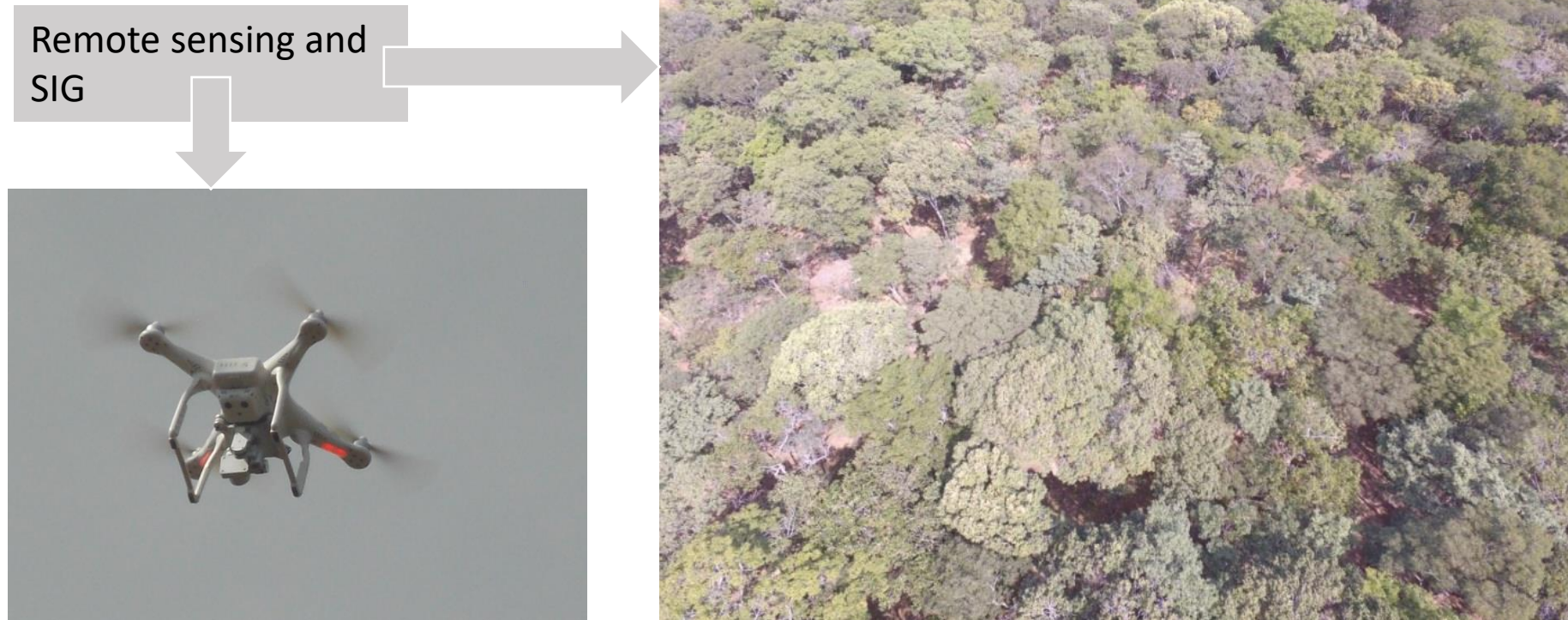


Silviculture : 250,000 plants in the nursery



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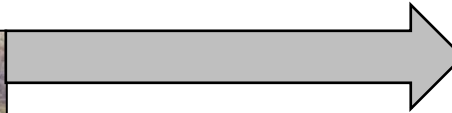
3. Scientific research on Miombo

Analysis of deforestation and degradation scenarios in Miombo (e.g. 1)



3. Scientific research on Miom

Analysis of deforestation and degradation scenarios in Miombo (e.g. 2)



3. Scientific research on Miombo

Forest restoration strategies

Step 1 (Training people or LC)

Step 2 (Nursery)

Step 3 planting

Step 4 (Monitoring and
Rapportage)



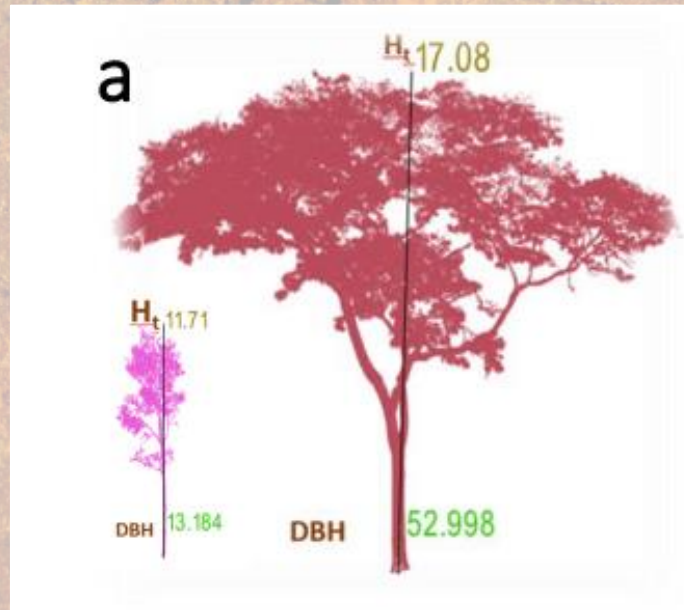
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National forest monitoring system program (funded by CFI) : National Forest Inventories (NFI), Allometric Equations have to be developed in different types of Biomes of DRC, including in Katanga.



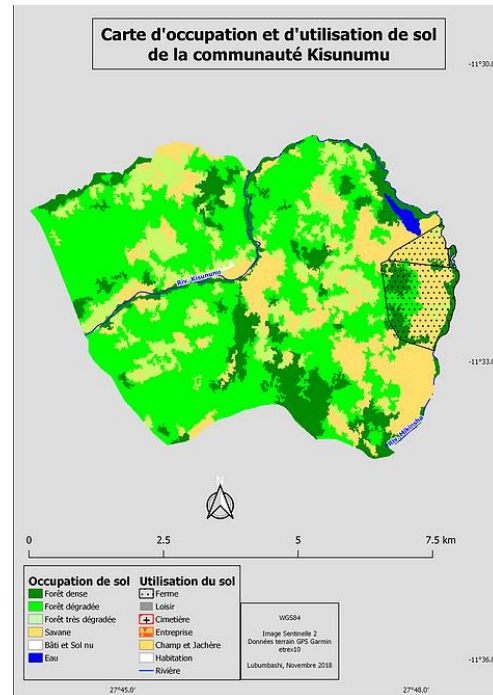
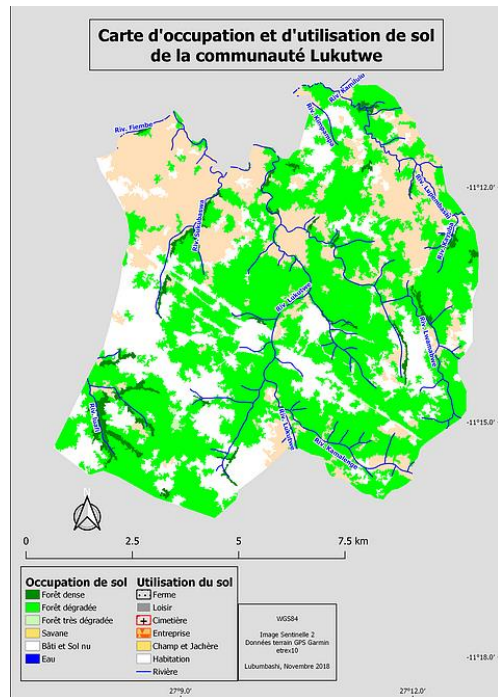
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4. Management of Miombo in Katanga

A. Community forestry project (funded by GEF) : 20 award orders of Local communities' forest concessions (LCFC) and Simple Management Plan (SMP) had been written; 250 000 plants in nursery in LCFC.

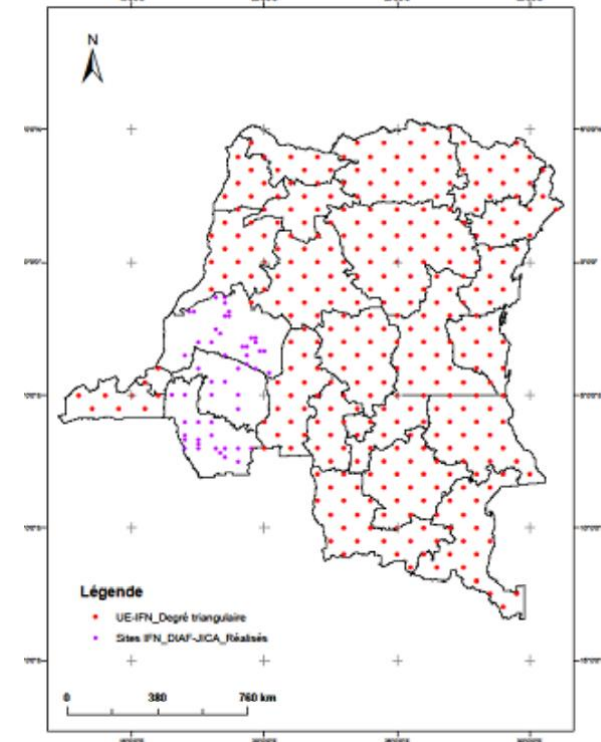
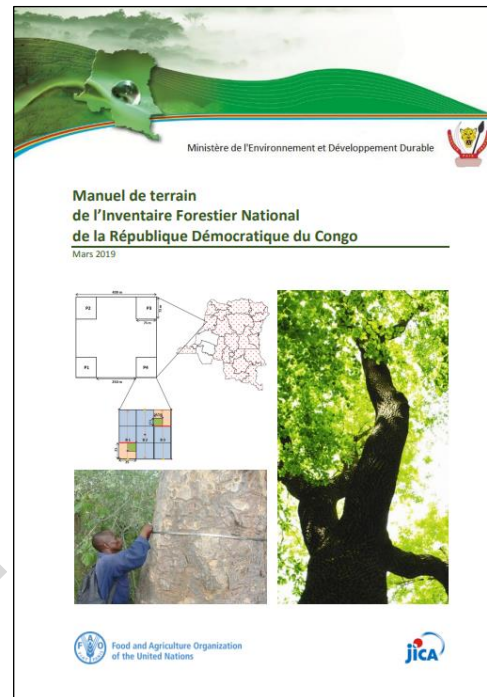


4. Management of Miombo in Katanga

B. National Forest monitoring System Program (NFMS funded by CAFI) :

1. IGES (Inventaires des Gaz à Effet de Serre)
2. SSTS (Système de Surveillance des Terre par Satellite) et

3. IFN (Inventaires Forestiers Nationaux)



REDD+ and climate change

4. Management of Miombo in Katanga

C. Income Generating Activities are needed to prevent the indiscriminate cutting of wood for charcoal



C1. Agriculture and Agroforestry



4. Management of Miombo in Katanga

C. Income Generating Activities are needed to prevent the indiscriminate cutting of wood for charcoal



C2. Improved fireplaces



4. Management of Miombo in Katanga

C. Income Generating Activities are needed to prevent the indiscriminate cutting of wood for charcoal

C3. Exotic trees for Firewood or Makala and Native trees



Conclusion

- Vegetation of Katanga has been studied since ancient times.
- However, research lost momentum between 1990 and 2010 due to political issues.
- For the past 10 years, research has been starting timidly.
- Fortunately, a dynamic team is now in place at the Faculty of Agricultural Sciences of UNILU.
- Since the relaunch of research on Miombo in 2010, the other sites in Katanga have been less (or very simply not) studied due to lack of resources, lack of accessibility, etc.
- But there is still a lot to do. The Miombo network is a Good opportunity to take place in the Zambezian area and allowing share experiences related to ecology and management of Miombo of Katanga.