**Timber management and carbon sequestration of traditional wood energy species in the Congo Basin**

L. Nsenga1,2,3, T. De Mil1, J. Van den Bulcke1, H. Beeckman2 and J. Van Acker1

*1 Laboratory of Wood Technology, Ghent University (UGent), Belgium*

*2 Wood Biology Service, Royal Museum for Central Africa, Belgium*

*3 WWF, Democratic Republic of Congo*

**Corresponding author:** lnsenga@yahoo.fr

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The Congo Basin forests are living places where many people depend almost exclusively for forest resources for their survival. In addition to being informal, wood energy sector in the Congo Basin does not have enough reliable scientific data. This research aims to study this particular sector with special emphasis on REDD +.

The suitable methodological approaches used are: socioeconomic surveys; coppice system; calorimetry, density measurement and ash content depending on the size, whether it is an adult or juvenile wood and according to anatomical parameters and the carbon sequestration assessment based on natural regeneration.

The hypotheses to be tested are: (1) The regeneration has an influence on biomass production and carbon sequestration; (2) Juveniles and adults wood are different each other in terms of calorific values, density and ash content; (3) The calorific value / ash / wood density depends for anatomical and technological parameters of the wood.

Expected results: 110 traditional types of wood energy data of natural regeneration of three ecosystem types (primary forest, secondary forest, fallow), data on the calorific value, density, ash content of 110 species, biomass comparative arising from the exclosure.