

# Challenges related to the trade of Forests products in the Democratic Republic of Congo

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## Abstract

The tropical forest products are among the important international goods which could bring revenues and support to the national economy of the tropical forest producing countries but unfortunately the tropical forests products do not contribute or facilitate the economic development of African countries like in the developed countries. This paper focuses on some of the challenges of the forests products trade in the Democratic Republic of the Congo to bring out the analysis we would like to make. The existing information on the forest exploitation in the Democratic Republic of the Congo, based mainly on the bibliographic review were considered. These data are time-series data of secondary source in the range of 2000 to 2015. Both of Ligneous and non-ligneous forest products are very important for the support of people and governments as income sources, food, construction, sports and art materials. These products need a sustainable management and best forest protection whereas they are gotten.

**Keyword:** Forest, challenges, product

## Résumé

Les produits forestiers tropicaux sont parmi les marchandises internationales importantes qui pourraient apporter des revenus et un soutien à l'économie nationale des pays producteurs de forêts tropicales, mais malheureusement les produits forestiers tropicaux ne contribuent pas ou ne facilitent pas le développement économique des pays africains comme dans les pays développés. Cet article se concentre sur certains des défis du commerce des produits forestiers en République Démocratique du Congo pour faire ressortir l'analyse que nous souhaitons faire. Les informations existantes sur l'exploitation forestière en République Démocratique du Congo, basées principalement sur la revue bibliographique ont été considérées. Ces données sont des séries chronologiques de source secondaire dans la gamme de 2000 à 2015. Les produits forestiers ligneux et non-ligneux sont très importants pour le soutien des populations et des gouvernements en tant que sources de revenus, de nourriture, de construction, de sports et de matériaux d'art. Ces produits ont besoin d'une gestion durable et d'une protection optimale des forêts lorsqu'ils sont obtenus.

**Mots clés :** Forêt, défis, produit

## Introduction

In many development countries, there are several tropical forests products traded on the national and international market throughout the world. I would name some of them such as the Democratic Republic of Congo, Cameroun, Gabon, Brazil, Indonesia, etc.

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countries but unfortunately the tropical forests products do not contribute or facilitate the economic development of African countries like in the developed countries. Therefore, two questions can help to understand more that situation.

- What the challenges do the tropical forests producing developing countries face in the international trade of their forests products ?

- What could they do to come out from that problem ?

## Objectives, description and method of the paper

The objective of this paper is to raise the challenges of the international trade of the forests products in Africa which are barriers of the economic development of the African countries.

This paper focuses on some of the challenges of the forests products trade in the Democratic Republic of the Congo to bring out the analysis we would like to make. The existing information on the forest exploitation in the Democratic Republic of the Congo, based mainly on the bibliographic review were considered. These data are time-series data of secondary source in the range of 2000 to 2015.

### Sorts of forests products

The total volume of forests in the three basins is estimated about 250 billion m<sup>3</sup>, equivalent of an average of 188 m<sup>3</sup>/ha. However they observe a great variation between the countries, the national averages communicated are between 40 m<sup>3</sup>/ha (Angola, Thailand), 350 m<sup>3</sup>/ha (Guyana) and 200 m<sup>3</sup>/ha in eight countries (FAO, 2010).

**Table 1. Volume on the forest foot in the 3 forests basins, 2010**

Region	Total of million m <sup>3</sup>	Average per m <sup>3</sup> /ha
Amazon Basin	156,028	195
Congo Basin	57,673	191
South-East Basin	39,313	162
Tropical rainforests Basin	253,014	188
World	527,203	131

Source: FAO, Report of forest state (2010)

Forests products are all of goods people can get from forest as leaves, wood, roots, animals, fruits, medicines, caterpillars, trees peel, etc. There are several categories of forests products, but for us, it seems important to discuss about two forests products categories which are the non-wood forests products and the wood forests products.

## Non-wood forest products (NWFP)

### Definition and typology of NWFP

The non-ligneous forest products are biologic products, except wood, derived from forest and woodlands destined to the human alimentation, animal alimentation and the agro alimentary transformation and for the commercialization (FAO, 2017).

The non-wood forest products are good of biological origin, other than wood that are derived from the forest. They also include services, such as rope making and gum collecting that are related to the collection and processing of these products.

The non-timber forest products (NTFPs) describe a broader range of goods than those defined as NWFPs. The NTFPs include small products made of ligneous (or wood) materials, such as wooden stool, pounding mortars and paster, masks, drums, or other handcrafted items which are not industrial timber or pulp.

The non-wood forest products (NWFP) are collected in the nature, forest plantations, and agro forestry perimeters and from trees outside the forests as trees from savanna.

There are a lot of non-wood forest products divided in two categories: the first category is constituted of the goods and the second of the services.

The goods category counts 16 products with eight vegetal products and eight animal products as in the below table:

**Table 2. Categories of animal products and vegetal products.**

Goods Category		Services Category
Vegetable-based products	Animal products	Tourism, Shelters, Humus, Culture, etc.
Food products (trunks, buds, roots, tubers, flowers, fruits, nuts, spices, oilseeds, and fungi)	Alive animals	
Fodder	Curs	
First matter for the medicine and aromatic products making (herbs, leaves, bark, twigs, trunks, roots and flowers, seeds or fruits)	Skins and trophies	
Matter for colorants and hanging making	Wild honey and beeswax	
Matter for utensils making, Artisanal and construction stools	Brush meat	
Exudates (gum, resin, latex, oleoresin, fatioil)	Matter for the medicine and coloring preparation	
Ornamental plants	Comestible animal products (bee honey, wild meat, snail, insects, etc.)	
Other vegetal products	Non-comestible animal products	

Source : FAO, 2010.

Those non-wood forest products are consumed as community main food or appoint food, binder food, condiments, exciting, etc. The vegetal products are classified according to their parties' use (fruits, vegetables, roots, etc.) or to their production system (from forest, domesticated, from woodlands, etc.). The animal products seem less important than the vegetal products. However they have best place in the alimentation because of their protein richness. Some examples of animal products are: game (mammals, reptiles, etc.), insects (caterpillars, larva as *Rhynchophorus phoenicius*, croquets, etc.), escargots (*Achatina* and *Archachatina*), birds as the wild duck, partridge, toucans, parrots (*Psittacus erithacus*), etc.) and fishes.

## Importance of the non-wood forest products

NWFPs also play an essential role for the inhabitants, providing them with food (fruit, game, mushrooms etc.), building materials (rattan, bamboo etc.), medicines and flavourings. Moreover, they can be traded in markets, allowing diversification in household income. Apart from this clear economic value, there is an ecological value in the form of soil protection, the recycling of organic matter, the maintenance of biodiversity and good-quality water resources, and regulation of the climatic cycle of the subregion and even the planet, not to mention the immense cultural and religious value associated with forests by various peoples (LESCUYER, G., 2009).

According to the assessments of Mala, about 65 million African people live around African forest and use the vegetal non-wood forest products as food, medicine, and tools. Unfortunately, most of the vegetal non-ligneous forest product species are unknown. A few species only are known and used.

By the same sources, Mala estimates that around 80% of African people use the non-wood forest products for medicine because these products are available and more economic than their pharmaceutical equivalent. For example, there are 500 plants species against malaria and around 10,000 vascular plants species. But the great question is to know if those plants species are efficacy against diseases in Africa.

## Wood forest products

### Definition

The Wood Forest Products (WFPs) describe all materials or stools which the origin is the wood or the timber. The main ligneous forest products (LFP) involved in commercial exploitation are heating wood, charcoal, pulp, wood and timber. The important LFP I will discuss about is the wood. I distinct several sub-categories of wood but the ligneous forest products or the wood forest products are essentially: Plywood, Sawn wood, Round wood, Processing wood, Hardwood, Softwood, paper, Wood-based panel.

### Some Wood Forest Products details

Some details are important about the explanation of those above materials:

**a. Charcoal:** is a transformed forest product as sawn wood and other ligneous forest products. The traditional energy sources in Africa are characterized by the needs for domestic fuel

consisting of wood and charcoal. In the DR Congo, due to the electric energy disturbing through all of the country, the population needs in charcoal using is over 90%, although the important hydro-electric energy potentialities founded through all of the Congolese provinces.

**b. Hardwood and Softwood:** There is a strong relationship between the properties of wood and the properties of the particular tree that yielded it. The density of wood varies with species. The density of a wood correlates with its strength (mechanical properties). For example, mahogany is a medium-dense hardwood that is excellent for fine furniture crafting, whereas balsa is light, making it useful for model building. One of the densest woods is black ironwood.

It is common to classify wood either softwood or hardwood. The wood from conifers is called softwood, and the wood from dicotyledons is called hardwood. These names are a bit misleading, as hardwoods are not necessarily hard, and softwoods are not necessarily soft. The well-known balsa is actually softer than any commercial softwood. Conversely, some softwoods are harder than many hardwoods.

Generally a softwood is a wood which cells are mostly of one kind, tracheid, and as a result the material is much more uniform in structure than that of most hardwoods. Example: coniferous (France), Afromosia (DR Congo). There are no vessels (pores).

The structure of hardwoods is more complex. The water conducting capability is mostly taken care of by vessels: in some cases these are quite large and distinct, in others too small to be seen without a hand lens. Example: Wenge, oak, Tola (*Gossweilerodendron balsamiferum*).

A softwood can be earlywood or latewood. The latewood will be denser than that formed early in the season. For example, we can cite Afromosia. The earlywood grows very quickly such as *Moringa oleifera*.

**c. Timber and sawn wood:** Timber is the sawn planks ready for use. Lumber is another name of wood in the construction work usually refers to the felled trees. Around 80% of timber in the DR Congo is artisanally exploited in the forests in all of the Congolese provinces, with exploited products including baulks and boards used primarily in the construction. In the wood informal sector, operators are very poorly equipped and the wood is transformed using saws and chainsaws.

**d. Wood-based panel:** The Wood-based panels are by example the particle board, fiberboard and plywood. The plywood is the leading type of the wood-based panels;

**e. Processing wood:** The processing wood shall be defined as any degree of processing facility to either undertake semi-processing or manufactured or finished products of the non-timber forest products (NTFPs).

### Conclusion

Both of Ligneous and non-ligneous forest products are very important for the support of people and governments as income sources, food, construction, sports and art materials. These products need a sustainable management and best forest protection whereas they are gotten.

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