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Analysis of the marantaceae leaf sector in the Ombella M'Poko region of the Central African Republic

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Abstract

Between August and October 2024, a study was conducted on the exploitation of Marantaceae leaves in the Ombela M'Poko forest area up to marketing in the Bangui markets. A total of 106 randomly selected actors constituted the sample. It emerged that 2 species of Marantaceae are harvested and sold in the Bangui markets. These are mainly: *Megaphrynium macrostachyum* and *Sarcophrynium brachystachyum*. These two leaves are used for various purposes. The surveys revealed that Marantaceae leaves are present in the markets surveyed, sold fresh in modest quantities. The wholesale prices of Marantaceae leaves cost 3,000 CFA francs in the villages surveyed; in Bangui the wholesale prices are 7,500 CFA francs and 100 CFA francs in retail. Two types of commercial circuits have however been identified: the short circuit and the long circuit. The main actors are the pickers, the intermediaries and the consumers. Concerning the profit margins, it is the wholesaler who generates the most important margin estimated at 1 638 000 F CFA (3 months per year). Given the economic potential of these resources, it would be essential to valorize them.

Keywords: *Analysis, marantaceae sector, Central African Republic.*

Résumé

Entre août et octobre 2024, une étude a été menée sur l'exploitation des feuilles de Marantacées dans la zone forestière d'Ombela M'Poko jusqu'à la commercialisation sur les marchés de Bangui. Un total de 106 acteurs sélectionnés au hasard a constitué l'échantillon. Il ressort que 2 espèces de Marantacées sont récoltées et vendues sur les marchés de Bangui. Il s'agit principalement de : Megaphrynium macrostachyum et Sarcophrynium brachystachyum. Ces deux feuilles sont utilisées à diverses fins. Les enquêtes ont révélé que les feuilles de Marantacées sont présentes sur les marchés étudiés, vendues fraîches en quantités modestes. Les prix de gros des feuilles de Marantacées s'élèvent à 3 000 francs CFA dans les villages étudiés ; à Bangui, les prix de gros sont de 7 500 francs CFA et 100 francs CFA au détail. Deux types de circuits commerciaux ont toutefois été identifiés : le circuit court et le circuit long. Les principaux acteurs sont les cueilleurs, les intermédiaires et les consommateurs. En ce qui concerne les marges bénéficiaires, c'est le grossiste qui génère la marge la plus importante estimé à 1 638 000 F CFA (3 mois par an). Étant donné le potentiel économique de ces ressources, il serait essentiel de les valoriser.

Mots-clés : Analyse, secteur des Marantacées, République centrafricaine.

1. INTRODUCTION

The tropical rainforests of Central Africa cover 241 million hectares, more than half of which represents the Congo Basin and is the largest forest of this type in the world, after that of the Amazon (Talbott, 1993; FAO, 1995). They are rich, characterized by great biodiversity. This biological diversity is made up of a significant portion of Non-Timber Forest Products (NTFPs) of animal or plant origin, among which are Marantaceae leaves. These resources are herbaceous plants that are not edible, but they play a major role in food. Indeed, they are used as packaging for many Central African dishes. In the Central African Republic, indigenous populations living near forest areas use them for various purposes. These same leaves are also used by Pygmies to build their homes. However, in Bangui, the use of Marantaceae leaves, which give them commercial value, is the packaging of foodstuffs. Currently, populations living near forest areas continue to exploit these resources to meet their various needs. Despite their importance and high economic potential, there is, however, very little valorization of these biological resources at the local level, especially a poor knowledge of the resource and their role in the household economy. This preliminary study would then be the first in the Ombella M'Poko region in the Central African Republic with a view to taking stock of the resource for effective valorization. The main objective is to analyze the Marantaceae leaf sector. More specifically, it involves identifying the main Marantaceae leaves marketed; analyze operating techniques and sales channels and then evaluate the profitability of commercial activities.

2. METHODOLOGY

2.1. Study Site

The study environment is the forest sector of Botambi, a peri-urban area, located about 18 km from the southern exit of the Central African capital. It is located in the Sub prefecture of Bimbo, Prefecture of Ombella M'Poko (Figure 1). The hottest month is March, the coldest is August. Precipitation is abundant and amounts to 1600 mm. The soils are ferralitic, red or ochre sometimes beige. The Botambi area belongs to the forestry sector of the south-west of the Central African Republic belonging to the Guinea-Congo region, to the Congo Basin domain. The classified forest of Botambi occupies an area of 27962 ha. It is in the case of the conservation of vegetation with a view to safeguarding genetic resources that this forest was erected as a "classified forest" by the Central African Government during the colonial era, on 19 June 1950. The presence of this vegetation therefore ensures the maintenance of the balance of biophysics and also stabilizes the ozone layer of the micro climate of Bangui. This sector is home to important activities in the informal sector (gathering, hunting, fishing, food crops, livestock, trade).

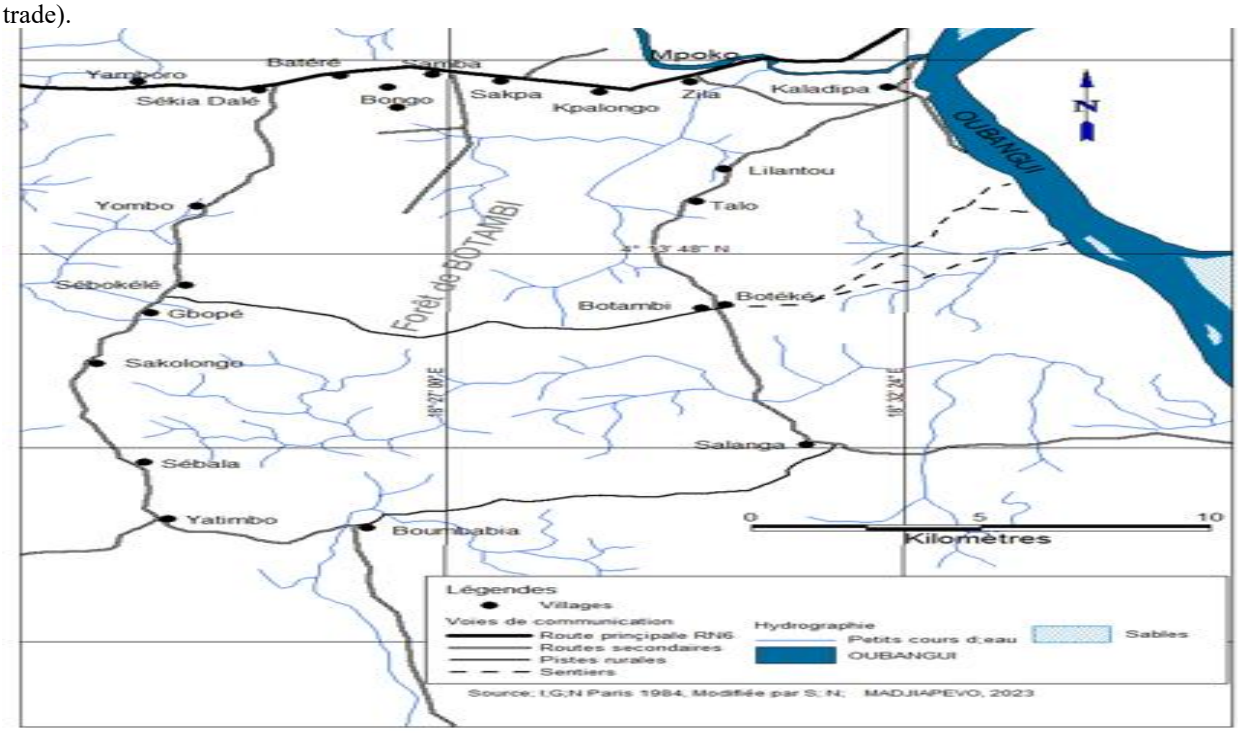

Figure 1. Study Area Rental Ma

2.2. Technical Equipment

The technical equipment for the investigations consists of a survey sheet, a camera, a location device (GPS) and a tool made of cardboard.

2.3. Biological Material

It consists of the leaves of Marantaceae exploited in the wild in the forest sector of Botambi and then marketed in local markets. During the investigations, the samples were collected and then preserved at the Laboratory of the Ecole Normale Supérieure in Bangui. When possible, photographs were taken in the field to support this identification (Appendix 1). The data collected in the field were enriched by books and previous studies.

2.4. Sampling

It was made up of different actors involved in the picking and marketing of Marantaceae leaves. A type of guide was designed for each actor. Overall, 30 pickers and 36 wholesalers and 40 retailers, for a total of 106 people interviewed. The survey lasted three months, from August to October 2024.

2.5. Survey of gatherers

The survey was conducted in three villages located near the Botambi forest where the gathering and marketing of Marantaceae leaves is frequently practiced. These are mainly Gbopé, Salanga and Yatimbo. In each village, 10 gatherers were interviewed, chosen randomly according to their availability during the investigation period. The information was obtained using a semi-structured questionnaire. This questionnaire focused on the following essential points: the vernacular names of the main leaves, the collection locations, the gathering techniques, the equipment used for gathering, the quantities harvested and sold, the selling prices and the profits that could result from the practice of selling.

2.6. Surveys conducted among traders

Surveys were conducted in three markets in the villages surveyed (Gbopé, Salanga and Yatimbo) and in three markets in Bangui (Poko-bac, Pétévo and Kéténguéré). In these villages surveyed, 12 wholesalers per market, chosen randomly, i.e. a total of 36 people were interviewed. The quantity of leaves purchased, the wholesale purchase price of a packet, resale prices, sales channels, transport costs and road taxes and the financial profitability of the commercial activity were the points on which the interviews focused. Among the retailers in the Bangui markets, the interview was conducted in the sector of sellers of Marantaceae leaves where 40 of them were interviewed using the same approach as among the wholesalers surveyed.

2.7. Data analysis and processing

The surveys made it possible to identify two principle species of the Marantaceae family and to collect precise information on their local taxonomy, the different uses, their exploitation methods as well as their marketing channel. All the results were processed and assessed using Excel-2010 and Word software.

3. RESULTS

3.1. PRESENTATION OF THE RESOURCE

3.1.1. Description of the main species

Marantaceae are typically tropical plants. They grow in the undergrowth in dense humid forests or in gallery forests, sometimes in swamps. The leaves of Marantaceae are the subject of intense trade in the main markets of Bangui. Among the diversity of leaves known and used in the Central African Republic, the following two species are the most appreciated and used both in the hinterland and in the Central African capital. These are mainly: *Megaphrynium macrostachyum* and *Sarcophrynium brachystachyum*. The following Table 1 provides information on the botanical and ecological characteristics of these two species.

Table 1. Botanical and ecological characteristics of the identified species
TF: Leaf types; TDF: Leaf dimension types; TM: Morphological types H: Habitat; TP: Phytogeographic types

N°	Species	Families	Vernacular names	TF	TDF	TM	H	TP
1	*Megaphrynium macrostachyum*	Marantaceae	Ngongo	Simple leaves	Macrophyll	Grass	Forest	Guinean species
2	*Sarcophrynium brachystachyum*	Marantaceae	Kpakata	Simple leaves	Macrophyll	Grass	Forest	Guinean species

1. *Megaphrynium macrostachyum* Benth.

A perennial herb up to 4 m tall, with a rhizome up to 6 m long; the leaves are simple growing directly from the rhizomes; the flowers are bisexual, zygomorphic, about 4 mm long, glabrous, yellow to bluish-purple; the corolla is about 10 mm long; the fruits are globose, bright red containing a whitish pulp; the seeds are usually three, purple to whitish aril; the species produces a dense foliage layer and re-sprouts rapidly from the rhizomes.

2. *Sarcophrynium brachystachyum* (Benth) K.Schum

A rhizomatous perennial herb, erect; the leaves are simple, on a petiole up to 1.5 m long, elliptic with an entire margin 20-50 cm long and 10-25 cm wide; the flowers are hermaphrodite, with oval sepals, 3 mm long, a pinkish

corolla, 2.5 mm long; the fruits are red-orange capsules, containing three seeds about 1 cm long, immersed in a sweet gelatinous pulp. Figure 2 below illustrates the leaf blades of the two plants described.

Figure 2. Blade of *Megaphrynium macrostachyum* (a), blade of *Sarcophrynium brachystachyum* (b)

3.1.2. Utilities

The leaves of *Megaphrynium macrostachyum* and those of Sarcophrynium brachystachyum are used to wrap foodstuffs. They are more famous because they give a particular taste to the cooked foods they wrap, which is why they are preferred over other leaves such as those of Zingiberaceae and Musaceae. Locally, they are used for various purposes.

From a food point of view, the young shoots are cooked and consumed by the Beka Pygmies; the pulp of the fruits is edible. The fact that the leaves of Marantaceae are the raw material in the packaging of cassava, the culinary practice requires a certain know-how and therefore a more or less long learning time in the processing of the commodity. This indigenous know-how is transmitted from mother to daughter from generation to generation.In traditional medicine, the decoction, infusion or maceration of the leaves, fruits, seeds of *Megaphrynium macrostachyum* treat jaundice, epilepsy, lung disorders, stomach aches, hernia and other diseases. The ashes of the roots heal the wound. In crafts, the Beka Pygmies use them to cover the roofs of their homes. They are used to cover the clay walls. A range of items are made with these leaves. Whole petioles and strips of bark are used to tie and make mats, baskets, brooms and other utensils. Figure 3 below illustrates some of the uses made of these resources.

Figure 3. Pygmy hut made from Marantaceae leaves (a), Gnetum wrapped with Marantaceae leaves (b), Pancakes wrapped with Marantaceae leaves (c)

3.2. EXPLOITATION

3.2.1. Harvesting

The inhabitants of the study area continue to harvest Marantaceae leaves for commercial purposes in order to satisfy their needs. The frequent presence of wholesalers in their locality is a motivating factor for this activity. Indeed, the harvesting of Marantaceae leaves is carried out in the forest most often by indigenous populations and Pygmies. During this activity, only the ripe leaves are harvested for marketing because they are of better quality. In the *Megaphrynium macrostachyum* species, harvesting is simply done by hand. However, in Sarcophrynium brachystachyum, harvesting is done using a knife. At each harvest, the harvested leaves are gathered and then stored under the trees in the open air. From this harvest, the Marantaceae leaves are tied into bundles that form a sales unit. These wrapped bundles are transported on the head from the collection site to the village. Figure 4 below shows the different stages of harvesting Marantaceae leaves in the natural environment.

Figure 4. Leaves of *Megaphrynium macrostachyum* in the wild (a), Leaf picking (b), Leaf storage in humid places (c), Transport of leaves on the head from the forest to the village (d),

3.2.2. Harvesting equipment

The harvesters use machetes, knives, flour sacks, traditional ropes made from vines and baskets to harvest Marantaceae leaves.

3.2.3. Category of harvesters

However, there are two types of harvesters: regular or permanent harvesters and irregular or temporary harvesters. The Pygmies are specialized harvesters in this activity because they have a good command of the forest and know the places where these leaves grow.

3.2.4. Post-harvest conservation

Once harvested from their natural environment, Marantaceae leaves have a very limited lifespan of one to ten days. During our survey, only one technique for preserving these leaves was observed. This is mainly cool storage. In fact, the leaves picked in the forest are preserved and packaged in a simple way in humid places where care is taken not to expose them to the sun. Here we are dealing mainly with the traditional conservation technique.

3.2.5. Market organization in the surveyed villages

In the surveyed villages, indigenous pickers organize the daily sales market at the edge of the forests and in small traditional markets at the end of the day. Prices are negotiated between the picker and the wholesaler whose sales unit is the packet. The price is set by the picker who accepts a certain price reduction offered to them by the buyer. The 30 wholesalers we interviewed unanimously told us that they buy 1 packet of Marantaceae leaves from the pickers for 3000 CFA francs. While some indigenous pickers sell Marantaceae leaves in direct exchange for money, the Beka Pygmies interviewed during our surveys barter them for food, clothing, cooking salts, sugars, palm oil, household utensils, cigarettes, alcohol or machetes.

3.2.6. Means of transport

The most used means of transport are pirogues, rickshaws, small vehicles and motorcycle taxis. Figure 5 below illustrates the possible means of transporting Marantaceae leaves to Bangui.

Figure 5. A pirogue transporting Marantaceae leaves (a), a rickshaw filled with Marantaceae leaves (b), a motorcycle taxi transporting Marantaceae leaves (c).

3.3. MARKETING

3.3.1. Marketing sector

In the Central African Republic, the activity of selling Marantaceae leaves also occupies an important place like other food NTFPs, generating significant income for the actors in particular. The sale of these local resources is an integral part of the informal sector where women, men and even some young girls engage in it to meet their daily and/or family needs.

3.3.2. Distribution channels

During our surveys, two main types were identified:

1. Short circuit
It involves three actors in the sector, namely the picker, the retailer and the consumer. It is presented as follows:

• Picker → Retailer → Consumer

2. Long circuit It involves at least four actors: the picker, the wholesaler, the retailer and the consumer. It can be summarized as follows:

• Picker → Wholesaler → Retailer → Consumer

3.3.3. Different links in the chain

The sale of Marantaceae leaves is increasingly intensifying between the countryside and the city of Bangui. Figure 6 below illustrates the different links in this chain.

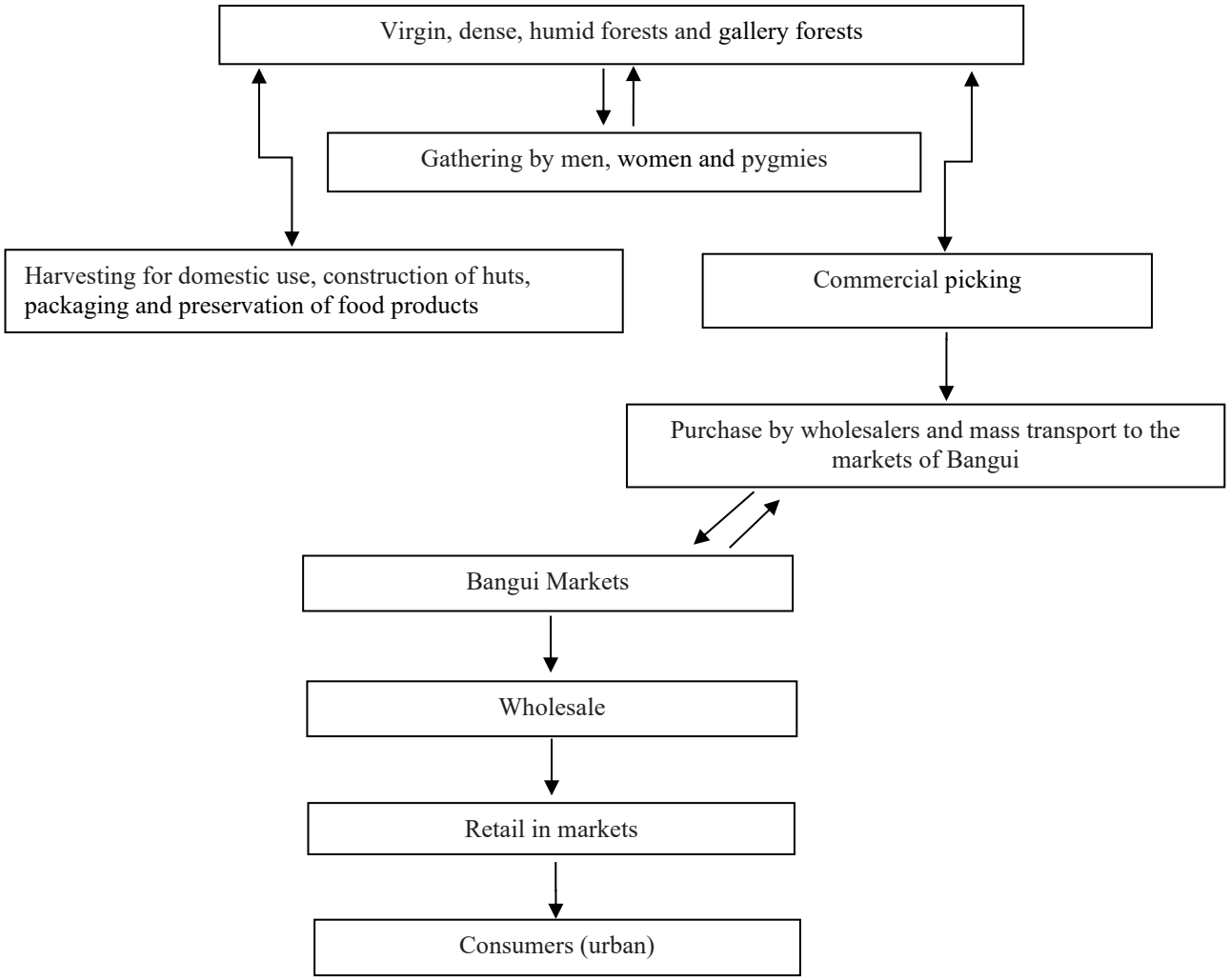

Figure 6. Different links in this chain.

3.3.4. Different actors

There are however four types of actors: (i) collectors, mainly villagers and Pygmies responsible for picking; (ii) wholesalers who play the role of suppliers in the city of Bangui by also ensuring the functions of evacuation and wholesale; (iii) retailers responsible for resale; (iv) consumers, particularly urban households constituting the demand at the level of retail markets.

3.3.5. Sale in Bangui markets

In Bangui markets, wholesalers sell Marantaceae leaves at Poko-bac, Pétévo and Kétènguéré in the early afternoon. Retailers, mainly women, buy them in sufficient quantities for retail resale to consumers. During our surveys, the retailers interviewed told us that they buy 1 packet of Marantaceae leaves for 7,500 CFA francs from wholesalers. In the three markets investigated, retailers sell their products on market stalls and on the sidewalk in front of the markets. Retail sales generally begin in the morning, before sunrise, especially at 5 a.m. However, it is important to note that the clientele for Marantaceae leaves in Bangui markets is mainly women. Figure 7 below illustrates how Marantaceae leaves are sold in Bangui markets.

a b c

Figure 7. Wholesale of Marantaceae leaves (a), Retail of *Megaphrynium macrostachyum* leaves (b), Retail of *Sarcophrynium brachystachyum* leaves (c).

3.3.6. Supply and demand

The supply on the market is ensured by the distribution chain including pickers, wholesalers and retailers. It varies from one period to another. The rainy season (August-October) corresponds to the period of abundance. During this period, the long marketing circuit becomes very important because intermediaries regularly supply the city of Bangui with Marantaceae leaves. However, the period of scarcity is the dry season. As for demand, it is permanent, because these resources are present and sold throughout the year.

3.3.7. Sales quantification

However, the quantification of sales of Marantaceae leaves is very difficult to control accurately since the sector remains informal and also the sales practice is individual and not organized. It therefore varies according to the periods, the markets and also according to the traders.

3.4. PROFITABILITY

3.4.1. Determination of commercial margins

The profit margins of traders engaged in the sale of Marantaceae leaves depend on several factors: they depend on the volume of trade carried out by traders, the conditions of supply and demand, the durability of the products and the rate of stock rotation. The weekly monitoring of a picker, a wholesaler and a retailer gives the status of their expenses, their revenues as well as their profit margins. The complete results of the estimation of the profit margin for each actor are detailed below.

3.4.2. Operating account of a picker

For the picker, the expenses are linked only to the time taken for picking. It is important to note that the picker only sells in packages. From the number of packages likely to be sold by the picker, the number of packages sold in the month is calculated by multiplying the daily figure by 26 working days in the month and the figure obtained is then multiplied by 78 days corresponding to 3 months in the year.

Table 3. Operating account of a picker during the period of abundance

Details of operations		Price (F CFA)
Selling price of a packet of leaves to wholesalers		3000
Selling price per day (2 packs per day)		6000
Income per day from 2 packs		6000
Benefits	Per day	6000
	Per month (26 days per month)	156 000
	Per year (3 months per year)	468 000

The results in Table 3 above show that the picking activity provides the picker with a daily profit margin of 6,000 CFA francs. The picker makes a monthly profit of 156,000 CFA francs. His quarterly remuneration is 468,000 CFA francs.

3.4.3. Operating account of a wholesale trader

For the wholesaler, in addition to time, there are also sales costs related to transport and municipal tax. During our surveys, a wholesale trader interviewed said that she buys and sells at least 6 packets of fresh Marantaceae leaves per day. She is used to buying these products in the study area. The profit per day was obtained by taking the difference between the total expenses per day and the income per day; the monthly profit was obtained by multiplying the profit per day by 26 days; the quarterly remuneration was estimated by multiplying the profit per day by 78 days. The status of its expenses, its income as well as its profit margins per day for 3 months during the good season are recorded in Table 4 below.

Table 4. Profits of a wholesale trader during the good season

Details of operations		Price (F CFA)
Price of purchasing a bundle of leaves from a picker		3000
Purchase price per day (6 packs per day)		18 000
Additional expenses (transportation costs, taxes)		6 000
Total expenses per day		24 000
Resale price of a package in Bangui		7 500
Income per day of 6 packs		45 000
Benefits	Per day	21 000
	Per month (26 days per month)	546 000
	Per year (3 months per year)	1 638 000

Except for the Sunday she rests, she carries out her sales activity for 26 days. This wholesale trader who gets her supplies from pickers makes a net profit margin of 2,000 CFA francs per day during periods of abundance. Her monthly profit margin is estimated at 546,000 CFA francs. This monthly amount is not insignificant. After three months, this trader makes 1,638,000 CFA francs. This contributes greatly to increasing her household income. The case of this wholesaler who devotes all her time to commercial practice during the period of abundance each year is a remarkable fact. Such a practice contributes efficiently to increasing the income of several households and also improves their living conditions.

3.4.4. Retailer's operating account

All the retailers interviewed during the surveys stated that the sale of Marantaceae leaves is profitable and beneficial. The retailer buys 1 packet of Marantaceae leaves at 7,500 CFA francs and resells them in bunches (bunches) at 100 CFA francs to consumers. At the end of the sale, she obtains a revenue of 16,000 CFA francs for 1 packets. The rental of the stall costs 250 CFA francs and the municipal tax costs 100 CFA francs, i.e. daily expenses of 350 CFA francs. Thus, the difference between the total sale and the purchase price gives the sum of 8,50 CFA francs of a net profit margin. The profit per day was obtained by taking the difference between the total expenses per day and the income per day; Monthly profit was obtained by multiplying daily profit by 26 days; quarterly remuneration was estimated by multiplying daily profit by 78 days. Table 5 below provides detailed information on the transactions carried out by the retailer interviewed.

Table 5. Retailer's operating account during the period of abundance

Details of operations		Price (F CFA)
Purchase price of a pack of leaves from a wholesaler		7 500
Purchase price per day (1 pack per day)		7 500
Additional expenses (ticket and seat fee)		350
Total expenses per day		7 850
Retail resale price of a package		16 000
Daily income from a package		16 000
Benefits	Per day	8 150
	Per month (26 days per month)	211 900
	Per year (3 months per year)	635 700

Table 5 shows that the retailer who gets her supplies from the wholesaler generates a daily profit margin of 8,500 CFA francs. Her monthly profit margin is paid at 2,900 CFA francs. Her quarterly remuneration is estimated at 635,700 CFA francs. This income plays a very important role for the actor concerned.

3.4.5. Comparison of the results of the different actors

Table 6 below provides information on the comparison of the profit margins of the actors surveyed.

Table 6. Comparison of the profit margins of the different actors in times of abundance

Actors	Profit margin per day (FCFA)	Profit margin per month (FCFA)	Profit margin for three months (FCFA)
Picker	6000	156 000	468 000
Wholesaler	21 000	546 000	1 638 000
Retailer	8 150	211 900	635 700

From these results, we can see that the profit margin generated by a picker in one day is 6,000 CFA francs; he values 156,000 CFA francs in one month; his remuneration for three months is 468,000 CFA francs. For the wholesaler, his profit margin generated per day is 21,000 CFA francs; he values 546,000 CFA francs in one month; his profit margin for three months is 1,638,000 CFA francs. As for the retailer, his profit margin generated per day is 8,50 CFA francs; she values 211,900 CFA francs in one month; his remuneration for three months is 635,700 CFA francs. Overall, the daily, monthly and quarterly profit margins of the wholesaler are higher than those of the retailer and picker. This is simply due to the large quantity that it buys for resale. This could also probably be linked to the budget envelope of the wholesale trader, which is higher than for actors located upstream (picker) and downstream (retailer) of the sector. Thus, all of these results reveal that the Marantaceae leaves sector existing in the Central African Republic largely benefits wholesalers with a quarterly profit margin of 1 638,000 CFA francs, three times higher than that of pickers.

4. DISCUSSION

Role

This work has made it possible to compile a large amount of new information on the Marantaceae leaf sector in the Central African Republic. Consequently, two leaves have been identified, namely *Megaphrynium macrostachyum*, and *Sarcophrynium brachystachyum*. They are harvested in primary and secondary forests and then in gallery forests in the southwestern part of the country. These two main resources have played an important role in local trade for decades, like any NTFP. To this end, rational management and sustainable conservation of forest ecosystems are imperative in order to safeguard these biological resources.

Harvesting

The surveys revealed that harvesters constitute the first link in the Marantaceae leaf sector. They are mainly riverine and Pygmy populations, most of whom are men and a few women. However, there are two types of pickers: permanent pickers and temporary pickers. Furthermore, our results revealed that the practice of picking and the technique of preserving Marantaceae leaves remain traditional. Similarly, the tools used for picking are rudimentary. It is therefore essential to improve them for sustainable management.

Utilities

Concerning the utilities, the two identified Marantaceae leaves are used for various purposes. Indeed, these wild resources are used in culinary practice, as packaging leaves. They are also used for therapeutic needs, in crafts and in construction.

Marketing

Marantaceae leaves are sold fresh in modest quantities in the surveyed markets. The wholesale price costs 3,000 CFA francs in the surveyed villages; in Bangui, the wholesale price is 7,500 CFA francs and the retail price of a bouquet (bunch) is 100 CFA francs. Women are the owners. The resource improves their income informally, but also contributes to the economy of their households.

Availability and sales quantity

The availability of Marantaceae leaves for sale is generally very high during the rainy season (August to October); however, during the dry season, these products become rare. Demand and supply are permanent. As for the quantity of sales, it varies according to the periods, the markets and also according to the traders.

Profits

The results revealed that the profit margins related to the sale of Marantaceae leaves are relatively high. The monthly income of the actors ranges from 156,000 to 546,000 CFA francs. In fact, it is the wholesalers who make

the most of the profits from this sector to the detriment of the local populations who are nevertheless managers of the forest resources of their village lands.

5. Conclusion

This study highlighted the importance of the Marantaceae leaves sector in the Central African Republic. The results revealed that the two species identified are useful in food, construction, traditional medicine, and crafts. The harvesting of these resources involves the indigenous people, but the Pygmies remain the main harvesters. The results also showed that the sale of Marantaceae leaves is mainly in the informal sector. However, women play a leading role in this sector. Regarding profit margins, it is the wholesaler who generates the largest margin and holds 59.76% of the sector's share. The picker who acts as manager and supplier of the products holds only 17.70% of the sector's share. From these results, it would be essential to promote this precious cultural heritage.

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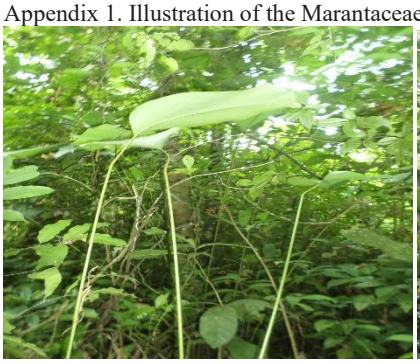
Appendix 1. Illustration of the Marantaceae leaf chain



Megaphrynium macrostachyum in natural environment

Sarcophrynium brachystachyum in natural environment

Tuft of Marantaceae leaves in natural environment

Harvesting Marantaceae leaves

Transporting leaves from the forest to the village

Wholesale sale of leaves in the villages

Route to Bangui

Pancakes wrapped in Marantaceae

Retail in Bangui

leaves Gnetum wrapped in Marantaceae

Retail purchase by a girl

leaves Cassava sticks