

Research Article

Commercialisation and Market Margins of Marantaceae Species in Cameroon

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Abstract

This study examined the commercialization of Marantaceae species in Cameroon, with focus on market margins, socio-economic dynamics, and regional trade patterns. Data were collected through structured questionnaires, focus group discussions (FGDs), and key informant interviews involving harvesters, traders, and consumers participating in the Marantaceae value chain across key markets in the different agro-ecological zones of Cameroon. The study analyzed profitability through the Rate of Market Margin (RMM) and Net Marketing Margin (NMM). Findings revealed that collectors retain higher per-unit profits, but wholesalers are the main financial beneficiaries due to their larger trading volumes, faster turnover, and better access to market. Retailers record modest gains limited by spoilage and competition. An estimated average of 55, 651 bundles of Marantaceae species notably *Halopegia azurea*, *Marantochloa purpurea*, *Haumania denckelmaniana*, and *Megaphrynium marostachyum* are traded monthly by approximately 421 traders, (engaged in Marantaceae trade). When extrapolated annually, this corresponds to a substantial volume entering the national value chain underlining the growing economic importance of Marantaceae in the non-timber forest product sector. The trade contributes significantly to household incomes, particularly for women, but remains constrained by informality and infrastructural challenges. Enhancing cooperative organization, price transmission, and sustainable harvesting would improve equity, efficiency, and long-term viability of the Marantaceae value chain in Cameroon.

Keywords

Cameroon, Commercialisation, Livelihood, Marantaceae, Profit Margins, Value Chain

1. Introduction

The Marantaceae family, commonly referred to as the arrowroot family, is composed of herbaceous, rhizomatous plants predominantly found in tropical regions of Africa, Asia, and the Americas [3]. These species thrive in various humid forest ecosystems, contributing to forest structure, soil stabilization, and serving as understorey cover for fauna [13].

Cameroon is situated in the Congo Basin, one of the most biologically diverse regions in the world. The country har-

bours an extensive range of ecosystems, from lowland evergreen rainforests to montane and semi-deciduous forests, creating ideal conditions for the growth and spread of Marantaceae species. The family is distributed across all five agro-ecological zones of Cameroon, particularly in the humid forest zones of the Centre, South, East, Littoral, and South West regions. These species form an integral part of forest undergrowth communities, where they stabilize soil, protect

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against erosion, provide shade and habitat for fauna, and contribute to forest regeneration dynamics [14].

From a socio-economic standpoint, Marantaceae leaves are indispensable in the daily lives of many Cameroonians. They are widely used for wrapping food (such as: koki, bobolo, egussi pudding and ekwang), constructing temporary shelters, producing handicrafts, and as traditional medicine [4]. Beyond subsistence use, the trade in Marantaceae products have evolved into a significant economic activity, particularly among women in rural and peri-urban communities. The leaves are harvested from wild populations and sold in markets ranging from local villages to major urban centers like Yaounde, Douala, Bafoussam and Bamenda.

In terms of livelihood and gender dynamics, the commercialization of Marantaceae is predominantly driven by women, who form the majority of harvesters, processors, and traders within local and regional markets [10]. Women's involvement in Marantaceae trade is critical for income generation, often serving as a primary or supplementary source of livelihood in areas where formal employment opportunities are limited [11]. This trade not only supports household economies but also enhances women's financial autonomy and social status.

The Marantaceae value chain in Cameroon is characterized by informal networks that connect forest harvesters with wholesalers and retailers in urban Centers. Despite its importance, the sector suffers from limited access to capital, poor storage and transportation infrastructure, and weak institutional support, which restricts the scale and efficiency of trade [2].

Despite their importance, Marantaceae species have not received the research attention accorded to other NTFPs such as rattan, bush mango (*Irvingia* spp.) and eru (*Gnetum afri-*

canum), [8]. There is a paucity of comprehensive data on their phytogeographic distribution, population dynamics, harvesting pressure, and market performance. Moreover, increasing deforestation, habitat fragmentation, unsustainable harvesting practices, and shifting land use patterns are threatening the natural populations of these species. This situation is compounded by inadequate documentation of the supply chains and economic margins of the Marantaceae trade, which hinders informed policy development and conservation efforts.

The overall objective of this study was to examine the distribution and market margins of different actors in the Marantaceae species trade in the different ecological zones of Cameroon in order to inform sustainable management and enhance their economic value for rural communities. Understanding where Marantaceae species occur and how they are being extracted and traded is essential to guide policy, enhance sustainable livelihoods, and contribute to biodiversity conservation.

2. Material and Method

2.1. Material

The study was conducted in some selected urban, semi urban and rural markets in the different agro ecological zones of Cameroon as illustrated in (Figure 1). The characteristics of the study area (Table 1) are the Sudano - Sahelian zone, High Guinea savana, Western Highlands, Humid forest with monomodal rainfall and Humid forest with bimodal rainfall.

Table 1. Characteristic of study location.

Zone	Name	Location	Climate	Main Soils	Main Crops/livestock & Activities
Zone I	Sudano-Sahelian Zone	Far North Region	Arid to semi-arid; 600–900 mm rainfall; long dry season	Sandy and lateritic soils	Millet, sorghum, cotton, groundnuts, onion; livestock (cattle, goats)
Zone II	High Guinea Savanna	North and Adamawa Regions	Sub-humid; 900–1500 mm rainfall; moderate dry season	Ferruginous tropical soils	Maize, yams, legumes, cassava, cattle herding; agro-pastoralism
Zone III	Western Highlands	Northwest, West, parts of Southwest Region	Humid; 1300–2500 mm rainfall; cooler temperatures (high altitude)	Volcanic (andosols), rich in nutrients	Irish potatoes, maize, beans, coffee, vegetables; dense population
Zone IV	Humid Forest with Monomodal Rainfall	Centre, South, East Regions	Equatorial climate; 1200–1600 mm; one rainy season	Ferralitic soils, well-drained	Cocoa, cassava, maize, plantains, oil palm, forest products
Zone V	Humid Forest with Bimodal Rainfall	Littoral, Southwest Regions	Equatorial climate; 1600–2500 mm; two rainy seasons	Deep ferralitic soils	Cocoa, banana, cocoyam, vegetables, oil palm, rubber, plantains

Source: Data adapted from Institute of Agricultural Research for Development [IRAD] (2007), Annual Report 2007, Yaoundé Cameroon.

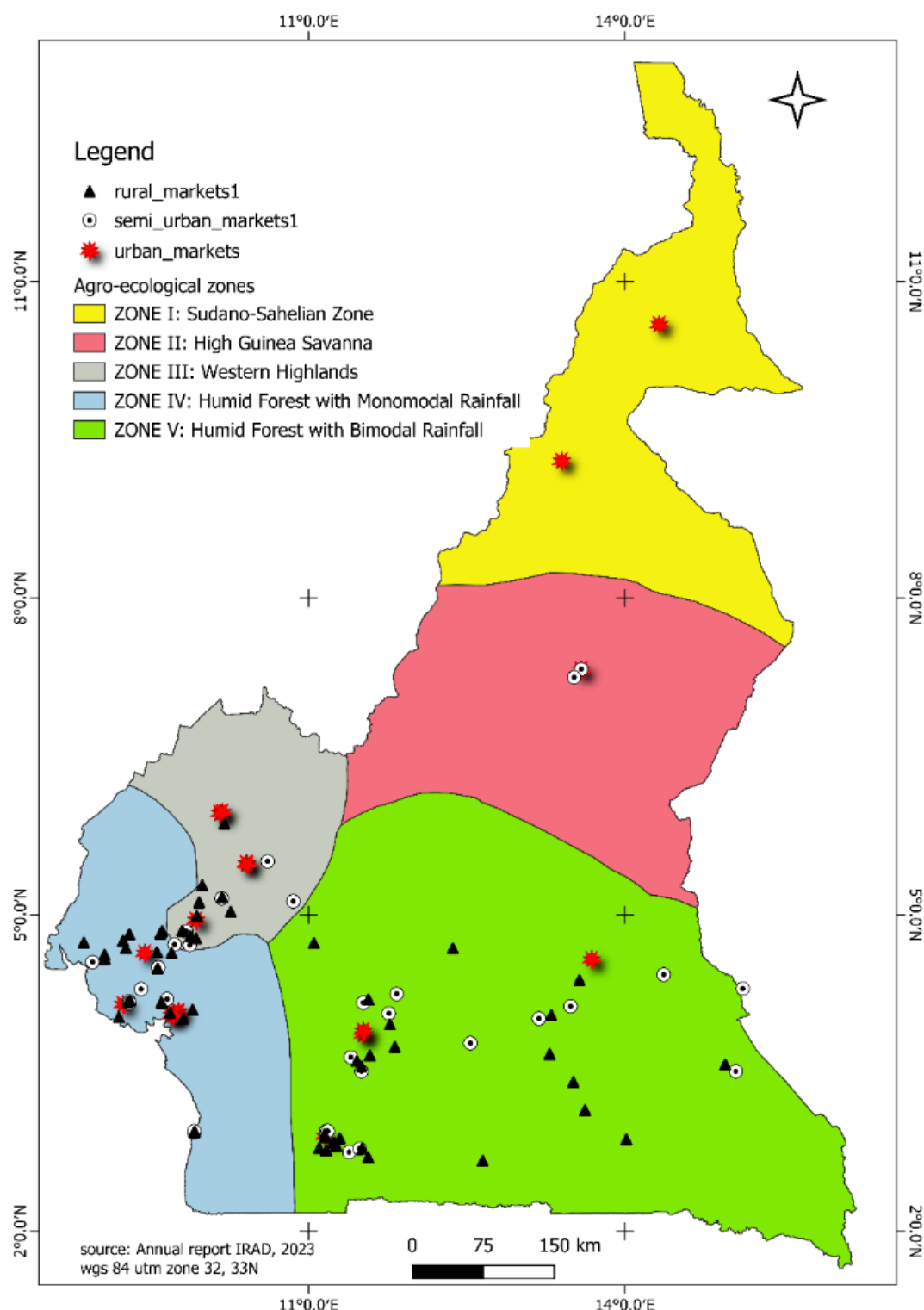


Figure 1. Map showing urban, semi urban and rural markets in the different agro ecological zones of Cameroon.

2.2. Method

2.2.1. Targeted Population

The population targeted in this study were those in the Marantaceae market chain. The traders were identified and

surveyed in the markets of the different agro ecological zones. A total of 127 individuals were identified and surveyed in 25 selected markets including 10 urban markets, 10 semi urban markets and 5 rural markets with 73% women and 27% percent men (Table 2). The selection of these markets was purposive based on Marantaceae trade networks.

2.2.2. Survey

Survey was carried out using socio-economic techniques that made use of the random and purposive sampling for the selection of markets and the respondents for questionnaire administration in the different agro ecological zones. Alongside these sampling techniques, (some selected Participatory Rural Appraisal tools such as) focus group discussions, interview with key informants were employed to collect information on difficulties encountered, harvesting techniques. A scale balance was used to measure the fresh weight of a

bundle of Marantaceae species [8].

2.2.3. Selection of Markets

The various markets (see Figure 1) were selected based on the role in the assembly, their links with other markets in the distribution of Marantaceae species, and accessibility. Four dominant Marantaceae species were observed to be traded in large quantities in Cameroon. This study focuses on the commercialisation of the four Marantaceae Species identified in Cameroon markets recorded during the survey.

Table 2. Number of sellers surveyed in the different agro-ecological zones.

Agro-ecological zone	Location	Name of market	Number of persons surveyed
Zone I: Sudano-Sahelian	Far North region	Maroua Central Market	2
Zone II: High Guinea Savanna	North and	Garoua Central market	3
	Adamawa region	Ngaoundere central market	6
Zone III: Western Highlands	Northwest	Food market, Nkwen market,	7
	West region	market A, market B	11
Zone IV: Humid Forest with Monomodal Rainfall	Centre region	Mvog-Atangana-Mballa, Mokolo, Nkometou, Acasia, mendong, Mfoundi	33
	South region	Yom market, Ebolowa central market, campo market	11
	East region	Abong-bang, Batouri market, Yokadouma	12
Zone V: Humid Forest with Bimodal Rainfall	Littoral region	Syncatex Ndokoti, goat market Newbell, Newbell market, palmiers market, rail market,	28
	Southwest region	Kumba main market, munya market	14

2.3. Data Analysis

EXCEL and SPSS were used for descriptive statistics. Trade margin analysis was employed to determine the distribution of benefits along the Marantaceae species marketing chain.

Gross Market Margin was determined according to [1] and [9].

$$GMM = \frac{(\text{Retail price} - \text{Farm Gate Price})}{\text{Retail Price}} \times 100 \quad (1)$$

Retail Price = Price at which the market woman sells the product

Farm Gate Price = Price paid to the producer (farmer)

Net Market Margin according to [12].

$$\text{Net Market Margin NMM} = \frac{(\text{Retail Price} - \text{Farm Gate Price} - \text{Marketing Cost})}{\text{Retail Cost}} \times 100 \quad (2)$$

Marketing Costs include direct costs market women incur while commercializing the product:

- 1) Transport (bike/taxi)
- 2) Loading/unloading
- 3) Packaging materials (sacks, baskets, ropes)
- 4) Storage fees (if any)
- 5) Market stall fees
- 6) Wastage/spoilage
- 7) Taxes or council dues

3. Results and Discussions

3.1. Actors and their Role in the Marantaceae Chain

3.1.1. The Collectors

They harvest Marantaceae species, tie them in bundles using another Marantaceae specie *Sarcophrynium*

macrostachyum for preservation. They represented (on average) 39% on the Marantaceae market chain with 68% women and 32% men.

3.1.2. Wholesalers

They were located mostly into semi urban and urban markets. They represented 18% on the Marantaceae chain with 62% men and 58% women. They have financial power and are intermediary with retailers in the different markets in all the regions of Cameroon. They determine the harvesting volumes of the collectors through information from retailers in the urban markets. 72% wholesalers had a long history of Marantaceae trade with the activities being transmitted from

parents to even grandchildren. They spend the least time in the Marantaceae chain and had the largest profit amongst all the actors. They also bear the greatest risk on the chain as most retailers have to sell before paying back.

3.1.3. Retailers

They are the most populated (53%) on the Marantaceae chain with women representing 80% and men 20%. They are located mostly in urban and semi urban markets. They spend all their time on the Marantaceae chain which is their main source of income for their family. They make the least profit on the Marantaceae chain on a sale of a bundle of Marantaceae specie.

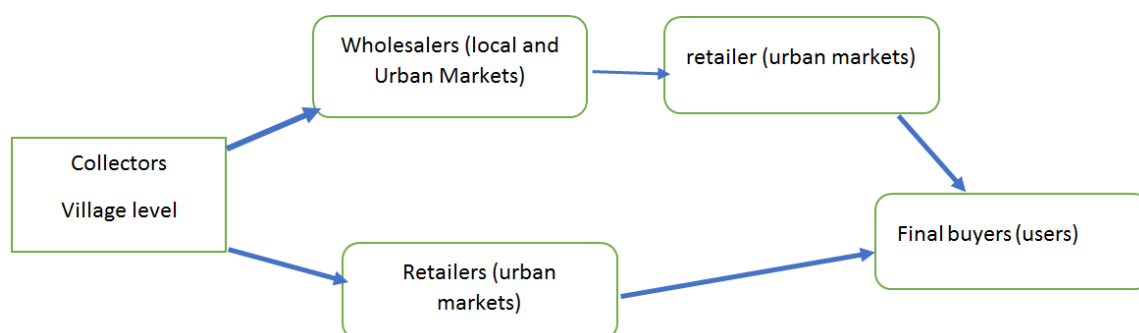


Figure 2. Exploitation Chain for Marantaceae.

3.2. Major Marantaceae Species Traded in Different Agroecological Zones of Cameroon

The use of Marantaceae leaves varies in the different agro-ecological zones of Cameroon. Dietary and culture are

some of the factors that determine the demand and supply of the Marantaceae as shown in Table 3. Four major species were identified mostly commercialised. It should be noted that species abundance varied with agro-ecological zone depending on the presence or absence of swamps and/or forest which are the main habitats of these species.

Table 3. Marantaceae species traded in the different Agro-ecological zone of Cameroon.

Agro-ecological zone	Species names	Common names	Habitat	Uses	Frequency of harvest
Zone I: Sudano-Sahelian	<i>Halopegia azurea</i> (K. Schum)		swamp	Cassava stick (batong de manioc) wrapper	+
Zone II: High Guinea Savanna	<i>Halopegia azurea</i> (K. Schum)		Swamp	Cassava stick (batong de manioc) wrapper	+
Zone III: Western Highlands	<i>Marantochloa purpurea</i> (Ridl.) Milne-Redh	Ngogo leave	Swamp	Coki corn, fufu corn, puddings	+++++
Zone IV: Humid Forest with Monomodal Rainfall	<i>Halopegia azurea</i> (K. Schum)	Minken, nyol	Swamp	Cassava stick (batong de manioc) wrapper	++++
	<i>Haumania denkelmanania</i>	Conner water	Secondary forest	Miondo wrapper	+++

Agro-ecological zone	Species names	Common names	Habitat	Uses	Frequency of harvest
Zone V: Humid Forest with Bimodal Rainfall	<i>Marantochloa purpurea</i> (Ridl.) Milne-Redh	Invio	Swamp	Cassa stick, egussi pudding, ndomba	++++
	<i>Megaphrinium macrostachyum</i> Milne-Redh	Akwe, okakon	Secondary forest	Koki corn, kwacoco bible, mitumba,	+++++
	<i>Megaphrinium macrostachyum</i> Milne-Redh	Akwe; okakon	Secondary forest	Koki corn, kwacoco bible, mitumba,	++++
	<i>Halopegia azurea</i> (K. Schum)	Minken, nyole	Swamp	Cassava stick (batong de manioc) wrapper	+++++
	<i>Marantochloa purpurea</i> (Ridl.) Milne-Redh	invio	Swamp	Coki corn, fufu corn, puddings	+++++

Legend: +++++ very high, ++++ high, +++ moderate, ++ low, + very low

3.3. Socio and Demographic Characteristics of Respondents

The profile of the respondents (Table 4) indicated 67.6% for women and 32.4% for men in the *Marantaceae* leaves value chain. The ages of the majority of actors involved in the sector ranged between 25 and 35 years (52.1%), followed by 35 years old and above (33.7%) and finally 15 to 25 years old (14.2%). As for marital status, 33% of respondents were single, 48% married, 15% widowed and 4% divorced. The level of education was secondary (47.2%), primary (37.9%) and university (7.8%), no education (7.1%). These traders were mainly retailers (47.6%), wholesalers (12.6%) and both wholesalers and retailers (39.8%), and finally collector or gatherer (75.6%), farm to market transporter (18.3%) and urban market transporter (6.1%) as illustrated in (Table 4).

Table 4. Showing Socio-Demographic characteristics of respondents in the *Marantaceae* chain.

Variables	Designation	Proportions (%)
Gender	Male	32.4
	Female	67.6
Marital status	Married	48
	single	33
	Widow	15
	Divorce	4
Age	15-25 year	14.2
	25-35 years	52.1
	35 years +	33.7

Variables	Designation	Proportions (%)
Types of traders	Retailer	47.6
	Wholesaler	12.6
	Retailer and wholesaler	39.8
Educational level	Did not go to school	7.1
	Primary education	37.9
	Secondary education	47.2
	university	7.8
Main activity	collector or gatherer	75.6
	Farm to local market transporter	18.3
	Urban market transporter	6.1

3.4. Estimation of Monthly Bundles of *Marantaceae* Spp by Commercial Collectors in Different Agro-ecological Zones of Cameroon

The estimation of the annual volume of *Marantaceae* harvested in Cameroon provides an overview of the scale and geographic distribution of this important non-timber forest product. Since harvesting occurs across diverse ecological and socio-economic contexts, results are presented according to the major agro-ecological zones of the country. This zonal breakdown highlights regional variations in harvesting intensity, species availability, and market orientation. By comparing estimated volumes across zones, it becomes possible to identify production hotspots, understand the relative contribution of each zone to national supply, and assess the potential pressure exerted on local forest resources. These results therefore provide the foundation for analysing trade flows, market dynamics, and the sustainability of *Marantaceae* ex-

exploitation at both local and national scales.

Table 5 reveals that an estimated average of 55 651 bundles of Marantaceae species notably *Halopegia azurea*, *Marantochloa purpurea*, *Haumania denckelmaniana*, and *Megaphrynium marostachyum* were traded monthly by 421 traders. When extrapolated annually, this corresponds to a substantial volume entering the national value chain. The distribution of harvest is not uniform across the country, with

(67.03%) of the total quantity originating from a single agro-ecological zone (the humid forest zone with bimodal rainfall), thereby contributing the largest share to commercial national supply followed by (32.97%) coming from the humid forest zone with monomodal rainfall. This zonal dominance underscores the uneven geographical concentration of Marantaceae exploitation and highlights the ecological and economic significance of those zones in sustaining the trade.

Table 5. Showing an estimated bundles of Marantaceae species traded in the different agro-ecological zone.

Agro-ecological zone	Estimated weekly bundle	Estimated monthly bundle	Estimated yearly bundle	Percentage (%)
Zone I: Sudano-Sahelian	182	728	8736	0.32703815
Zone II: High Guinea Savanna	733	2932	35184	0.01317137
Zone III: Western Highlands	9741	38964	467568	17.5037286
Zone IV: Humid Forest with Monomodal Rainfall	24654	98616	1183392	44.3010907
Zone V: Humid Forest with Bimodal Rainfall	20341	81364	976368	36.5510054
	55651	222604	2671248	100

3.5. Market Margin

The estimation of market margin (Table 6) reveals that for each bale (bundle of 100) of Marantaceae species sold, collectors consistently have the highest average net and relative

margins. Retailers show the lowest margins across all regions, reflecting higher costs and smaller profit share. The Centre's Region margins are quite balanced between collectors and wholesalers suggesting multiple sources of supplies of Marantaceae species into the market.

Table 6. Average Net and Relative Marketing Margins per region and actor.

Region	Actor	Avg NMM (FCFA)	Avg RMM (%)
Centre	Collector	11,266.67	30.17
	Wholesaler	10,400.00	28.49
	Retailer	4,216.67	11.17
Littoral	Collector	10,575.00	33.22
	Wholesaler	8,783.33	25.22
	Retailer	3,525.00	10.38
West	Collector	9,300.00	29.08
	Wholesaler	9,566.67	30.14
	Retailer	3,600.00	10.38
Northwest	Collector	12,250.00	31.33
	Wholesaler	9,550.00	26.25
	Retailer	5,250.00	12.95

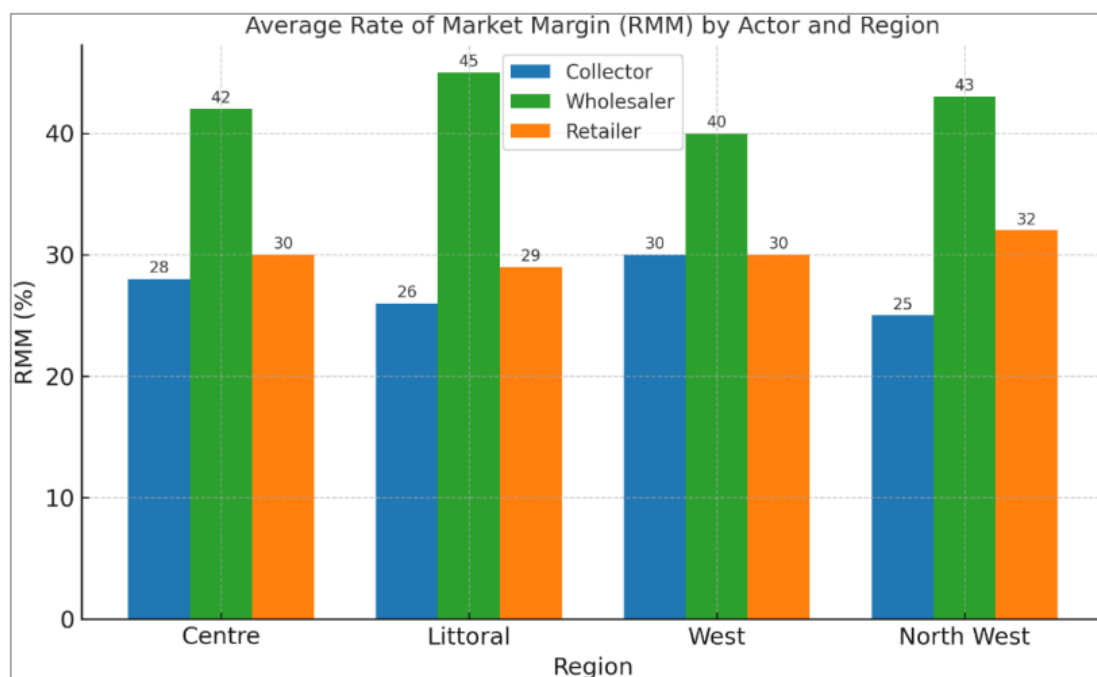


Figure 3. Average Rate of Marketing Margin (RMM) by actor and region.

Average Rate of Market Margin (RMM) by actor and region for the Marantaceae trade in Cameroon. (Figure 3) shows that wholesalers consistently record higher RMM values

across regions, reflecting their advantage in trading volume and market position, while collectors and retailers maintain lower but relatively stable margins.

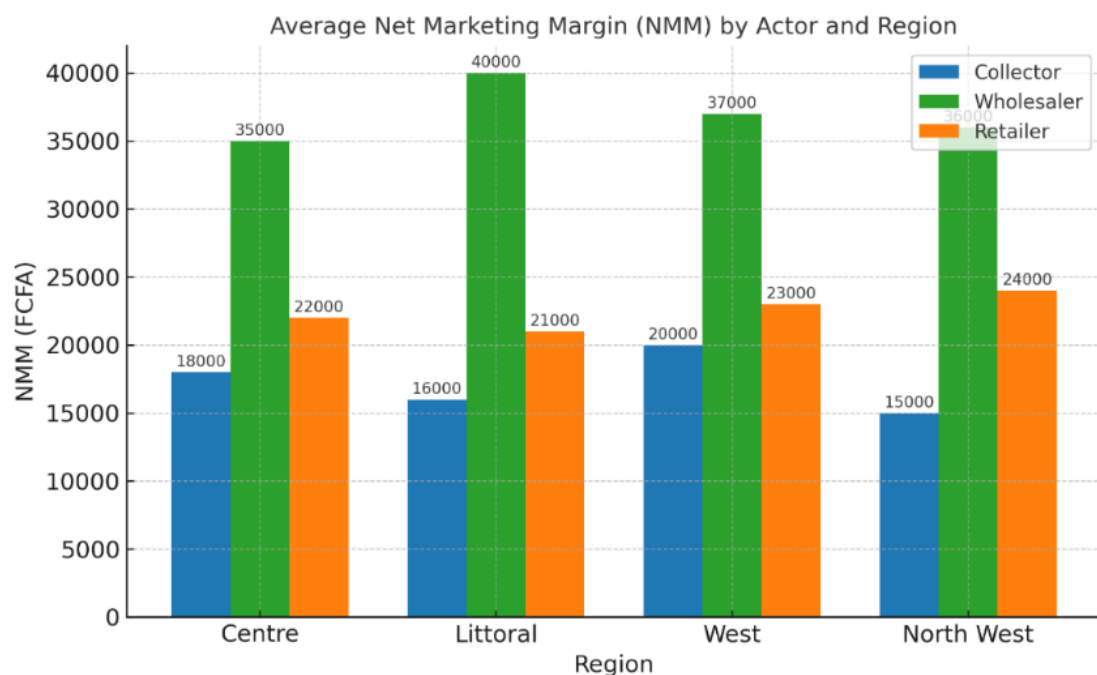


Figure 4. Average Net Marketing Margin (NMM) by Actor and Region.

Average Net marketing margin (NMM) by actor and region for Marantaceae in Cameroon with wholesalers exhibiting the highest average NMM, followed by retailers and lastly by

collectors. Regional variation highlights the transportation costs, infrastructure and market accessibility on profitability.

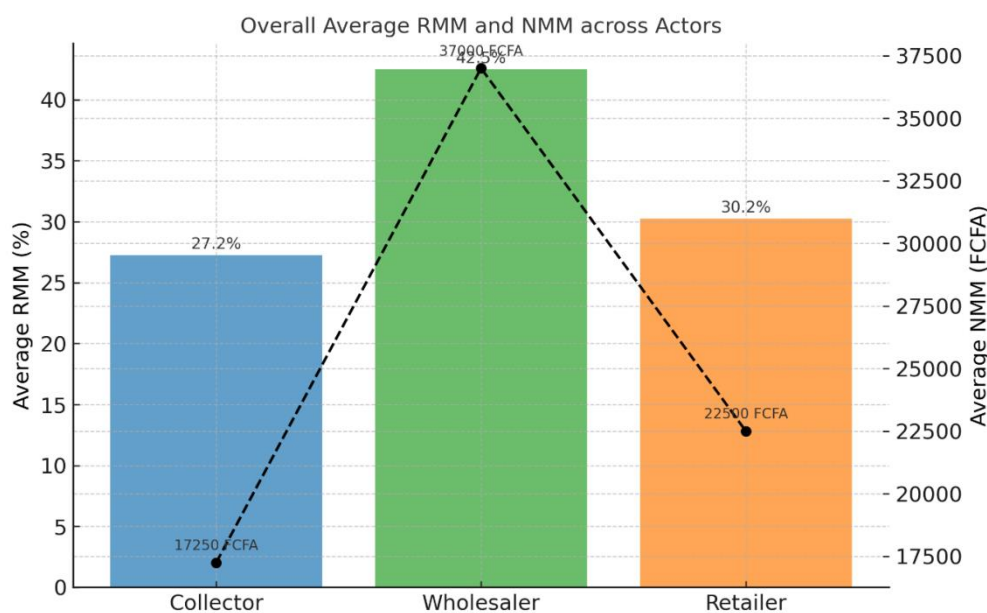


Figure 5. Average Rate of Market Margin (RMM) and Net Marketing Margin (NMM)

Comparison of average Rate of Market Margin (RMM) and Net Marketing Margin (NMM) across collectors, wholesalers, and retailers. The combined analysis reveals that wholesalers are the ultimate financial beneficiaries of the Marantaceae trade due to their control over bulk transactions and faster product turnover.

4. Discussion

The average Net Marketing Margin (NMM) and Relative Marketing Margin (RMM) per bale (100 bundles) of Marantaceae species across the different agro ecological zones of Cameroon revealed considerable variation among actors (Table 6; Figure 5). These variations reflect differences in market organization, access to information, and the efficiency of value chain coordination for Marantaceae products.

4.1. Per-bale Profitability Patterns

At the per-bale level, collectors consistently obtained higher margins across most regions, emphasizing their advantageous position at the initial stage of the marketing chain. The highest average net market margin (NMM) was recorded in the Western high land/ North West (12,250 FCFA), followed by the humid forest zone with bimodal rainfall/ Centre (11,267 FCFA) and lastly the humid forest zone with monomodal rainfall/Littoral (10,575 FCFA). These high margins are attributed to favourable farm-gate prices, proximity to production areas, and lower handling costs. The West highland showed a distinct pattern where wholesalers (9,567 FCFA) slightly outperformed collectors (9,300 FCFA), reflecting a more balanced profit distribution between upstream and midstream actors. In the western highlands, Marantaceae vendors buy directly from the collectors and equally sell di-

rectly to the consumers eliminating the role of the wholesalers in a great deal. Retailers, by contrast, recorded the lowest per-bale in average NMM values (3,525–5,250 FCFA), highlighting thinner profit margins at the final point of sale due to competitive urban market conditions and relatively higher operational costs. This is also in line with the work of [6], who worked on the commercialisation of Marantaceae species in the Southern Cameroon and demonstrated that for a bale of (100 bundles) of Marantaceae species sold, collectors derived higher profit (42.86%), followed by wholesalers (28.57%) and lastly retailers (14.29%).

4.2. Distribution of Average Relative Marketing Margins (Age RMM)

A similar trend was observed for the average RMM (%), where collectors captured between 29% and 33% of total marketing margins across most regions. The humid forest zone with monomodal rainfall recorded the highest RMM for collectors (33.22%), while wholesalers maintained moderate shares (25–30%) and retailers the lowest (10–13%). In the Western high lands, wholesalers (30.14%) slightly surpassed collectors (29.08%), illustrating the growing influence of intermediaries in that regional marketing structure (Figure 3).

4.3. Long-run Profitability Dynamics

When profit accumulation is considered over time and in relation to trading volumes, a different pattern emerges. Wholesalers appeared as the most profitable actors in the long run, benefiting from their smaller numbers, larger trading volumes, and shorter product handling time. Their strategic position between collectors and retailers allowed them to achieve economies of scale, faster turnover, and reduced

exposure to losses or spoilage.

Retailers followed from wholesalers, earning steady but moderate profits through frequent transactions and continuous product flow to consumers. Collectors, although enjoying higher margins per bale, accumulated less total profit due to lower turnover rates, high transportation costs, and extended time spent sourcing and assembling bundles from dispersed producers. This outcome reflects a classic margin–volume trade-off, where high unit margins at the collector level do not necessarily translate into greater overall profitability. This result is in line with the work of [5], who revealed that the yearly average net margins of different trader categories of cassava flour in Yaounde markets were different in pairs with wholesalers earning the most (435,022 FCFA), followed in order by semi-wholesalers (333,709 FCFA) and retailers (90,566 FCFA).

4.4. Implications for Value Chain Efficiency

The results demonstrate that while collectors maintain a strong per-unit advantage, wholesalers remain the ultimate financial beneficiaries of the Marantaceae trade across Cameroon. Zonal variation in both NMM and RMM indicates that local market organization, transaction efficiency, and accessibility substantially influence income distribution among actors. Enhancing coordination among collectors, wholesalers, and retailers together with improved price transmission, infrastructure, and market information systems could strengthen equity and efficiency within the Marantaceae value chain. This result is supported by the work of [7], who shown that the commercialization of NTFPs is less beneficial to rural collectors compared to the other stakeholders involved, whereas they are the main contributors of NTFPs value chain. The main reason for this are the poor organization of collectors, low access to market information, low power in price negotiation, lack of storage and drying facilities, ambient poverty in rural areas as well as the high purchasing power of wholesalers who intervene in the value chain.

5. Conclusion

The commercialization of Marantaceae species in Cameroon has evolved from a subsistence activity rooted in traditional forest use to a complex and economically significant trade network linking rural harvesters to urban consumers. The Marantaceae chain were dominated by women who account for the majority of collectors and retailers, while men participated more in wholesale and transportation. An estimated average of 55 651 bundles of Marantaceae species notably *Halopegia azurea*, *Marantochloa purpurea*, *Haumania denckelmaniana*, and *Megaphrynium marostachyum* were traded monthly by 421 traders engaged in commercial trade. When extrapolated annually, this corresponds to a substantial volume entering the national value chain.

The marketing chain is typically characterized by three key

actors: collectors, wholesalers, and retailers. Collectors on average 39% on the chain, are predominantly rural women, who operate at the base of the chain and benefit from relatively low production costs and direct access to the forest resource. Their per-unit profit margins are often higher due to minimal overhead and immediate market access. However, the volume of their trade remains limited, and their overall income is constrained by poor infrastructure, weak bargaining power, and lack of organized cooperatives. Wholesalers who represented the least on the chain (on average 18%), in contrast, handle larger trading volumes and occupied strategic positions that allow them to bridge rural production zones with urban consumption markets such as Yaounde, Douala, Bafoussam, Bamenda. The wholesalers emerged as the ultimate financial beneficiaries in the long run. Their dominance stem from economies of scale, better access to transportation networks arrangement, existing market information, and the ability to manipulate prices through control of supply and market timing. Retailers, though numerous on average 53% on the chain, often face higher operational costs and fluctuating demand, which compress their margins compared to wholesalers.

Regional analyses further revealed that profitability and market efficiency varied across Cameroon's ecological zones. In markets with improved accessibility, information flow, and infrastructure, wholesalers tend to realize higher net marketing margins (NMM) and rates of market margin (RMM). Conversely, in remote or poorly connected markets, collectors were relatively more influential, though their income remain limited by high transport costs and post-harvest losses. These spatial differences highlight the influence of market organization, infrastructure, and transaction efficiency on income distribution along the value chain.

Despite its growing economic significance, the commercialization of Marantaceae remains largely informal and poorly regulated. There are no standardized pricing systems, quality control mechanisms, or formal associations to protect the interests of small-scale collectors. The absence of organized marketing cooperatives and weak institutional support exposes the trade to exploitation by intermediaries and price volatility. Moreover, the lack of reliable statistics and monitoring on volumes traded or harvested poses a challenge to both market transparency and sustainable resource management.

Overall, Marantaceae trade in Cameroon is economically dynamic but socially and institutionally fragile. While it provides substantial income opportunities especially for rural women, it remains vulnerable to market inefficiencies, infrastructural limitations, and ecological degradation. To enhance both equity and sustainability, future interventions should focus on (i) formalizing the value chain through cooperatives or trade unions, (ii) improving transport and market infrastructure, (iii) strengthening price transmission mechanisms, and (iv) integrating Marantaceae commercialization into national NTFP and rural development policies.

Abbreviations

FGDs	Focus Group discussions
RMM	Relative Marketing Margin
NMM	Net Marketing Margin
NTFPs	Non-Timber Forest Products
SPSS	Statistical Package for Social Sciences

Author Contributions

Mingoh Emmanuel Mbapah: Conceptualization, Methodology

Tchakonte Simeon: Methodology, Supervision

Nasako Noto Penda: Methodology, Supervision, Visualization

Conflicts of Interest

The authors declare no conflict of interest.

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