



Micro, small and medium enterprises (MSMEs) in non-timber forest products (NTFPs) exploitation and economic growth in Cross River State, Nigeria

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Abstract

Exploitation of forest resources is one of the main stays of economic livelihood in Nigeria and Cross River State (CRS) in particular. However, due to the increasing rate of deforestation and the campaign against logging and other forms of depletion of timber resources, what is left in the forests are largely the non-timber forest products (NTFPs). This study thus, focused on the exploitation of NTFPs as a form of income by micro and small enterprises in CRS. Multistage sampling techniques and structured questionnaires were used to obtain cross sectional data on the socioeconomic characteristics, the different types of NTFPs, their uses and the returns from NTFPs trade to households in 5 (Five) LGAs in the southern senatorial district of the State (Akpabuyo, Bakassi, Akamkpa, Biase and Odukpani). In all, 500 (Five Hundred) questionnaires were administered and 482 (Four Hundred and Eighty-Two) were returned. Out of these, 22 (Twenty-Two) were mutilated beyond use, while 460 (Four Hundred and Sixty) were suitable for analysis. Descriptive analytical tools were used for the analyses while the gross margin analysis was used to determine the returns of NTFP trade to households. The study revealed that 290 out of 460, representing 63.04% are engaged in exploitation and trading in NTFPs on full time basis. Almost 95% of the respondents reside in the study area and more than 78% of them had at least primary education. Of the different types of NTFPs in the study area, thatch/bamboo has the highest prevalence usage due to its high demand for building construction and sundry purposes. These products also have the highest average gross margin of N390, 000 per year to an average household in the study area. This is followed closely by fruits with N370, 000 per year of average gross margin to a household. This study has brought to light some facts on NTFP contribution to the enhancement of livelihoods in the study area. The results show that NTFP extraction which was hitherto a support to other livelihood activities is rapidly becoming a mainstream source of income in the area. If reproduction enhancement and conservation of use are not factored into the extraction of these products now, a situation could arise in the future where these resources could become less available.

Keywords. NTFPs, MSEs, alternative Livelihood, household income

Introduction

Non-Timber Forest Products (NTFPs) are without doubt useful substances, materials or commodities that are available in forests which do not require logging of trees. They are important because they present alternative sources of materials, income, livelihood for households and

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communities and a critical component of global sustainable forest management and conservation strategy. In some cases, forests can be managed to increase NTFP diversity and, consequently, to amplify biodiversity and consequently economic diversity. While the uses of NTFPs are seen every day and everywhere, it is difficult to scientifically estimate their contribution to national or host communities as there is a lack of broad-based systems for tracking the combined value of the hundreds of products that make up various NTFP enterprise (Delang, 2006).

Also known as minor forest products, non-timber forest products have different definitions, but all tend to point to the same direction. While Belcher & Vantomme (2003) defines minor forest products as any plant or animal resources found in woodlands except timber, Ahenkan & Boon (2011) sees all materials derived from woodlands, excluding timber as non-timber forest products. The above, which shall be taken as our working definition include natural resources such as valuable economic and social plants, wild and managed game, fish and insects. NTFPs in all cases highlight forest products which are of monetary or communal value to local people but have been overlooked in designing forest management priorities (Heubach, Wittig, Nuppenau, & Hahn, 2011).

Many rural dwellers in tropical regions have traditionally depended on NTFPs for their livelihood and income needs. There are therefore quite a number of forest-dependent households who realize a significant part of their cash income through the sale of NTFPs (Pandey, Tripathi & Kumar, 2016). The contribution of NTFPs to the socio-economic benefits of the forestry sector in most countries is significant. Although they have been undervalued in the past, the demand for NTFPs is increasing as a result the increasing campaign against deforestation and degradation of forest resources (Odebode, 2003). A greater number of people can therefore, increase their income by harvesting non- timber forest products from the wild. This activity is receiving increasing attention and making significant contribution to local economies (Campbell, 1995).

There is therefore a growing awareness of the contributions of NTFPs to household economies, food security, national economies and conservation of biodiversity. Non-Timber Forest Products provide food, medicines, fibres and cash income for rural households (Odebode, 2003).

About 80% of the countries in the developing world depend on NTFPs for their primary wealth and nutritional needs. The implication of this is that the economic importance of NTFPs in these countries cannot continue to be overlooked (Pandey, Tripathi & Kumar, 2016)

There is an increasing rate of despoliation of forest resources both legally and illegally. Thus, the NTFPs which have increasingly caught the attention of more people because of their various uses are left in the forests. Although NTFPs have significant economic value they are not explicitly recognized in legislation as natural resources to be included in multiple use management (Chamberlain, Hammett & Araman, 2001)

Recently, because of the high rate of extraction globally, and the increasing awareness of the importance of NTFPs people have begun to pay some form of tariffs as token fees to the host communities at times and the government, generally for extraction of NTFPs. Most of the rural households tend to be generalists as they involve themselves in different combinations of activities like farming, hunting, leaf gathering and other forest product extraction. In spite of the fact that most agricultural products are inelastic in demand, NTFPs play an important role in food security. Domestication of forest resources can improve the quantity and quality of NTFPs, making them more attractive to farmers and more marketable, thus contributing to the alleviation of malnutrition and poverty and the enhancement of rural livelihoods (FAO, 2006).

Households from a wide range of socio-economic backgrounds gather NTFPs for various purposes. Some do it for subsistence, maintenance of cultural and familial customs, religious and sacred fulfillment as well as physical and emotional well-being. Others, for energy needs, animal nutrition, local medicine, scientific learning and income. NTFPs also serve as basic raw materials for industries ranging from large-scale floral greens suppliers and pharmaceutical companies to micro-enterprises such as basket-making, fruits gathering, woodcarving etc. (Belcher, 2003).

In a World Bank report, it was estimated that the forest sector earned annual foreign exchange in Nigeria of between 308 million to 412 million naira or about 4.2 percent of GDP. This, however, changed between 1970 and the early 1980s, due largely to the discovery and exploitation

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of oil. In spite of this, the sub-sector still performs functions which are critical to the socio-economic growth and development of the nation. These functions include the supply of forest products to infant industries and the protection of the environment. Forest-related industries engage in processing and marketing of forest products which indirectly provide employment for people and contribute to the gross domestic product (Akinleye, Olubanjo & Idowu, 2006)

In recent years, there has been a sustained global campaign against deforestation and the general degradation of forest resources, most of which is timber. This has resulted in a huge loss of revenue by individuals and small businesses, whose main source of incomes were tied to timber-based businesses in the host communities. To ameliorate the effects of this loss and provide soft landing for these rural persons and businesses, there has been a call for the redirection of efforts towards enterprises derived from non-timber forest resources. The question however is whether this move is commensurate to the loss suffered by moving away from the historic exploitation of timber-based businesses.

In investigating the place of NTFPs as a source of income and livelihood option for rural households and businesses, especially the micro and small enterprises, we shall be guided by the Hotelling's theory and the Homma's model. The Hotelling's theory by Harold in 1931 postulated that the most socially and economically profitable extraction track of a non-renewable resource was one in which the price of the resource, determined by the marginal net revenue from the sale of the resource, increased at the rate of interest. The theory thus proposed the time track of natural resource extraction that most increases the value of the resource reserve (Rodrigo, 2014).

The Hotelling's theory is also known as the theory of non-renewable resources that proposes that owners of non-renewable resources will only continue to produce and make available their products, if it will yield more than the instruments available to them in the market. Non-renewable resources are exhaustive resources that when continued to be exploited would eventually be non-available (Hens & Quynh, 2008). This theory was criticized because its assumptions were not realistic in most cases and that it did not address the problem of conservation of biodiversity of

forest resources, but assured optimal rate of substitutability and the discount rate of non-renewable resources like petroleum, solid minerals like gold, silver, iron, coal, zinc etc. which were the principle sources of raw materials at that time (Schulze, 1974).

Alfredo Homma's model became the reference to analysis the emerging issue related to the economy of non-timber forest products after 1986. For Homma, the management of non-timber forest products (NTFP) is innocuous because sooner or later these products will give way for domesticated, synthesized or any else substitute product (Borges, 2003). Homma's model considers that agriculture will solve a major part of forestry problem. The theory argues that sometimes ago, all agricultural products (whether apples, oranges, domestic animals etc.) were extractive products and for its increasing scarcity, they were domesticated and raised in large scale or substituted by other products (Borges, 2003).

Most of the studies on NTFPs have focused principally on three perspectives. These are as a medium focusing on improvement in incomes or livelihood option for rural households; as an expression of traditional knowledge and cultural preservation and finally as a key component of sustainable forest management and conservation strategies. These perspectives invariably promote forest products with useful or economic importance for income generation and as important tools that can control degradation of forest resources and promotion of conservation of the gifts of nature (Emery & McLain, 2001).

Heubach, Wittig & Nuppenau (2011) examined the income from NTFPs and the dependency on these by different groups in Northern Benin. Using data from 230 (Two Hundred and Thirty) households, the study revealed that economic importance of NTFPs varied between households, with poorer households being more dependent on NTFPs in order to fulfill basic needs than wealthier ones. Also, Akinleye, Olubanjo & Idowu (2006) conducted a study on multiple use and relative profitability of non-timber forest-products in Ogun State, Nigeria. They used multistage sampling techniques and structured questionnaires to obtain cross sectional data on the socioeconomic characteristics, different types of NTFPs, their uses and the returns to households.

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The study revealed that bamboo was the most used NTFP due to its high demand for building construction purposes. Similarly, snail, mushroom and bush meat had the highest average gross returns.

In a similar study, Soe & Yeo-Chang (2019) analyzed livelihood dependency on NTFP and its implications for REDD+. The study was carried out in Myanmar where the authors identified “poor regulation and unsustainable extraction of non-timber forest products (NTFPs) is decimating millions of hectares of natural forests; overexploitation of forest resources is one of the main drivers of forest degradation”. Further findings from the study revealed that NTFPs contributed the most to total household income and the main types of NTFPs exploited were charcoal making and bamboo selling.

This study was carried out in Cross River State (CRS), one of the 36 States in Nigeria, which has an estimated land area of about 98,000 sq. kms and a population of 3,866,269 in 2016 (National Bureau of Statistics, 2017). About 75% of the population lives in the rural areas of the 18 Local Government Areas (LGAs) that constitute the State. The Gross State Product (GSP) on the purchasing power parity is US\$9.29 million, or a per capita income of \$3,000. However, 50% of the population lives below \$2 per day. The economy is public-sector driven, while the private sector is dominated by agriculture, which comprises rich variety of crop farming, livestock, forestry resources, fishery etc. The State has an estimated 480 sq. kms of mangrove forests, 520 sq. kms of swamp forest, 7290 sq. kms of tropical high forest and about 216 sq. kms of woodland savanna. Public and private plantations occupy a total area in excess of 216 sq. kms (CRS SEEDS, 2005).

The State hosts a National Park covering an area of 4000 sq. kms (Heinrich Boll Stiftung, 2016) and has one of the most assorted concentrations of plant and animal lives in the world. Timber species in the Cross-River forests with economic value include mimosop, ebony, okwen, mahogany, cedar, mansonina, iroko, opepe, ukong, enoi, camwood, ekiki, black afara, afzelia, teak, obeche, gmelina, albura, abigia, aga, etc. Non-timber products include various species of animate

and inanimate resources, depending on the geographical and other environmental composition of the area (CRS SEEDS, 2005).

As is the case in most tropical regions, CRS has a variety of NTFPs. Some of the very popular non-timber economic and social products that abound in almost every part of CRS as observed during field observation by the author include various perennial condiments and small animals for local delicacies like mushrooms of various types, snails, various insects and reptiles as well as vegetables and other cash crops. They also include bush mango (popularly known as *ogbono* (*Irvingia gabonensis*), bitter kola (*Garcinia kola*), *afang*, *eruru* (*Gnetum africana*) raffia, (*Raffia hokera*), bamboos, thatch, game and wildlife (popularly known as bush meat in the local parlance), local cosmetics and lotions for beautification, plant based alcoholic and non-alcoholic beverages. Others include plantain and bananas (*Musa covadish* & *Musa sapientum* spp), pineapple, climbers like yam (*Dioscorea* spp), cocoyam, cocoa, cassava (*Manihot utlisima*). Fruits like mangoes (*Magnifera indica*), oranges, cashew (*Anacade Ossidentalis*), kola nuts (*Cola nitida*; *Kola accuminata*), and medicinal plants are also found in the State. Though exploitation of these and other NTFPs could be very profitable, most of the so-called successful businessmen in the forest communities are those who deal on the timber resources.

Majority of rural dwellers in the State, who are mostly subsistent farmers, micro or small enterprises (MSEs) have traditionally depended on the exploitation of timber and non-timber forest products (NTFPs) as their principal source of revenue and livelihood. MSEs which are the lower rung businesses have therefore provided multiple employment opportunities to the youths and women in the forest communities who are engaged in one form of agricultural activity or the other. These categories of businesses have accordingly been recognized as socio-economic and political development channels in these societies.

In recent years, there has been a sustained global campaign against deforestation and the general degradation of forest resources, most of which is timber. This has resulted in a huge loss of revenue by individuals and small businesses, whose main source of incomes were tied to timber-

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based businesses in the host communities. To ameliorate the effects of this loss and provide soft landing for these rural persons and businesses, there has been a call for the redirection of efforts towards enterprises derived from non-timber forest resources. The question however is whether this move is commensurate to the loss suffered by moving away from the historic exploitation of timber-based businesses.

Objectives of the study

This study is interdisciplinary and involves coming together of experts from Environmental Studies, Entrepreneurship and Finance. Our objective is to investigate the place of NTFPs as a source of income and livelihood option for rural households and businesses, especially the micro and small enterprises. In this context, the gathering and use of NTFPs can be a catalyst for livelihood, poverty alleviation and wealth creation. The specific objectives are;

- To describe the socioeconomic characteristics of the survey respondents;
- Enumerate the different types of NTFPs in the study area and their different uses;
- Determine the returns on NTFPs trade to households in the study area; and

Research methodology

The study was carried out in CRS, in the Niger Delta area of Nigeria. The State lies within latitude 5°32' and 4°27'N and longitude 7°50' and 9°28'E. The State is bounded to the east by the Republic of Cameroun, to the west by Akwa Ibom, Abia and Ebonyi States, to the north by Benue State and to the south by the Atlantic Ocean. The predominant climate is tropical but semi-temperate in the north eastern fringes with rain and dry seasons all year round. There are 18 (Eighteen) LGAs and the agro-ecological zones are rainforest, swamp forest, savannah and montane zones. Agriculture is the major occupation of the people, particularly those in the rural areas, which occupy more than three quarters of the State. The climates as well as other environmental factors favour the production of crops such as trees, tuber crops and cereals, as well as forestry, animal husbandry, fishery and tourism etc. Buying and selling are the other major economic activities in the State (CRSG, 2012).

A cross sectional research design was adopted for the study, executed through a multistage sampling technique was used in sample selection. In the first stage, 5 LGAs were selected; Akpabuyo, Bakassi, Akamkpa, Biase and Odukpani LGAs were purposively chosen because they have large forest coverage areas. These LGAs are all in the Southern senatorial district of the State. They are all almost surrounded by a body of water and as such, they have a large area of swamp forests, with high rainfall.

After a preliminary investigation, 10 (ten) of the prominent NTFPs in these LGAs were selected based on their use and socioeconomic importance. Primary data was thereafter collected using structured questionnaires, with 100 (One Hundred) administered to the NTFP exploiters and dealers in each of the LGAs, totaling 500 (Five Hundred) in all. At the end, 482 (Four Hundred and Eighty-Two) were returned. Out of these, 22 (Twenty-Two) were mutilated beyond use, while 460 (Four Hundred and Sixty) were found okay and used for analysis.

Descriptive statistics are the analytical tools used for data. Frequency tables were also used in some instances to obtain the distribution of respondents by certain socioeconomic features like age, gender, level of educational attainment, marital status, years of experience in the business, major occupation, secondary occupation and area of residence. In enumerating the different types of NTFPs and their uses, distribution of respondents by product specialization, sources and rationale for NTFP collection, the results were presented by way of frequency tables. Finally, gross margin analysis was used to determine the returns of NTFP trade to households.

Results and Discussion

Socioeconomic Characteristics of Respondents:

Table 1 shows the results of analyses on some socioeconomic features of the respondents. The result shows that 290 (63.04%) of all respondents exploit NTFPs on full time, while 170 (36.96%) are on part time. Distribution by educational attainment shows that 78% had a minimum of primary school. 23.79% do it on full time, lack formal education, 44.83% had primary education; while 27.59% had secondary education and only 3.79% had post-secondary education. This shows

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that larger percentages of NTFP dealers have some form of education, while only few (21.52%) without any educations are engaged in it. The table also shows that more women (337, representing 73.26%) are engaged in the business. 30.34% of all NTFP dealers operating on full time basis are male and 69.66% are females, while 20.59% of male and 79.41% of female are operating on part time. The prevalence of women is due to the fact that NTFP is a business with paltry earnings, making it more attractive to females who have their incomes augmented by their husbands in most instances.

The age of the dealers is a key factor that impacts on their involvement, productivity and overall coping ability. From Table 1, the age of respondents was aggregated into 18 - 25, 26 - 35, 36 - 45, 46 - 55 and 56 years and above. These were chosen because they represent the active age groups in the communities. Under the above, we observed that the most productive age bracket was 26 - 35, followed by 18 - 25 years, with 39.78% and 23.26 % respectively; of all respondents. From the data, it can be deduced that the active age group is engaged in the NTFPs business. Even on part time basis, most active age groups are involved because they have the necessary skills and capacity to carry out production and trading. The results also show that 71.09% of the respondents are married. The high percentage shows that good numbers of people feed their family through this means. Experience was measured in years based on the period they have been engaged in the business. The table shows that 28.48% have been on the occupation for less than 6 years. The percentage continues to decrease as the number of years increase, leaving a paltry 7.17% for those who have been in the trade for 26 years and above. This means that some people take the business as a stop gap trade and exit as time goes on into other trades (See table 1).

NTFP types and their economic uses

Table 2 shows the varieties and use of NTFPs in the study area. From the table, Thatch/Bamboo had the most prevalent dealership with an engagement rate of 28.91%. This was followed by palm (oil and raffia) products with 15.65% of respondents. This result could be as a result of the

vegetation of the study area, as earlier highlighted. The types and utilization of the NTFPs under study vary from one household to another. Snail, mushroom and bush meat, soup condiments, plantain and banana, fruits and kola serve as food for the household and for the market.

Table 1: Distribution of Respondents by socioeconomic characteristics

S/N	Characteristics	Full Time		Part Time		Total	
		Number	%	Number	%	Number	%
1.	Level of Education attained						
	i. None	69	23.79	30	17.65	99	21.52
	ii. Primary	130	44.83	75	44.12	205	44.57
	iii. Secondary	80	27.59	60	35.29	140	30.43
	iv. Tertiary	11	3.79	5	2.94	16	3.48
2.	Gender						
	i. Male	88	30.34	35	20.59	123	26.74
	ii. Female	202	69.66	135	79.41	337	73.26
3.	Age in years						
	i. 18 - 25	65	22.41	42	24.71	107	23.26
	ii. 26 - 35	110	37.93	73	42.94	183	39.78
	iii. 36 - 45	65	22.41	34	20.00	99	21.52
	iv. 46 - 55	35	12.07	18	10.59	53	11.52
	v. 55 and above	15	5.18	3	1.76	18	3.92
4.	Marital Status						
	i. Married	192	66.21	135	79.41	327	71.09
	ii. Single	98	33.79	35	20.59	133	28.91
5.	Place of residence						
	i. In the LGA	275	94.83	160	94.12	435	94.56
	ii. Outside the LGA	15	5.17	10	5.88	25	5.44
5.	Experience in the extraction in years						
	i. Less than 6	77	26.55	54	31.76	131	28.48
	ii. 6 - 10	59	20.34	40	23.53	99	21.52
	iii. 11 - 15	48	16.55	35	20.59	83	18.04
	iv. 16 - 20	41	14.14	26	15.29	67	14.57
	v. 21 - 25	37	12.76	10	5.88	47	10.22
	vi. 26 and above	28	9.66	5	2.95	33	7.17
	TOTAL	290	100	170	100	460	100

Source: Compiled from survey data, 2017

Others like medicinal plants, palm products, and leaves have multidimensional applications, while thatch, bamboo are basically for construction. Bamboo derivatives include bamboo shoot, tooth pick, paper, household furniture, building materials and musical instruments. Millions of people depend on this plant for their sustenance.

The findings indicate that apart from providing livelihood options for the households, NTFPs also, and more importantly provides materials for the building, construction and other

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forest-based enterprises. Though we did not research into the actual figures that could be attributed to this sub-sector as far as socio-economic growth and development is concerned, it could be safe to assume that Cross River State's socio-economic growth is enhanced by the activities of micro and small enterprises in this sector. These findings corroborate with that of Soe & Yeo-Change (2019) in Taungoo District where there is as well high dependence on NTFPs, with the most exploitation on charcoal making and bamboo selling.

Table 2: Distribution of respondents by type of product exploited

S/N	Product exploited	Full Time		Part Time		Total	
		Number	%	Number	%	Number	%
1.	Roots and tubers	24	8.28	12	7.06	36	7.83
2.	Medicinal plants	15	5.17	9	5.29	24	5.22
3.	Plantain and Banana	40	13.79	21	12.35	61	13.26
4.	Palm products (Oil and raffia)	47	16.21	25	14.71	72	15.65
5.	Vegetables	22	7.59	20	11.76	42	9.13
6.	Snails, game, mushroom	19	6.55	9	5.29	28	6.09
7.	Thatch/Bamboo	88	28.28	40	23.53	122	28.91
8.	Fruits	13	4.48	13	7.65	26	5.65
9.	Condiments like groundnuts, melon, benniseed	22	7.58	16	9.41	38	8.26
	TOTAL	290	100	170	100	460	100

Source: Compiled from survey data, 2017

Costs and returns of NTFP extraction

The average gross income of those in the NTFP value chain varies for various reasons. For instance, some of the products are seasonal; some could be exploited more than once in a year, so it is feasible for some to be in the market throughout the year but others only for a season in the year. In Table 3 it can be seen that thatch/bamboo recorded the highest margin or profit of N390,000 (Three Hundred and Ninety Thousand Naira only) per annum, due to their multiple usages, the high domestic demand and relative cheap cost of exploitation. This was followed by fruits exploitation, which recorded N350,000 (Three Hundred and Fifty Thousand Naira only). The remaining commodities have appreciable annual gross profit which the dealers take as their earning for their effort.

The contributions of forest ecosystem services to the livelihood of the local communities have been highlighted in this study going by the incomes from NTFP accrued to the people. This has also been highlighted in other studies (Angelsen, *et al*, 2014; Agrawal, *et al*, 2013).

Table 3: Cost and incomes from extraction per year

S/N	Product exploited	FC ()	VC ()	TC ()	Income ()	Margin ()
1.	Roots and tubers	150,000	50,000	200,000	360,000	160,000
2.	Medicinal plants	50,000	25,000	75,000	325,000	250,000
3.	Plantain and Banana	150,000	50,000	200,000	480,000	280,000
4.	Palm products (Oil and raffia)	150,000	30,000	180,000	450,000	270,000
5.	Vegetables	75,000	25,000	100,000	350,000	200,000
6.	Snails, game, mushroom	250,000	25,000	275,000	500,000	225,000
7.	Thatch/Bamboo	300,000	30,000	330,000	720,000	390,000
8.	Fruits	75,000	25,000	100,000	450,000	350,000
9.	Soup condiments	75,000	15,000	90,000	360,000	270,000

Source: Compiled from survey data, 2017

Key:

1. FC = Fixed Costs
2. VC = Variable Costs, including labour
3. TC = Total Cost

Conclusion

This study was undertaken to investigate the role of micro, small and medium enterprises (MSMEs) in non-timber forest products (NTFPs) exploitation and economic growth in Cross River State, Nigeria. A survey was carried out in 5 (Five) LGAs in the State with the objectives of describing the socioeconomic characteristics of the survey respondents, enumerating some of the different types of NTFPs, their uses and determining the returns to NTFPs trade to households in the study area; and finally, highlighting some of the implications of the findings.

In summary, the study brought to light some facts on NTFP enterprise in the State. Because the geological and socio-economic configuration of the State, the findings from the sample

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population could be generalized to other areas in the State that were not covered. Our findings highlighted the great varieties of NTFPs in the State and their contribution to the enhancement of livelihoods in the selected LGAs in Cross River State, Nigeria. It indicated that a great number of the active populations are involved in this business, which has several varieties and is very rewarding as a livelihood option.

The results also show that while initially exploitation of NTFPs was regarded as a supplement to other livelihood activities, it is gradually becoming a mainstream income source. Thatch/bamboo, domesticated animals and fruits are the most sought after NTFPs in the survey area. One of the critical implications of our findings is that since these are exhaustible products, the continuous depletion if not checked would lead to a situation where the commodities become exhausted or extinct.

Recommendations

Based on the findings from this study, there is need for controlled exploitation, reproduction enhancement and conservation of use to be factored into the exploitation of these resources now as has been the case with timber product. Government and Civil society should therefore start a sensitization exercise to let the people know the implications of their actions. On their own part also, the communities should be responsive in their dealings with NFTP.

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