

Non-Timbers Forest Products And The Survival Of Rural Dwellers In Owo Forest Reserve Of Ondo State

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Abstract—Non-timber forest products (NTFPs) contribute significantly to the development, welfare and survival of rural dwellers but less importance are attached to it in many countries of the world. This is because the foresters and economic planners relied solely on timber production to the detriment of non-timber forest products. The major objective of this study is to identify NTFPs, their uses and highlights their contributions to the livelihood of rural dwellers in Owo forest reserve of Ondo State. Non-timber forest products found in the study areas are honey, vegetables, chewing sticks, bushmeat, mushrooms, kolanut, snail, tortoise and many others. Some of these items are wholly or partially consumed as food or craft while some are used to produce native medicines. Most of the rural dwellers especially the females are directly involved in the collection, processing and marketing of non-tuber forest products and they are within the age range of 35 years and above. The livelihood dependence records of the rural dwellers in terms of NTFPs availability and consumption pattern must be properly addressed by the policies formulated by foresters and other government agencies concerned.

Keywords—Non-timber forest products, rural dwellers, Foresters, Livelihood Availability.

Introduction

Since time immemorial, non-timber forest products (NTFPs) has been offering precious services to man. The pre-historic man new non-timber forest products as source of food, fertilizers and herbal medicines. Millions of years ago, NTFPs are also development of salvation. Even in this contemporary times, despite the development of products like canned food, wine from sugarcane and juice which are very good substitutes for some NTFPs particularly in the area of economic, social and ecological benefits for the citizenry, NTFPs still remain a modern choice for providing services the man in various forms.

Non-timber forest products (NTFPs) have been defined as all biological materials derived from the forests excluding timber but including bark, root, tuber, leaves, flowers, fruits, honey and animal products (Townson, 1995). Okafor (2004) also defined NTFPs as forest goods and services providing subsistence

and trade which exclude commercially exported timber. These include plants and materials used for food, fuel, forage and fodder, medicine, cottage, clothing, construction tools, wrapping materials, biochemical, fibres, birds, reptiles and fishes for food, fur and feather.

Rural dwellers rely greatly on NTFPs for meeting a large number of their basic necessities of life but the types of NTFPs and consumable pattern in each forest reserve varies according to ecological and socio-culture. In spite of the importance of NTFPs, their contributions to rural livelihood in many developing countries is yet to be acknowledged (Shackleton & Sheona, 2004).

This is because the foresters and economic planners prefer timber production for the effective management of forest hence the neglect of NTFPs. Therefore there is a need for a growing awareness of the contributions of NTFPs to household economy, national economy, food security and conservation of biodiversity. NTFPs serve as source of income to higher percentages of rural dwellers, supplement income and as part time activity with farming.

The collection, processing and marketing of NTFPs provide major employment opportunities to the less privileged ones and contribute significantly to the livelihood of rural dwellers. For examples, in Zimbabwe, 237,000 people worked on NTFPs in 1997; compared with 16,000 people in industrial forest (Anon, 2000). In some places like India and Pakistan, NTFPs provide about 40% of the total official revenue and 55% of the forest based employment. The report also added that nearly 500 million people living in and around the forest in India relies on NTFPs as a critical component for subsistence (Okafor, 1980).

Reference to the advantages of NTFPs highlighted above, Nigeria government at all levels through forest management policy should clearly spell out the roles, values and contributions of NTFPs on the livelihood of rural dwellers and to the Nigeria economy in general.

Methodology

Study Area:

The study was conducted in two villages closed to Owo forest reserve in Owo Local Government Area of Ondo State. Owo forest reserve is situated in the lowland rain forest of Nigeria. The State is located in the South-western part of Nigeria and lies between longitude 4.00°E and 6.00° E and 5.45°N and 8.15°N. It covers areas of over 15.597km² The climate of the state is tropical with two seasons (i.e dry and raining seasons). The raining season commences in March and ends in October with break in July ending/first two weeks in August with the dry seasons which occurs between October and March. Ondo State is bounded in the north by Ekiti and Kogi states, in the East by Edo state, in the West by Osun and Ogun states and in the South by the Atlantic Ocean.

Some of the major towns within the local government include Owo, Ipele, Iyere, Uso, Emure-ile and Eporo with more than fifty villages and camps which include Oke-ogun, Owajulaye, Ago Pannu, Familugba, Molege, Ajalumeme, Akogun, Ugboila, Ori-oghen, Obasooto, Ojana among others.

Population Sample

Two villages sampled in Owo forest reserve are Akogun-Ipele and Ajamuleme. They were purposely selected from interior and exterior parts of the forest respectively. Fifty households in each village were randomly selected and classified as follows: upper class, (highly rich), middle class(fairly rich) and lower class (poor) using the type and nature of their buildings along side with their monthly income for social and economic grouping. Households with monthly income of thirty thousand naira and above and with their houses built of blocks cement were classified as upper while households with monthly income between twenty thousand and thirty thousand naira with their houses built with mud and plastered with cement were classified as middle class (fairly rich) and households with monthly income between ten thousand and twenty thousand naira with houses built with mud without plaster as lower class (poor)- Forest products found in the two selected villages are shown in Table 1.

Table 1: Non-timber forest products found and specifically collected for the purpose of this study

General Names	Yoruba Names	Local Names	Scientific Name	Uses
Bitter gourd	Aghun	Agbon	Alstonia	Medicinal
Grasshopper	Elete	Akuta	Zonorecerus verigatus	Food
Mushroom	Olu	Isese	Agarricus bisporus	Food
Mango	Mango	Mango	Mandingo spp	Food
Bush mango	Ogbono	Apipan	Irvingia gabonensis	Food
African star apple	Agbalumo	Osan katanpa	Chrysophyllum albidun	Food
Snail	Igbin	Ugben	Archantina margnata	Food/Medicinal
Bamboo	Oparun	Efooro	Oxtenanthera albyssisica	Food, shelter, craft, medicinal
Pawpaw	Ibepe	Ibanyin	Carica papaya	Food, medicinal
Grasscutter	Oya	Ewuju	Thryonomys swinderiques	Food, medicinal
Butterfly	Labalaba	Aluweluwe	Anaphe venata	Food
Honey bees	Oyin	Oyin	Apis mellifera	Food, medicinal
Bitter leaves	Ewuro	Ewuro	Vemonia amyadalna	Food, medicinal
Bread Fruit	Keerebutu	Bembutu	Artocarpus cummunis	Food
Neem	Donyoyaro	Dongoyaro	Azadirachta indica	Medicinal
Palm tree	Ope	Ope	Elaeis guineensis	Wine, craft, medicinal
Raphia palm	Ogoro	Ope(ope ogoro)	Raffia hookeri	Wine, craft for roofing
Walnut	Awusa	Ewusa	Tatracpidium conophrum	Food medicinal
Kola nut	Obi	Obi	Cola nitida	Food, medicinal
Bitter kola	Orogbo	Urogbo	Garcinia cola	Food, medicine
Ewe Iran	Ewe iran	Ewe iran	Thanumatococus danielli	For wrapping, food
Rabbit	Okete	Ewusa	Orycyolagus caniculus	food
Fuel wood	Igi idana	Igi udana		For cooking
Chewing stick	Orin	Pako		As brush

As tabulated in Table 1 above, some of the non-timber forest products, NTFPS, were specifically meant for food, used as medicine, for craft work and for roofing construction. Three categories of people were fully involved in the collection, processing and marketing of NTFPs. NTFPs under collections: nearly all NTFPs are collected from their natural habitat.

NTFPs under processing: palm tree, palm fruit, palm wine, broom, basket, cage and palm oil.

NTFPs under marketing: mushroom, bush mango, palm wine, kola and bush meat. The age of those that are fully involved in the business of NTFPs ranged between 35 years and above as indicated in the study.

Table 2: Involvement of Respondents in the collection, processing and marketing of NTFPs at Akogun-Ipele community.

NTEPS	Collector Frequency %		Processors %		Marketers Frequency %	
Snail	24	9	0	0	11	6.1
Bush meat	32	12	16	12	24	13.3
Insect	04	1	0	0	0	0
Palm oil	40	15	46	35	22	12
Fuel wood	36	13	0	0	3	1
Honey	8	3	3	2	5	2
Kola nut	38	14	14	11	27	15
Palm wine	10	4	9	7	25	14
Bush mango	36	13	39	29	38	21
African star apple	7	2.5	0	0	1	5.5
Chewing stick	5	1	5	4	2	1.1
Mush room	30	11	0	0	14	7
Others	4	1.5		0	5	2
Total	274	100	132	100	180	100

Table 3: Involvement of Respondents in the collection, processing and marketing of NTFPs at Ajalumeme Community.

NTEPS	Collector Frequency %		Processors %		Marketers Frequency %	
Snail	26	9	0	0	11	7
Bush meat	35	12	20	19	28	17.9
Insect	5	2	0	0	0	0
Palm oil	43	15.3	46	43	22	14
Fuel wood	42	15	0	0	3	1
Honey	9	3.2	1	1.1	2	1.2
Kola nut	30	11	24	22	33	21
Palm wine	9	3.2	3	2.8	11	7
Bush mango	34	12	12	11	28	7.9
African star apple	9	3.2	0	0	8	5
Chewing stick	6	2.1	1	1.1	0	0
Mush room	33	12	0	0	10	6
Others	0	0	0	0	0	0
Total	280	100	107	100	156	100

Table 4: Respondents average age and their involvement in NTEPs business

Community	Age	Collectors frequency %		Processor frequency %		Marketers %	
Akogun-Ipele	12-25	1	5.55	5	31.25	3	15
	25-35	3	16.66	2	12.5	7	35
	35 above	14	17.77	9	56.25	10	50
	Total	18	50	16	100	20	100
Ajalumeme	12-25	4	18.18	4	22.22	1	66.67
	25-35	1	4.54	3	16.67	5	33.33
	35 above	17	77.3	11	61.11	9	100
	Total	22	100	18	100	15	100

Table 5: Male/Female Respondents involvement in NTFPs business Community Sex Collector

Community	Sex	Collectors frequency %		Processor frequency %		Marketers %	
Akogun-Ipele	Male	8	36.3	3	25	3	23.1
	Female	14	63.7	9	75	10	76.9
	Total	4	50	6	100	20	100
Ajalumeme	Male	4	13.3	2	12.5	2	15.4
	Female	26	86.7	14	87.5	11	84.6
	Total	30	100	16	100	13	100

Higher percentages of females as against lower percentage of male were fully involved in the collection, processing and marketing of NTFPs in both communities as showed in Table 5 above.

For Akogun-pele community, 63%, 75% and 76% were female who are involved in the collection, processing and marketing as against 36%, 25% and 23% that are males. For Ajalumeme, 86%, 87% and 84% were females who are also involved in the collection and processing of NTFPs while 13%, 12% and 15% were males with lower percentage. The result of this study shows that all NTFPs, found in this study, are not limited to a particular ecological zone but it can be found all over Nigeria and the world at large.

All NTFPs found in the study area are neither mangrove nor savanna based but they are forest based. Seasons in Nigeria have direct influence over some seasonal categories of NTFPs and they are obtainable throughout the year, while some are seasonal e.g insects, birds, reptiles and mammals. Falconer (1990) noted that the abundance of some of the NTFPs varies with Season which agree with the finding of this study. This finding also agrees with Ipinjolu et al (1988) in Sokoto that more abundant forest products are available during the rainy season than in the dry season. With the result obtained in the study, collection, processing and marketing of NTFPs are done by the elderly people in the study area while the younger ones are fully engaged in education, subsistence farming and machine riding business popularly called "Okada".

NTFPS plays important roles in the live of rural dwellers which agrees with Shackton and Sheona (2004): Females are highly engaged in collection, processing and marketing of NTFPs than males which agree with IFAD (2001) findings. As observed in this study males move to urban cities to look for white collar jobs while women are comfortable with their local business in the two communities.

Conclusion

Non-timber forest products play vital roles in the development and survival of rural dwellers in both communities. Both old and young, rich and poor benefit immensely from NTFPs. This may not be statistically recorded in the government gazette at all levels, NTFPs brings about employment among the rural dwellers most especially within the females and this help to check rural-urban drift.

Since reasonable numbers of people in the study areas rely much on NTFPs cultural techniques for propagation and development of a wider range of NTFPs should be developed through extensive research with proper record to show population growth in rural areas, NTFPs available and consumption rate.

Recommendations

Really, mass production of NTFPs through forest policy in Nigeria has not been fully achieved. It is therefore recommended that:-

1. Awareness campaign can be made through seminars and workshops to the rural dwellers on the importance of NTFPs.
2. To minimize deterioration and spoilage, government should assist the rural community dwellers in devising suitable storage gadgets for NTFPs.
3. Extension agents should initiate and keep records of all available NTFPs relation to the collection, processing, marketing and rate of consumption

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