



UTILIZATION PATTERN OF NON-TIMBER FOREST PRODUCTS BY RURAL HOUSEHOLDS IN KOGI STATE, NIGERIA

Akomolafe, S. K. and Alfred, S. D.

Department of Agricultural Extension and Communication Technology,
Federal University of Technology, Akure
Corresponding Author's Email: chrisbabafarm70@gmail.com, GSM: 08062846211

ABSTRACT

The study examined the utilization pattern of non-timber forest products by rural households in Kogi State, Nigeria. The objective of the study was ascertain the socio-economic characteristics of the respondents and utilization pattern of NTFPs in the study areas. Multi-stage sampling procedure was used to select sixty respondents for the study. Descriptive statistics such as frequency, percentage and mean were used to analyzed the data that were gathered for this study. Most respondents were within the age group of 47 to 57 years (51.7%), followed by 36 to 46 years age group (26.7%). The respondents were still in their active and productive ages with larger percentage of them having one form of education or the other. The NTFPS collected by the respondents in the study area were fuel wood (mean=2.93), tree poles and Bamboo (mean=2.92 respectively), and medicinal plants (mean=2.88) had high utilization pattern in the study area. The study concluded that fuelwood, seasonal vegetables, medicinal plants and bamboo among others were the major NTFPs in the study area. It also concluded that the usage pattern of these NTFPs were high, this could enhance food security and sustainable livelihood in the study area. The study recommended that stakeholders and policymakers should consider NTFP sector in forest conservation measures that could meet the needs of forest-dependent communities.

Keywords: Utilization, Patterns, Non-timber, Products, Rural, Households.

INTRODUCTION

By providing cash income, food security, health care, nutrition, and other social and cultural ecosystem services, non-timber forest products (NTFPs), or any product or service other than timber but including wood products, like those used for woodcarving or fuel, have had a major impact on improving people's quality of life globally over the past few decades (Shackleton and Shackleton, 2004; CIFOR, 2011; Shackleton et al., 2011; Endamana et al., 2016; Ojea et al., 2016. Furthermore, NTFPs provide the subsistence fuel requirements of people who live in and around forest regions worldwide (Kim et al., 2008; Heubach et al., 2011; Pengelly and Davidson-Hunt, 2012). Furthermore, NTFPs are frequently viewed as a security measure to cover any gaps in the event of an emergency or agricultural shortage (Shackleton and Shackleton, 2004; Dash and Behera, 2013). Investigations According to several research (Angelsen et al., 2014; Steele et al., 2015; Mugido and Shackleton, 2019), the value of NTFPs per hectare may be more than that of timber worldwide; nevertheless, these findings have not gotten the attention they deserve in terms of NTFP management and conservation (Suleiman et al., 2017). Despite the significance of NTFPs and their role in improving rural lives in Nigeria, there are still numerous issues with accurately estimating their revenue as a means of enhancing livelihoods. Because many developing nations lack a regular and comprehensive national data collection system, the function of NTFPs in livelihood improvement has not been thoroughly investigated. Since NTFPs are now widely regarded as a vital tool for sustainable and economic growth, professional attempts to assess their economic potential are being made in a methodical manner (Angelsen et al., 2014. Determining the elements that influence the degree of reliance on NTFPs by the local population is necessary to comprehend the socioeconomic impact of NTFPs to rural lives. Understanding the reliance on forest revenue is essential for directing national and local forest use plans. Given this, the study was conducted to examine utilization patterns of NTFPs by rural households.

In this context, the following are the objectives of the study:





- 1. ascertain the socio-economic characteristics of the respondents;
- 2. utilization pattern of NTFPs in the study areas.

MATERIALS AND METHODS

The study was carried out in Kogi State Nigeria, Kogi State is a state in the North Central region of Nigeria (Omole, 2022) bordered to the west by the states of Ekiti and Kwara, (Oluwole, 2022) to the north by the Federal Capital Territory, to the northeast by Nasarawa State, to the northwest by Niger State, to the southwest by the Edo and Ondo States, to the southeast by the states of Anambra and Enugu, and to the east by Benue State. It is the only state in Nigeria to border ten other states. Named for the Hausa word for river (Kogi). Kogi State was formed from parts of Benue State, Niger State and Kwara State on 27 August 1991 (Onyeakagbu, 2021), (NBS, 2021). The state is nicknamed the "Confluence State" due to the fact that the confluence of the River Niger and the River Benue (Ogunyinka, 2021) occurs next to its capital, Lokoja (Mamman and Oyebanji, 2000).

The population of the study comprised of rural households in Nigeria who are engaged in economic activities, vegetation and NTFP activities. The respondents were the household heads.

Sampling Procedure and Sample Size

A multistage sampling procedure was used for this study. The first stage involved the random selection of three local government areas (L.G.A) from the state.

Secondly, two communities were selected from each of the three L.G.A, to make (6) six communities.

The third stage involved the selection of ten (10) respondents from each of the six communities selected, making a total of sixty (60) respondents for the study.

Method of Data Collection

An interview schedule was used to collect relevant information from the respondents with a well-designed questionnaire for the study.

Method of Data Analysis

In order to analyze the data that was gathered for this study, descriptive statistics including frequency distribution, mean values, and percentages were used.

RESULTS AND DISCUSSION

Respondents' Socio-economic Characteristics

Most respondents were within the age group of 47 to 57 years (51.7%), followed by 36 to 46 years age group (26.7%). While the age group of 25 to 35 years contained the least respondents (8.3%). Those in the age of 36 to 57 years constitute main workforce who employ in collection of NTFPs activities. This implies that the respondents were in their active and economic age.

Furthermore, majority (85.0% and 66.7%) of the respondents were married, with the household size of 1 to 5 persons. Given how labor-intensive NTFP activities are, this might increase the amount of labor needed on the farm. As a result, spouses and kids can be used as cheap labor, which could NTFP activities. Also, it was shown that only 15.0% of the respondents had no formal education, while the rest had one form of education or the other. this agrees with the finding of oke *etal* (2023) that a greater percentage of smallholder food crop farmers in Ekiti state are educated, this implies that majority of the respondents were literate, therefore the ability of the majority of the farmers to read is expected to have positive influence on their willingness and capacity towards adopting agro forestry practices.





Table 1: Socio-economic Characteristics of Respondents in the Study Area

Socio-Economic Characteristics	Frequency	Percentage (%) Mean
Age		
25-35	5	8.3
36-46	16	26.7
47-57	31	51.7
>57	8	13.3
Marital Status		
Married	51	85.0
Single	9	15.0
Educational Level		
No formal Education	9	15.0
Primary education	22	36.7
Secondary education	17	28.3
Tertiary education	12	20.0
Household Size (person)		
1-5	40	66.7
6-10	20	33.3

Source: Field Survey, 2024

Utilization Pattern of NTFPs

The results in Table 2 shows that fuel wood (mean=2.93), tree poles and Bamboo (mean=2.92 respectively), and medicinal plants (mean=2.88) had high utilization pattern in the study area. During a discussion with selected respondents, they indicated that some of these NTFPs (bamboo, tree poles, wild honey) collected from the forests are being sold at the local markets to meet the households' needs, while others such as medicinal plants and animals from wildlife hunting were for personal use. Other NTFP that had high utilization pattern in the study area was Teal leaves for food packaging fuelwood (mean=2.81). This agrees with the finding of VIHI, *et al* (2023) that forests are very significant to the livelihood of the rural dwellers and urban dwellers. Government should encourage the effective management of forest resources for sustainability.

 Table 2: Utilization Patterns of Non-Timber Forest Products

NTFP Type	Usage pattern	High F (%)	Moderate F (%)	Low F (%)	Mean
Bamboo	House-building materials, handicrafts, furniture, fuelwood and vegetable.	55(91.7)	5 (8.3)	-	2.92
Medicinal Plants	Curing different types of ailments	53 (88.3)	7 (11.7)	-	2.88
Tree poles	House-building materials, furniture, and fuelwood	55(91.7)	5(8.3)	-	2.92
Fuelwood	Residential and commercial cooking.	56(93.3)	4(6.7)	-	2.93
Teak leaves	Packaging foods and other consumable items	49(81.7)	11(18.3)	-	2.81
Wildlife hunting and poaching	Food for nutritional and medicinal purposes, rituals for festivals, and sale in the market	40(66.7)	12(20.0)	8(13.3)	2.53
Seasonal vegetables	Vegetables and curries food for nutritional and medicinal purpose	50(83.3)	10(16.7)	-	2.83
Wild honey	Food for nutritional and medicinal purposes	36(60.0)	17(28.3)	7(11.7)	2.48

Source: Field Survey, 2024. Weighted Mean Score= 2.79. < 2.79=low, ≥ 2.79=High





CONCLUSION AND RECOMMENDATION

The study concluded that fuelwood, seasonal vegetables, medicinal plants and bamboo among others were the major NTFPs in the study area. It also concluded that the usage pattern of these NTFPs were high, this could enhance food security and sustainable livelihood in the study area. The study recommended that stakeholders and policymakers should consider NTFP sector in forest conservation measures that could meet the needs of forest-dependent communities.

REFERENCES

- Angelsen, A., Jagger, P., Babigumira, R. (2014). Environmental income and rural livelihoods: a global-comparative analysis. *World Development*, **64**(1): 12–28.
- CIFOR (Center for International Forestry Research), 2011. Forests and Non-timber Forest Products. CIFOR fact sheets [2021-05-26]. http://www.cifor.cgiar.org/publications/corporate/factSheet/NTFP.htm
- Dash, M., Behera, B., 2013. Biodiversity conservation and local livelihoods: a study on Similipal Biosphere Reserve in India. *Journal of Rural Development*, **32**(4): 409–426.
- Endamana, D., Angu, K.A., Akwah, G.N., 2016. Contribution of non-timber forest products to cash and non-cash income of remote forest communities in Central Africa. *Int. For. Rev.* **20**(10): 280–295.
- Heubach, K., Wittig, R., Nuppenau, E.A. (2011). The economic importance of non-timber forest products (NTFPs) for livelihood maintenance of rural west Africancommunities: a case study from northern Benin. *Ecol. Econ.* **70**(11): 1991–2001.
- Kim, S., Sasaki, N., Koike, M., 2008. Assessment of non-timber forest products in Phnom Kok community forest, Cambodia. *Asia Eur. Journal*, **6**: 345–354.
- Mamman, A. B. and Oyebanji, J. O. (2000). Nigeria: A people united, A Future Assured. P333
- Mugido, W., Shackleton, C. M., 2019. The contribution of NTFPS to rural livelihoods in different agro-ecological zones of South Africa. For. Pol. Econ. 109, 101983.
- Ogunyinka, V. (2021). "Kogi at 30: The journey so far". Vanguard News. Retrieved 4 November, 2022.
- Ojea, E., Loureiro, M.L., Allo, M. (2016). Ecosystem services and REDD: estimating the benefits of non-carbon services in worldwide forests. *World Dev.* **78**: 246–261.
- Oke, O. S., Ajala, A. O., Adeoye, A. S., Odediran, F. A., Olawale, O. O. and Adara, C. T. (2023). perception of arable crop farmers on agro-forestry practices in selected local government areas in ekiti state, Nigeria *Scientia Africana*, **22**(2): 155-166 © Faculty of Science, University of Port Harcourt, Printed in Nigeria.
- Oluwole, J. (2022). "Terrorists' Threat: Ekiti, Kwara reach agreement on boundary patrol". *Premium Times Nigeria*. Retrieved 4 November, 2022.
- Omole, A. (2022). "Kogi Recieves First Allocation as Oil-producing State". Retrieved 4 November, 2022.
- Onyeakagbu, A. (2021). "See how all the 36 Nigerian states got their names" *Pulse.ng.* retrieved 4 November, 2022.
- Pengelly, R. D., Davidson-Hunt, I., 2012. Partnerships towards NTFP development: perspectives from Pikangikum first nation. *Journal of Enterprising Communities People Places Glob. Econ.* **6**(3): 230–250.
- Shackleton, C., Shackleton, S., 2004. The importance of non-timber forest products in rural livelihood security and as safety nets: a review of evidence from South Africa. *South Afr. J. Sci.* **100**, 658–664.
- Shackleton, S., Shackleton, C., Shanley, P., 2011. Non-Timber Forest Products in the Global Context. Springer, Heidelberg
- Steele, M. Z., Shackleton, C. M., Shaanker, R. U., 2015. The influence of livelihood dependency, local ecological knowledge and market proximity on the ecological impacts of harvesting non-timber forest products. *For. Pol. Econ.* **50**: 285–291.
- Suleiman, M. S., Wasonga, V. O., Mbau, J. S., 2017. Non-timber forest products and their contribution to households income around Falgore Game Reserve in Kano, Nigeria. Ecol. Process. 6, 23 30.
- VIHI, SK; SELZING, PM; JESSE, B; ADENIYI, FO.2023 Assessment of Non-Timber Forest Products Utilization and its Contribution to Household Income among Farmers in Quan' Pan Local Government Area of Plateau State, *Nigeria J. Appl. Sci. Environ. Manage.* 27(12): 2799-2808.