

Original Research Article

ASSESSMENT OF INCOME GENERATION FROM NON-TIMBER FOREST PRODUCTS IN AWKA-NORTH LOCAL GOVERNMENT AREA OF ANAMBRA STATE, NIGERIA

ABSTRACT

Non-Timber Forest Products are important sources of income that can supplement farming and/or other activities to the rural dwellers. In spite of this, its potential to improve the standard of living and generate income to rural dwellers has not been known in Awka-North Local Government Area. The study was carried out from January to August, 2017. The study identified the variety of non-timber forest products (NTFPs) available to rural households, the level of income generated by households from these available Non-timber forest products and constraints to Non-timber forest products collection in the study area. Three towns; Achalla, Amansea and Mgbakwu were selected using multi-stage random sampling technique. A total of 100 copies of structured questionnaires were administered to obtain information from respondents who engaged in Non-NTFPs based activities in the selected towns. Data collected were analyzed using descriptive statistics and 5-point Likert Type Scale. The study revealed that fish, snail, bush meat, spices, firewood, fruits, seeds and nuts, vegetables and honey are the Non-timber forest products available to the rural dwellers. Monthly income of ₦61,000 and above was generated by the rural dwellers who engaged in NTFPs sales. Lack of marketing, bush burning, deforestation, NTFPs scarcity, over exploitation, transportation, bad road network, distance from forest, market price of other products and unfavourable government policies are the constraints confronting the respondents in the collection of Non-timber forest products in the study area.

Keywords: Forest, Non-Timber Forest Products, Assessment, Income generation

1. INTRODUCTION

Forest is a web of life; a dynamic, ~~constantly~~ constantly changing community of living things- from the subsoil to the canopy, a forest is much more than its trees. Forest comprises timber and non-timber forest products. Non-timber forest products (NTFPs) are plants and plant materials used for food, fuel, storage fodder, and medicine etc [1]. The importance of local, regional, national, and international trade of Non-timber forest products can significantly contribute to community and household economies. However, little is known about NTFPs, their collection, utilization, and marketing in Awka-North Local Government Area (LGA) despite their great potential to positively affect communities and households.

The extraction of Non-timber forest products has multiplier effects in the economy by generating employment and income in processing and trading activities. However, depletion of Non-timber forest products on account of indiscriminate exploitation, deforestation ~~and forest~~ and forest degradation have a

major issue of concern that may affect the NTFPs based livelihood and economics. It has been established from previous research works that a significant number of rural, tribal and overall forest dependent communities derive a significant part of their food, nutrition, health-care needs and income from Non-timber forest resources. However, in Awka-North Local Government Area, Anambra State, it has not been established if the communities and rural households are dependent on Non-timber forest products for their income and nutrition and hence, its livelihoods require some focused intervention on Non-timber forest products.

The Assessment of Income Generation from Non-timber forest products in Awka-North L.G.A was carried out to identify the forms of Non-timber forest resources available to rural households in the study area, to determine the level of income generated by households from Non-timber forest resources, to identify constraints to Non-timber forest resources collection in the study area and with view of enhancing the standard of living of the rural households.

2. METHODOLOGY

2.1 Study Area

Awka-North is a Local Government Area in Anambra State, South eastern Nigeria and lies approximately between longitude 7°10' E and 7°16' E and latitude 6°15' N and 6°25' N of the Equator. Awka-North Local Government Area in Anambra State is predominantly inhabited by the Ibos. It is 90 m, 295.28 ft, in height above sea level and has its Headquarters at Achalla. The total population of the inhabitant of Awka North Local Government Area is 112,192 (2006 census). Towns that make up the local government are Awba, Ofemili, Ugbene, Ebenebe, Achalla (the capital), Urum, Amansea, Amanasa, Amanuke, Isu-Aniocha, Mgbakwu, and Ugbenu. The major occupation of the inhabitants in Awka-North L.G.A is farming. The natural vegetation of the area is tropical dry or deciduous forest, which, in its original form, comprised tall trees with thick under growth and numerous climbers.

2.2 Data Collection

In this study, multi-stage random sampling technique was used to select the towns investigated for NTFPs in Awka North L.G.A. The towns selected include Achalla (capital), Amansea and Mgbakwu. A market was purposively selected from each of these three towns because of the size of the markets. A total of 100 constructed questionnaires were administered in this study. Forty (40) respondents were randomly selected from Achalla (capital) because of high number of population while 30 respondents were randomly selected each from Amansea and Mgbakwu. Data for this study were obtained using structured questionnaires. Information obtained includes Non-timber forest products available to households, the level of income generated by households and constraints to NTFPs collection in the study area. The research survey focuses on the value of NTFPs to the livelihood of the rural dwellers.

Comment [BA1]: Find out the population growth rate and extrapolate to 2020

2.3 Data Analysis

The data collected were carefully organized and analyzed (research question one and two) using descriptive statistics while research question three was analyzed using a 5-point Likert Type Scale. The results were presented using frequency tables, percentage and mean.

Comment [BA2]: What are they?

3. RESULTS AND DISCUSSION

3.1 Non-timber forest products available rural household in the study area Research Question 1

What are the Non-Timber Forest Products available to rural household in Awka-North LGA?

Table 1 shows that fish, snail, bush meat, spices, firewood, fruits, seeds and nuts, vegetables and honey are some of the Non-timber forest products available to the rural household in Awka-North Local Government Area. Based on this, it can be seen that the aforementioned are the NTFPs available to rural household in Awka-North LGA. This is in agreement with [2] report who stated that Non-timber forest products are wild plant and animal products harvested from the forest, such as wild fruits, seeds, nuts, edible roots, honey, bush meat, snails, firewood, spices, vegetables, fish, palm, medicinal plants and so on, which Nigerians engage in collection and selling of these NTFPs as a means of livelihood. [3] also noted that ~~firewood~~firewood, which is one of the non-timber forest resources, is the dominant fuel used by rural dwellers in tropical African countries mainly because it is cheaper or socially more acceptable to rural people than other forms of fuel. It therefore implies that, many of the rural dwellers in Awka-North LGA of Anambra State depend on these available non-timber forest products for their livelihood and well-being.

Table 1: Non-timber forest products available rural household in the study area

S/N	Non-Timber Forest products Available
1	Fish
2	Snail
3	Bush meat
4	Spices
5	Firewood
6	Fruits, seeds and nuts

- 7 Vegetables
- 8 Honey

3.2 Level of Income generated by households from Non-timber forest products in the study area
Research Question 2

What is the level of Income generated by households from Non-timber forest products in the study area?

Table 2 shows that 42 of the respondents generated income of ₦81,000 and above monthly from the sale of Non-timber forest products, 23 of the respondents generated income of ₦61,000 - ₦80,000, 18 of the respondents generated income of ₦41,000 - ₦60,000, 10 of the respondents generates income of ₦21,000 - ₦40,000 and 7 of the respondents generates income of ₦0 - ₦20,000 monthly from the sale of Non-timber forest products in the study area. Based on the results, it can be seen that majority of the rural household generated income of ₦61,000 and above monthly, from the sale of Non-timber forest products. This shows that NTFPs sales yield more income monthly to the rural dwellers which in turn helps to reduce the level of poverty and improve the standard of living of the people of Awka-North LGA. This result agrees with [4] who reported that NTFPs could serve as source of wealth creation and consequently aid poverty alleviation, considering the socio-economic level of most inhabitants of rural areas who earn meager income, gathering and sales of NTFPs is one of the ways by which they can generate additional revenue. This finding is also in line with the research study reported by [5] that Non-timber forest products contribute about 33% to household income for participating households, on average. This therefore, implies that the sale of NTFPs play an important role in poverty alleviation and in supporting rural livelihoods in Awka-North LGA.

Table 2: Level of Income generated by households from Non-timber forest products in the study area

S/N	Range of monthly income (₦)	Frequency	Percentage of Respondents
1	0 - 20,000	7	7%
2	21,000 - 40,000	10	10%
3	41,000 - 60,000	18	18%
4	61,000 - 80,000	23	23%
5	81,000 – Above	42	42%

Comment [BA3]: What is the mean income?

3.3 Constraints to Non-timber forest products collection in the study area ~~Research Question~~

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What are the constraints to Non-timber forest products collection in the study area?

Table 3 shows that the respondents agreed with seven out of the ten constraints presented to them. The mean responses for the seven agreed constraints range from 4.61 to 3.51 while those for the disagreement range from 3.41 to 3.10. Based on the result, it can be seen that lack of marketing, bush burning, deforestation, NTFPs scarcity, over exploitation, transportation, bad road network, distance from forest, market price of other products and unfavourable government policies are the constraints to Non-timber forest products collection.

This finding agrees with [6] who found that a number of factors, including unfavourable government policies, non-destructive harvesting, destruction of natural habitats, bushfires, population growth and high demand, are hindering the collection, use and development of NTFPs. This result is also supported by [7] who reported that marketers of NTFPs are faced with a number of constraints and that one of the major constraints is poor feeder roads. This shows that the availability and market of NTFPs in Awka-North LGA is constrained by the agreed factors.

Table 3: Constraints to Non-timber forest products collection in the study area.

S/N	Constraints	Weighted	Mean (\bar{X})	Remark
1	Lack of marketing		3.41	Not Agree
2	Bush burning		3.51	Agree
3	Deforestation		4.20	Agree
4	NTFPs Scarcity		4.61	Agree
5	Over Exploitation		3.21	Not Agree
6	Transportation		3.10	Not Agree
7	Bad road network		3.53	Agree
8	Distance from forest		4.02	Agree
9	Market price of other products		3.77	Agree
10	Unfavourable government policies		4.13	Agree

4. CONCLUSION

Based on the findings, it can be concluded that fish, snail, bush meat, spices, firewood, fruits, seeds, nuts, vegetables, and honey are the Non-timber forest products available in the study area which is a source of food to the rural households and a means of improved standard of living and well-being. Majority of the rural households generate income of ₦61,000 and above from the sale of Non-timber forest products and this helps to improve their standard of living and aid poverty alleviation.

The constraints to Non-timber forest products collection include lack of marketing, bush burning, deforestation, NTFPs scarcity, over exploitation, transportation, bad road network, distance from forest, market price of other products and unfavourable government policies. This affects the availability and market of Non-timber forest resources to the rural dwellers. Forest and forest reserve areas should be made more accessible to the rural households and laws governing forest reserve areas be reviewed and made flexible so that rural dwellers in Awka-North LGA can benefit from the available Non-timber forest products. Interventions aimed at increasing rural incomes through extraction and sale of Non-timber forest products should be made effective by the Government while also considering the ecological implication of increased NTFPs extraction. Government should develop strategies and policies that guide against deforestation, bush burning, over exploitation and ~~also~~ construct and maintain good road networks to enhance access to rural households and marketers to the forest, markets and areas of collection.

Comment [BA4]: Apart from the government, can self help groups and non-governmental organizations be responsible here?

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Comment [BA5]: References should not be more than 10 years till date

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