

THE CONTRIBUTIONS OF NON-TIMBER FOREST PRODUCTS (NTFPs) TO RURAL COMMUNITY EMPOWERMENT IN GASHAKA-GUMTI NATIONAL PARK, TARABA STATE, NIGERIA



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Abstract: The increasing empowerment of rural dwellers through the harvesting and processing of various non-Timber Forest Products (NTFPs) has attracted more participants in the industry. This paper therefore examined the contributions of NTFPs to household income of communities living in Gashaka-Gumti National Park. 100 structured questionnaires were distributed to the communities living in Gashaka-Gumti National Park and 95% were retrieved. Data collected included among others the socio-economic characteristics of the rural community, quantity and type of non-timber forest products harvested and processed income per month and uses. Interview method and focus group discussion were equally used to complement the data for this study. The data generated were analyzed using descriptive statistical tools such as means, frequencies and percentages. The economic tool used is Net Income (Gross Income G₁ less Gross Cost G_c). The result of the study shows that NTFPs contributes significantly to household income of the inhabitants of Gashaka Gumti thereby augmenting the much needed rural empowerment.

Keywords: Gashaka Gumti National Park, Household income, Non-Timber Forest Products.

Introduction

Without ambiguity, rural people are persons living in rural areas as individuals or families. They may be small scale farmers, fishermen, craftsmen, artisans, herdsmen, etc. They may also be migratory population settling temporarily in an area. Even though some activities of the urban area can also be seen in the rural area and vice versa, rural people differ from urban societies in their kinship and family structures. Rural families are generally large and more extended than those in urban center. The rural sector occupies a strategic position in the economy of Nigeria, because it provide employment to about 70 percent of the nations labour force and provides 90 percent of the food marketed and consumed in Nigeria(Amadi *et al* 2005).

Majority of the rural poor adults are illiterate, their children may go to school for some time and drop early. Chambers, (1983) submitted that the household of the poor has few assets: The hut is made of woods, bamboos, mud, grass reeds, palm fronds or hides and has little furniture: Mats or hides for sleeping, few cooking pots, and few tools. In some circumstances, there are no toilets. Clothes are few and worn until they are very old. Food or cash obtained meet only immediate needs and are soon used up. All family members work when they can on the land except the very young, the very old, the disabled and those who are seriously sick.

There is a high level of dependence on able bodied adults. Nigeria is presently confronted with the problem of reducing rural poverty. Indicators of poverty include low income, lack of food and water, poor health, environmental and housing facilities among others. Francis et al (1996) stated that the incidence of poverty in Nigeria in 1992 was 34 percent with 16 percent of the population suffering extreme poverty. Inequality had also increased so that the poorest 17 percent of households were actually worse off. In 1992, rural areas accounted for 66 percent of the incidence of poverty, and 69 percent of the extreme poor. The incidence of poverty was highest in the northern agro-climatic zone, at 45 percent, compared with the middle and southern zones at 38 and 24 percent, respectively. Harvesting, utilization and processing of Non Timber Forest Products (NTFPs) have the potential of increasing rural income thus boosting the interest of rural

dwellers to encourage forestration. NTFPs are vital in terms of basic livelihoods areas such as fuelwood, protein, medicines and raw materials. It also has important place in the cultural and social values for forest communities. Moreover the sales of NTFPs in rural and urban communities provide economic growth to rural dwellers. The people who depend on NTFPs are the rural poor whose well-being can fluctuate widely, characterized by extremely low income and large family size. These rural poor meet small needs by selling or mortgaging assets such as land, livestock, tools, trees, jewelry, standing crops or future labour. The wealth from NTFPs are used both as food and to improve income.

Gashaska-GumtiNational Park is endowed with about 97 different types of NTFPs (Zaku, 2013). NTFPs refer to all biological resources, products and services which are harvested from the forest ecosystem for subsistence and trade. The term NTFPs is used inter-changeably with terminologies such as minor forest products, secondary forest products, non-wood forest products etc. NTFPs are important in a number of ways such as food, feeds, energy, cultural value, economic gains, craft for local tools and technology etc. The gathering of NTFPs is as old as man himself. The early man was a wonderer, hunter and a gatherer of wild nuts, fruits and berries. NTFPs contribute to household self sufficiency, food security, income generation, accumulation of savings and risk. These minimization are important in filling seasonal or other food or income gaps by providing abuffer in time of hardship or emergency. It is an activity of last resort that often presents an opportunity for improving household income and food security. This corroborates the findings of Adekunle, (2009) that, it is very common to have a large family in Nigeria in order to supply farm labour and to assist in the collection of Minor forest product for family consumption.

The role of NTFPS

Irag (1986) saw the rural poor as a mixed group whose well-being can fluctuate widely. A good crop yield, or a chance to work on a nearby road project may push a poor family's income to the point where they can buy a plough with a metal blade or some clothing for the children, but

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two years of inadequate rain or a bout of illness may cost them their land or livestock. Hence, all rural poor are characterized by extremely low income and large family size, live in rural areas or urban slums in crowded conditions, economic vulnerability due to variability in climatic conditions. As much as 80 percent of the poor people's income is consumed as food, consisting mainly of carbohydrates with few vegetables, meat or fish.

According to Alison (2007), NTFPs provide a wealth of resources for both rural and urban dwellers throughout Central Africa. These include foods, medicines, construction materials, fuelwood, as well as resources of spiritual and cultural significance. These are important in improving livelihood security. They may provide one of the main sources of food (for example, for Pygmy peoples when they are based in the forest (Ichiakawa, 1993), or they may provide a safety net in times of agricultural shortage (Ndoye and Tieguhong, 2004). The wealth of forest resources that are used as food also provide valuable source of nutrients, particularly for the poorest sectors of society and in times of shortage, for example, prior to the agricultural harvest. As a source of medicine, NTFPs provide the basis of healthcare for the vast majority of the region's population for whom western medicines are unavailable or too expensive. In addition, a large proportion of the population use forest resources to build houses, tools and other implements, and the majority of households use wood or charcoal for cooking. as well as meeting subsistence needs, many of these resources are traded, and so provide a valuable source of income.

NIFPs are often collected and traded by women, and so help to increase their livelihood security and economic status. Women dominate the collection and trade of many products, such as Gnetum and caterpillars, while men are more involved in the harvest of higher value products, for example rattans, bushmeat and pharmaceutical products. Some NTFPs do provide a valuable income for many and can, in certain circumstances, help to reduce poverty. Even where they do not enable people to get out of the poverty trap, they may be crucial as a safety net and to improve livelihood security.

Despite the use and importance of NTFPs in Nigeria, forest regeneration is not encouraging and it hoped that this work in concomitance with others will make all tiers of Nigerian government to consider their negative stand on forest regeneration and development. The objective of this study is therefore to find out the various NTFPs being harvested and processed by the inhabitants of Gashaka Gumti National park and the extent the local industry has enhanced their local income.

Materials and Methods

Gashaka-Gumti National Park lies between latitude $6^{0}55$ 'N and $8^{0}05$ 'N, longitude $11^{0}11$ 'E and $12^{0}13$ 'E of the equator. The park is situated in Taraba State of Nigeria. The inhabitants of the area are predominantly farmers, craftmen, hunters and traders. Questionnaires sourcing data on socio-economic characteristics of the Gashaka Gumti dwellers, NTFPs harvested, quantity, income per month, number of persons in the industry, were distributed to the inhabitants of Gashaka Gumti National Park to extract data. Interview method and Focus Group Discussion were also used to complement the data for this study. The data generated was analyzed using descriptive statistical tools such as means, frequency and percentages. The economic tool used is Net Income (Gross Income G₁ less Gross Cost G_c) (Olukosi and Isitor, 1990).

Result and Discussion

The list of NTFPs available in Gashaka Gumpti Area is given in Table 1 while the socio-economic characteristics of the respondents are shown in Table 2. Out of the whole respondents, 32% were males while 68% were females. Women are vital to the success or failure of the family. They participate, actively supporting family income through harvesting of NTFPs in the study area. The married respondents consisted of 84% and must be in the industry as one of the means of supporting their family income. In the same vein, those with large family size were also involved more in the harvesting and processing of NTFPs as a means of augmenting household income. There is no much difference in educational status of the people involved in the collection and processing of NTFPs. Therefore educational qualification is not a prerequisite for collection and processing of NTFPs. Occupationally, Farmers, Civil Servants and Fishermen were involved more in the collection and processing of NTFPs than traders and artisans. Farmers found it easier to combine the industry with their farming activities, Civil Servants use the industry as part-time activities while traders and Artisans find it difficult to combine.

Table 1: List of Some NTFPs in Gashaka Gumti National Park

le 1: List of Some NTFPs in Gashaka Gumti	Nationa
NTFPS	
Bush meat	
Fish	
Honey	
Basketry	
Palm wine	
Medicinal plants	
Fruits/nuts	
Insects	
Mushroom	
Charcoal	
Ropes	
Palm oil	

Table 2: Socio-Economic Characteristics of Respondents				
Variables	Frequency	Percentages		

Variables	Frequency	Perce
	Gender	
Male	30	32
Female	65	68
Total	95	100
Μ	arital Status	
Single	15	16
Married	80	84
Total	95	100
Age		
20-40	35	37
41-60	45	47
61 & Above	15	16
Total	95	100
EH	ousehold Size	
1-4	35	37
5-8	45	47
9 & Above	15	16
Total	95	100
Educ	cational Status	
Quaranic/Arabic	20	21
Primary	40	42
Secondary	25	26
Tertiary	10	11
Total	95	100
(Occupation	
Farming	55	58
Civil Servant	15	16
Trading/Business	5	5
Artisan	5	5
Fishing	15	16
Total	95	100
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Source: Field Survey 2013

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Table 3 shows various level of income generation from the sales of NTFPs. A collector is able to make additional annual income of ¥102,000 (\$514) from sales of 144 Pick-up vans of fuelwood. In the production of charcoal, an additional annual net income of N95,600 (\$488) can be generated. The craftsmen producing mortar and pestle, farm implements and baskets make additional income of ₦96,000 (\$480). In the same vein, the Palm Wine Tappers likewise makes an income of ¥384,000 (\$1,920) annually from the sales of about 2000 liters of the product. In the production of cattle sticks, a person that produces 2000 cattle sticks in a month will make a net income of ₦120,000 (\$600). In palm oil production, a person that produces 2000 liters will get N192,000 (\$960) at the end of the year. Problems encountered by the respondents in the industry include, long trekking distances, bad rural road networks, park legislation officials, processing facilities and market trade unions. However all the respondents agree that their family income is enhanced through the collection and processing of NTFPs.

 Table 3: Annual contributions of selected NTFPs to household income

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Annual Quantity of NTFPs harvested	Gross Cost (N,000)/(\$)	Gross Income (N,000)/(\$)	Net Income (N,000) /(\$)
Fuelwood			
144 pickup vans	216.0/1,080	318.9/1,594.5	102.9/514.5
Charcoal production			
240 bags of charcoal	115.2/576	196.8/984	95.6/488
Craft			
100 Mortar & Pestle	120.0/600	216.0/1080	96.0/480
200 Farm implement	480.0/2,400	840.0/420	360.0/180
handles	96.0/480	144.0/720	480.0/2,400
200 Mats and baskets			
Palm wine			
2000 litres of palm	576.0/2,880	960.0/4,800	384.0/1,920
wine			
Cattle sticks			
2000 cattle sticks	240.0/1,200	360.0/1,800	120.0/600
Palm oil production			
160 litres of palm oil	288.0/1,440	480.0/2,400	192.0/960
Rope	,	<i>,</i>	
40 Bundles of Rope	240.0/1,200	360.0/1,800	120.0/600
Source: Field Surve	v 2013		

Source: Field Survey 2013

The findings of this study is in line with Shrivastava (2009) who stated that the use of NTFPs is as old as human civilization as source food, fodder, fibre, medicine, cosmetics and local crafts and 350 million people living in or near dense forests depend highly on it for their subsistence or livelihood both for their own consumption and income generation. On the other hand, Alison (2007) observed that markets in NTFPs are often hampered by poor infrastructure, storage and lack of market information. NTFPs Producers face challenges in the lack of organization into viable trading entities, lack of credit and investment opportunities and they are often victims of many types of informal taxes (Alison, 2007).

Conclusion

The result of the study indicates that majority of the inhabitants of Gashaka-Gumti National Park are involved in NTFPs harvesting, processing and trade. This is an indication that NTFPs contributes to household income and this agrees with the findings of Okafor (1994) which

states that, the gathering and selling of forest products is a major economic activity of the rural populace.

The inhabitants of Gashaka-Gumti National Park should form themselves into co-operative organizations such as forest products collectors, co-operative group and buyers co-operative group and should register with the National Park Service and should be charged token fees per quantity of NTFPs collected and their activities supervised by the Park management. This implies that if one is not a member, he cannot collect or harvest or buy NTFPs and since they are charged token fees per quantity of NTFPs collected, this will spur them not to allow a non-member, or non-contributor to harvest or buy NTFPs and since they are living together, it becomes easier to apprehend intruders and this will cushion over-exploitation since they are under close watch.

Having established that majority of the rural populace depend on NTFPs for livelihoods and income generation, disappearance of forests is a signal of danger to the livelihood and economic well being of the rural people. The government should then create an enabling environment for the various departments of forestry to embark on reforestation and forest development programs.

References

- Adekunle VA 2009.Contributions of agroforestry practice in Ondo State, Nigeria, toEnvironmental sustainability and sustainable agricultural production. *Afrika Focus*, 22(2): 27-40.
- Alison LH 2007. The use of non timber forest products in the Congo basin, constraints and opportunities. *The Rainforest Foundation*, London.
- Amadi DCA, Dishan EE, Jatau DF &Tella IO 2005. Rural development through participatory forest regeneration strategy. In:*Towards Sustainable Environmental Management*. Joseph Uyanga; Mala Galtima and Mathew Ono. EdtsParacelete Publishers Yola, pp. 52–57.
- Chambers 1983. Rural Development, Putting the Last First. New York: John Wilney and Sons Inc.
- Irag P 1986. Rural Development and the Developing Countries. An Interdisciplinary Approach. Canada: Alger Press Ltd.
- Ichikawa M 1993. Diversity and selectivity in the food of the Mbuti hunter gatherers in Zaire: In: Hiadik *et al.* (Eds), pp. 487-496.
- Francis P, Akinwumi JA, Ngwu P, Nkom SA, Odibi J, Olomajeye JA, Okumadewa F& Shebu DJ 1996. Community and Local Development in Nigeria. Washington DC: World Bank.
- Ndoye O & Tieguhong JC 2004. Forest resources and rural livelihoods: The conflict between timber and non timber forest products in the Congo basin. *Scandinavian J. Forest Res.*, 19(4): 36-44.
- Okafor JC 1994. Selection and improvement of indigeneous tropical fruit trees: Problems and prospects. J. Forestry Res., 1(2) 87-95.
- Olukosi, JO & Isitor SU Introduction to agricultural marketing and prices: Principles and Applications. *Living Books Series*, Abuja.
- Shrivastava MB 2009. Timber Industries and Non-Timber Forest Products.CBS Publishers & Distributors, New Delhi – Bangalore.
- Zaku SS 2013. Utilization of non-timber forest products within the buffer zone ofGashaka-Gumti National Park by the forest edge community. *Ahmadu Bello Uni. J. Vocational Studies*, 7(1): 177-185.

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