



## IMPACT OF CREDIT FACILITIES ON VALUE ADDITION TO SOME SELECTED NON - TIMBER FOREST PRODUCTS IN ORHIONMWON LOCAL GOVERNMENT AREA OF EDO STATE, NIGERIA

\*Omoghie, E.S.<sup>1</sup>, Adeleye, A.S.<sup>1</sup>, Osazuwa, D.K.<sup>2</sup>, Aliboh, U.F.<sup>2</sup> and Simpson, V.B.<sup>2</sup>

<sup>1</sup>Federal College of Forest Resources Management, Fugar, Edo State, Nigeria

<sup>2</sup>Moist Forest Research Station, Forestry Research Institute of Nigeria, Benin City, Nigeria

\*Corresponding Author: [emoghie@gmail.com](mailto:emoghie@gmail.com)

### ABSTRACT

*The study assessed the impact of credit facilities on value addition to some selected Non- Timber Forest Products (NTFPs) in Orhionmwon Local Government Area (LGA) of Edo State Nigeria. A multistage sampling technique was used to determine the sample for the study. Data was collected through structured questionnaire from respondents. The results of the study showed that majority (65.8%) of the respondents were between the ages 31-40 years. The results also showed that 34.2% of the respondents involved in NTFPs specialized in firewood business while a few 9% practiced snail production. Results further revealed that most of the respondents (51.4%) sourced their NTFPs from forest reserve areas while some sourced from the free areas. Chi-square test ( $p>0.05$ ) showed that there was no significant relationship between the personal characteristics of the respondents and the income generated from NTFPs in the study area. It was observed that if respondents (rural dwellers) get credit facilities, their means of livelihood will be better off than it used to be. It was however recommended that community participation should be encouraged in NTFPs business so as to help alleviate poverty.*

**Keywords:** Credit facilities, Impact, Livelihood, NTFPs, Value addition

### Correct Citation of this Publication

Omoghie, E.S., Adeleye, A. S., Osazuwa, D.K., Aliboh, U.F. and Simpson, V.B. (2022). Impact of credit facilities on value addition to some selected non -timber forest products in Orhionmwon Local Government Area of Edo State, Nigeria. *Journal of Research in Forestry, Wildlife & Environment*, 14(1): 135 - 140

### INTRODUCTION

Non – timber forest products (NTFPs) are plants or plant parts that have perceived economic or consumption value sufficient to encourage their collection and removal from the forest. FAO (1990) referred to them as all the resources/products that may be extracted from forest ecosystem and are utilized within the household or are marketed or have social, cultural or religious significance. These include plants and plant material used for food, fuel, storage and fodder, medicine, cottage and wrapping materials, biochemical, as well as animals, birds, reptiles and fishes, for food and

feather. Unlike timber – based products, NTFPs came from a large variety of plant parts and are formed into a diverse set of products: leaves and twigs that may be component of decorative arrangements, food items such as fruits, fungi and juices, wood carved or woven into pieces of art or utilitarian objects and roots, leaves and bark processed into herbal remedies or medicines.

Value is added to NTFPs through processing of the products. This can be done through the use of machines, chemicals and other means. Value addition is important but needs much capital.

The indigenous people and peasant communities may not have what it takes to sustainably add value to NTFPs. This is because value addition may involve huge capital which may not be easily accessible to the rural dwellers. Only recently, however, have they started to form small and medium forest enterprises (SMFEs) to add value to their timber and non – timber forest products (NTFPs).

NTFPs as a major source of livelihood of many people especially in developing countries are paramount both in poverty alleviation and community. Value addition allows for product improvement and increases returns to producers. Credit facilities are important in ensuring the means of value addition which are made available to producers. The effect of credit facilities on value addition on NTFPs in terms of product development and returns to producers is what this research will decipher. It is a general belief that non-timber forest products (NTFPs) play an important role in the livelihood of local communities in and around the forests. These products may be used for subsistence or for sale, providing cash income for predominantly rural dwellers. Past socio-economic studies revealed that the livelihood of poor household still depend on NTFPs from fallow or natural forest relatively than the other groups (Sills *et al.*, 2000; Osman *et al.*, 2000; Dang and Tran, 2006) and that NTFPs act as incentives for more sustainable use of forest and woodland resources (Arnold, 2002).

Also, the existing expertise and knowledge is not well documented or is inaccessible. This means that many are duplicated while many important issues remain neglected. There is equally a lack of appropriate methods and tools to promote sustainable use of NTFPs and successfully regulate trade and form policy i.e. policy development is still largely disconnected from field experiences (Adepoju and Salau, 2007). The inadequacy of information on credit facilities and its contribution to forest product development has created a setback in forestry development. NTFPs when compared with timber products have historically been neglected by governments particularly in Nigeria. The capacity to promote sustainable use of NTFPs

and facilitate increased financial benefits to local users as incentives for forest conservation is consequently low. There are yet gaps in understanding the range of products used from forests, their taxonomic classification, socio-economic values, technical packages and the policy contexts for their sustainable use (Adepoju and Salau, 2007). Therefore, this study assessed the impact of these problems on value additions on NTFPs marketed in Orhionmwon LGA. The main objective of this study was to assess the impact of credit assess to value addition on NTFPs in the study area. This would be achieved through the following specific objectives were to examine socio-economic characteristics of respondent involved in non – timber forest products utilization in the study area; to identify various value additions to non – timber forest products possibilities and actors involved and to examine the impact of adding value to non – timber forest product to household income generation. The hypothesis of the study:

$H^0$  - there is no significant relationship between the personal characteristics of the respondents and the income generated from the NTFPs.

$H^1$  - there is significant relationship between the personal characteristics of the respondents and the income generated from the NTFPs.

## MATERIALS AND METHODS

### Study Area

The study was conducted in Sakponba Forest Reserve, located in Orhionmwon LGA, about 30 kilometers southeast of Benin-city, Edo State, Nigeria. The climate is typically tropical with two major seasons, the rainy and the dry seasons. The rainy seasons last between April to November and the dry season December to March. The people of the area are predominantly farmers and traders. Crops grown in the area include yam, cassava, plantain and cocoyam while *Tectona Grandis*, *Gmelina Ivorensis*, *Terminalia Ivorensis* and *Khaya Ivorensis* are some of the tree species grown in the area. The primary data were obtained using well structured questionnaire.

### Sampling Procedure and Size

Copies of questionnaire were designed to know the role of credit facilities and its impact on

forest products, to determine the type of credit facilities offered to the farmers, to know the impact of the selected non-timber forest products on the economy as a result of available credit facilities. For the purpose of this study, five (5) NTFPs were focused on which include: Charcoal, Firewood, Chewing Stick, Snail and Bush meat. A purposive simple random sampling was used to select respondents from the study population using the medium of the Farmers Association in the villages. A total of 10 cell groups, which cut across the towns and villages in the area. Twelve (12) farmers were selected from each of the cell group giving a total of 120 respondents. The questionnaires were administered by the researcher personally with the assistance of some personnel in Moist Forest Research Station, Sakponba.

## RESULTS

The results from Table 1 revealed that in the study area 53.3% were male and 46.7% were female. The study also showed that about 19.2% of the respondents were within the age of 20 – 30 years, 65.8% were between the ages of 31 – 40 years, while 1.7% was within the ages of 51 – 60 years. Majority (85%) of the respondents are married while 9.2% are single. About 62.5% of the respondents had secondary education, 17.5% had primary education while only 10.0% had no education. In addition, the primary occupation of 30.3% of the respondent was crop farming, 33.9% were artisan, 15.6% were civil servant and about 19.3% were involved in gathering NTFPs.

**Table 1: Socio-economic characteristics of the Respondents**

<b>Variables</b>	<b>Frequency (n = 120)</b>	<b>Percentage (%)</b>	<b>Cumulative Percentage (%)</b>
<b>Sex</b>			
Male	64	53.3	53.3
Female	56	46.7	100
<b>Age</b>			
20 – 30 years	23	19.2	19.2
31 – 40 years	79	65.8	85.0
41 – 50 years	16	13.3	98.3
51 – 60 years	2	1.7	100.0
<b>Marital Status</b>			
Single	11	9.2	9.2
Married	102	85.0	94.2
Widow	7	5.8	100.0
<b>Educational Level</b>			
Primary	21	17.5	17.5
Secondary	75	62.5	80.0
Tertiary	12	10.0	90.0
No education	12	10.0	100.0
<b>Primary Occupation</b>			
Farming (Crop)	33	30.3	30.3
NTFPs gathering	21	19.3	49.5
Artisan	37	33.9	83.5
Civil Servant	17	15.6	99.1
Student	1	0.9	100.0

Results in Table 2 indicated that 92.5% of the respondents were engaged in NTFPs business and most of those engaged in the business (51.4%) sourced for their NTFPs product in forest reserve areas, 16.2% sourced from

communal land, 9.5% from free areas and 14.3% purchased from others. The result shows that the most sourced NTFPs in the area were firewood about 34.2%, while bush meat was 25.2%. Furthermore, it was observed that 30.0 % made

between ₦100,000 and ₦200,000 from the sale of NTFPs while a few 0.9% made above ₦400,000.

Results from Table 3 revealed that 98.9% of the respondents do not have access to loan because there is no provision for credit facilities in the study area, and even if there were provisions for loans, many of them wouldn't have collaterals to secure the loan.

The result of the chi – square analysis in Table 4 showed that there was no significant relationship ( $p > 0.05$ ) between age ( $\chi^2 = 17.042$ ), marital status ( $\chi^2 = 13.289$ ) and income generated from the NTFPs. The analysis revealed that marital status and age had no relationship with the income generated from the NTFPs. Moreover, Sex ( $\chi^2 = 10.452$ ) and educational level ( $\chi^2 = 32.792$ ) had significant relationship with the income generated from the NTFPs.

**Table 2: The distribution of respondents on their engagements with NTFPs**

Variables	Frequency (n = 120)	Percentage (%)	Cumulative Percentage (%)
<b>Are you engaged in NTFPs business</b>			
Yes	111	92.5	92.5
No	9	7.5	100
<b>Type of NTFPs specialized in</b>			
Charcoal	16	14.4	14.4
Firewood	38	34.2	48.6
Chewing stick	19	17.1	65.8
Snail	10	9.0	74.0
Bush meat	28	25.2	100.0
<b>Source of NTFPs</b>			
Forest Reserve	54	51.4	51.4
Communal land	17	16.2	67.6
Free Areas	10	9.5	77.1
Family	4	3.8	81.0
All of the above	5	4.8	85.7
Purchase	15	14.3	100
<b>Amount made from NTFPs sales</b>			
Below ₦50,000	24	21.8	21.8
₦51,000 – ₦100,000	19	17.3	39.1
₦101,000 – ₦200,000	33	30.0	69.1
₦201,000 – ₦300,000	29	26.4	95.5
₦301,000 – ₦400,000	4	3.6	99.1
Above ₦400,000	1	0.9	100.0

**Table 3: The distribution of respondents' access to loan**

Variable	Frequency (n = 120)	Percentage (%)	Cumulative Percentage (%)
<b>Access to loan</b>			
Yes	1	1.1	1.1
No	87	98.9	100

**Table 4: Chi - square result on relationship between the socio- economic characteristics of the respondents and income generated from NTFPs**

Variables	$\chi^2$ -value	Df	p-value	Decision
Sex	22.448	4	0.000	S
Age	17.042	12	0.148	NS
Marital status	13.289	8	0.102	NS
Educational level	40.000	12	0.000	S

## DISCUSSION

Majority of the respondent in the study area were male, this implies that farming in the area is male dominated and this may be due to the fact that they are mostly responsible for the upkeep of their family based on their culture. The age distribution of the respondents was approximately between 20 to 40 years of age which simple shows that majority of the farmer were in the active age category and able to practice farming effectively. Also, it implies that age is a factor because most of those involved in the NTFPs business are older people with declining capabilities for various farm operations. The result further showed that most of the people involved in NTFPs business take it as a secondary occupation just to balance their source of income. This level of operation encourages the use of hired labour but this cannot be possible because they have little or no credit facilities to add value to their business. However, most of the people involved in NTFPs business in the area of study had secondary education which means that majority of them had the basic knowledge of farm practices. In many areas, rural populations are traditionally dependent on local forest resources to provide additional income through collection and marketing of NTFPs. Where employed opportunities from traditional industries are declining, workers look for alternative income sources which often turn to collection of these products from nearby forest (Adepoju and Salau, 2007). It could be deduced from the study that most of the NTFPs were mostly sourced from forest reserve area. Majority of the respondents (98.9%) do not have access to credit facilities in the study area which maybe inform of loans, machines to help add value to their products, which will also increase productivity. NTFPs are obviously very important as they contribute to meeting food and other basic needs. Furthermore, it was observed that without credit facilities most of those involved in the NTFPs business make a reasonable amount of money from the sales of the NTFPs product which means if they had access to credit facilities, they would have been able to add value to their product and the amount made will increase. They had problems of marketing their NTFPs because of low demand from people, cases of

low pricing of the product and unpronounced usage due to lack of awareness of the uses of NTFPs in the study area. They provide a source of input into the agricultural system, help household and control exposure to risk of various kinds.

The result of Chi-square analysis of the personal characteristics of the respondents and the income generated from the NTFPs shows that there was no significant relationship between age, marital status and income generated from the NTFPs. The analysis revealed that marital status and age had no relationship with the income generated from the NTFPs. Moreover, Sex and educational level had significant relationship with the income generated from the NTFPs. This supports the assertions by Sebopetji and Belete (2009) that socio-economic characteristics of farmers such as sex does determine income generation. This implies that some of their personal characteristics are not factors that determine the income generated from the NTFPs in the study area.

## CONCLUSION

In conclusion, the descriptive analysis of socio-economic characteristics on those involved in NTFPs business revealed that males were the ones majorly involved in the collection, gathering and processing of these NTFPs products. Charcoal, firewood, chewing sticks, snails and bush meat were the NTFPs specialized in the study area, which were mostly sourced from the forest reserve areas. It was however observed that firewood formed the larger percentage of their source of income among the respondents. From the study, despite the fact that 98.9% of the respondents do not have access to credit facilities, majority (60.9%) of those involved in the NTFPs business make more than ₦100,000 from the sales of NTFPs. Thus, this study confirmed that there are no positive role credit facilities are playing on value addition in Orhionmwon L.G.A. of Edo State.

## RECOMMENDATIONS

Based on the results from this study, the following recommendations were made to improve the impact of credit facilities on value additions to NTFPs:

- i. Governments need to foster collaboration within appropriate ministries to share information on key NTFP species, bush meat, fuelwood and construction poles;
- ii. It was observed that if these rural dwellers get credit facilities, their means of livelihood will be better off than it used to be.
- iii. Producers of products and by-products from NTFPs need to be provided with timely information on the market prices of

NTFPs (to allow producers to negotiate more effectively with buyers) while information on transformation, packaging and marketing options, access to micro-loans, grants and cooperative possibilities must be provided to farmers;

- iv. Government should provide credit facilities to help add value to NTFPs product which will also increase the country's GDP on forestry development.

## REFERENCES

- Adepoju, A.A. and Salau, A.S. (2007): Economic Valuation of Non-Timber Forest Products (NTFPs). Munich Personal RePEc Archive MPRA paper 2689. Posted 11 April 2007. <http://mpra.ub.uni-muenchen.de/2689/>
- Arnold, J.E.M. (2002): Identifying Links between Forests and Poverty. In ECTF/IIED Forestry and Poverty Reduction Workshop, Edinburgh.
- Dang, V.Q. and Tran, N.A. (2006): Commercial Collection of NTFPs and households Living in or near the Forest: Case Study in Que, Con Cuong and Ma, Tuong Duong, Nghe An, Vietnam. *Ecological Economics* 60(1): 65 – 74. Doi:10.1016/j.ecolecon.2006.03.010.
- Food and Agricultural Organization of the United Nation FAO (1990): The Major Significance of 'Minor Forest Product'. The Local Use and Value of Forest in the West African Humid Forest Zone. Community Forestry Note 6 Rome.
- Osman, M., Mishra, P.K., Dixit, S., Ramachandran, K., Singh, H.P., Rama Rao, C.A. and Korwar, G.R. (2000): A Review of Dynamics, Management and Livelihood Contributions. Common Pool Resources Research Project Report No. 3, Natural Resource Institute (NRI) and Department for International Development (DFID), Palace Street, London, UK.
- Sebopetji, T.O and Beetle, A. (2009): An Application of Profit Analysis to Factors Affecting Small-scale Farmers Decision to take Credit. A Case Study of the Greater Letaba Local Municipality in South Africa. *African Journal of Agricultural Research* 4(8): 718 -723
- Sills, E., Pattanayak, S. and Holmes, T. (2000): Living on the Edge: Collecting Tropical Forest Products to Mitigate Risk in the Brazilian Amazon. Presented at the Western Economics Association Meetings in Vancouver, June.