MARKETING AND UTILIZATION OF *PROSOPIS AFRICANA* CONDIMENT IN MAKURDI, BENUE STATE, NIGERIA.

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ABSTRACT

The study assessed and evaluated the marketing and utilization of Prosopis Africana condiment in Makurdi metropolis. Four major markets where prosopis condiment is sold in Makurdi were randomly selected for this study. The markets are wurukum market, north bank market, modern market and high level market. Structured questionnaires, oral interviews and field assessment were used to generate primary data. The data generated were analysed using descriptive statistics. Approximately 6.3%, 8.8%, 78.8% and 6.3% of the marketers of prosopis condiment in Makurdi metropolis fall within the age brackets of 15-25, 26-35, 36-45 and 46-55 years respectively. It was also observed that all the marketers of prosopis condiment in Makurdi are females. Seventy-two percent (72%) of the marketers of prosopis condiment in Makurdi obtain their supply from within the state while 28% get their supply from other states. Production of prosopis condiment in Makurdi is usually done locally with most of the marketers going to the bush by themselves to gather the seeds before processing them. Inadequate storage facilities, poor processing techniques and high cost of transportation are some of the problems encountered in the production and marketing of prosopis condiment in Makurdi metropolis.

Key words: Prosopis, condiment, production, marketing

INTRODUCTION

There are many ways people from different parts of Nigeria utilize their surrounding forests and fallow lands. Some of the common items obtained from

different forest ecosystems in the country include: food, medicines, bush meat, household utensils, local wine, fibers, agricultural tool handles etc. In the past, forest management emphasis in the

country had been on timber products, which were considered to be of significant industrial and export importance. This defective approach to forest management has contributed in no small measure to forest degradation and even total loss of forestland in many areas. As a result of this, forest managers should no longer be concerned solely with timber production if the lofty objective of sustainable forest management is to be realized.

Rijsoort (2000) defined NTFPs as all tropical forests products including animals or parts thereof than industrial timber, which are (or can be) harvested for human use at the level of self support or for commercial purposes. Non-Timber Forest Products (NTFPs) provide a wide range of unquantified benefits. They serve as source of food for human beings and animals, medicine to prevent and cure several diseases, spices/condiments that add flavour to food, natural food colours and revenue through the sales of variety of products obtainable from them. About 80% of the populations of developing countries depend on NTFPs for their primary health and nutritional needs (FAO, 1995). According to Jimoh (2006), Non-Timber Forest Products contribute immensely to household food security and

income generation in Nigeria. Hence they play a significant role in rural poverty reduction.

However, both Foresters and economic planners have neglected the contributions of NTFPs for quite a long period of time. This neglect is evident in the Central Bank of Nigeria Report, which gave the situation report of Nigeria's major food and industrial crops and prospects up to 1990. In the report, only oil palm and shear oils were mentioned among the principal crops, neglecting all other fruit trees such as Irvingia gabonnensis, Dacryodes edulis, Prosopis africana, Parkia biglobosa etc. The relevance of NTFPs have been over shadowed by the over concentration on the timber components of forest production to the detriment of other components of the forest ecosystem, which function together to maintain the equilibrium of the system.. This neglect has led to forest degradation with the attendant loss of biodiversity, under- value, low pricing and abuse of the resources by exploiters, which often results in wastage.

Non-timber Forest Products (NTFPs) provide a wide range of unquantified benefits. They serve as source of food for human beings and animals, medicine to

prevent and cure many diseases, spices, natural food colours and provide revenue through the sales of variety of products obtainable from them. The contributions of NTFPs to our local and national economy, therefore, cannot be over emphasized. According to Aiyeloja and Opeyemi (2006),the role contributions of NTFPs in thie daily life of people in subsistence and rural economies all oner the world are crucial because of their richness of variety as sources of food e.g. fruits, nuts, oils, honey, insects, animals fodder, fibre tannin, gumse.t.c.

Prospopis africana and its products are of great importance in Nigeria. It belongs to the sub-family mimosaceae, in the genus Prosopis and the species Prosopis africana. It is one of the most popularly known leguminous trees in the savanna region. Prosopis africana according to Leaky (1996) is widely distributed in the sahel region of Africa, where various parts of the plant are used. In Nigeria, the tree is mostly found in Zamfara, Kaduna, Yobe and Enugu states. Other States where it can be found include Taraba, Kogi, Nassarawa, Benue etc.

The tree is called gbaaye in Tiv, Okpehe in Idoma, Kirnya in Hausa, Ubwa in Igbo,

Kohi in Fulani, Okpohia in Etsako (Edo State), iyan in Yoruba, Sanchi lati in Nupe (Keay et al 1964). In Nigeria, the uses of *Prosopis africana* has gained national acceptance and varies from one locality to another.

USES OF Prosopis Africana

Prosopis africana and its products are of great importance in Nigeria. In Benue State, for instance, the trunk is used in the carving of mortar and pestle for pounding of food such as yam which is a major food in Benue State. The seeds are cooked for hours, fermented, ground and used as spice and condiment which give taste and flavour to soup. The wood is used in carving local musical instruments such as wooden gongs, drums etc. The wood can also be used as firewood and pillars for houses. The bark leaves and roots are medicinal in Benue State. With all these benefits, *Prosopis africana* can be said to be of great importance to the economy and people of Benue State as Marketing of its products has created a lot of job opportunities to the inhabitants of the State.

It is therefore pertinent to find out how condiment of *Prosopis africana* is produced and marketed in the State. The objective of this paper is to evaluate the

production, processing, storage, marketing and utilization of condiment of *Prosopis* a *fricana* in Makurdi, the capital of Benue state.

DESCRIPTION OF THE STUDY AREA

This study was conducted in Makurdi local government area of Benue State. It is among the twenty three (23) local government areas of Benue State created in 1976 with its headquarters in Makurdi, which also doubles as the state capital. The study area lays between longitude 8° and 9° east and between latitude 7° and 8 o northern the southern guinea savanna zone in the middle belt region of Nigeria. It covers a total mass of 80.4km °. The area has two marked seasons: the wet season from April to October and the dry season that commences in November and lasts till March. It has an annual rainfall range of about 1000-15000mm, a mean annual temperature of about $32^{\circ} - 40^{\circ}$ c occurring between February and April. The vegetation is characterized by open woodland with tall trees as well, usually with short bold and broad leaves. The trees are about 12-17m tall and are rarely up to 27m or over 30m. The vegetation is destroyed annually by fire in the dry The dominating tree species season.

comprise Azadirachta indica. Daniellia oliveri, Prosopis africana, Vitex doniana, Vitelleria paradoxa, Leucenea leucocephala, Delonix regia, Parkia biglobosa etc.

The inhabitants of Makurdi local government area are predominantly the Tivs. However, there are other tribes that live within the area. These include the Idomas, Igedes, Jukuns, Hausas, Igbos, and Yorubas among others. The study area is the third most populous local government area in Benue State with about 226, 198 inhabitants. The area comprises of eleven (11) councils wards, which are: Agan ward, Ankpa ward, Bar ward, Mbalagh ward, Mission ward, clerk ward, Modern market ward, North bank 1 ward, North bank II ward, Wadata ward and Wailomayo ward.

Sampling Procedure

Study population is made up of marketers of condiments of *Prosopis africana* in Makurdi metropolis. Condiment of Prosopis africana is marketed in six major markets in Makurdi metropolis. These markets are:

- High level market
- Wurukum market
- Modern market
- North bank market

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- Fiidi market and
- Wadata market.

Out of the six markets above, four were randomly selected for this study. The selected markets include:

High level market, Wurukum market, North bank market and Modern market. Twenty marketers of prosopis condiment were randomly selected from each of the four markets, giving a sampling size of 80 respondents.

Data collection

Oral interviews, field assessment and semi-structured questionnaires were used in generating primary data, while secondary data were obtained from research abstracts, journals and other published and unpublished works.

Eighty (80) copies of semi-structured questionnaires were used in all, with twenty copies each being administered on the marketers of *Prosopis africana* condiment in each of the four markets selected. Data collected included information on:

- The demographic characteristics of the respondents.
- The source (s) of supply of condiment of *Prosopis africana*.
 - The production and processing of the condiment
 - The problems encountered in marketing the product etc.

Data Analysis

Data generated were analysed using descriptive statistics such as mean, percentages and tables. Frequency distribution and percentages were used to find out the age distribution of the marketers, to compute the gender of marketers and the sources of supply of prosopis condiment in Benue State.

RESULT AND DISCUSSION

All the 80 questionnaires administered on the marketers of condiments of *Prosopis africana* were collected. The data collected were analysed and presented in the form of tables.

Table 1: Age Distribution of Marketers

Market	Age group (yrs)	Frequency	percentage (%)
Wurukum	15-25	1	5
	26-35	3	15
	36-45	14	70
	46-55	2	10
North Bank	15-25	1	5
	26-35	-	-
	36-45	19	95
	46-55	-	-
Modern Marke	t 15-25	15-25 3	15
	26-35	2	10
	36-45	12	60
	46-55	3	15
High level	15-25	-	-
	26-35	2	10
	36-45	18	90
	46-55	-	-

Source: Field Survey, 2012

Table 1 shows that 6.25%, 8.75%, 78.75% and 6.25% of the marketers of condiment of prosopis fall within the age groups of 15-25, 26-35, 36-45 and 46-55 years respectively. It can therefore be deduced that most of the marketers fall within the ages of 36 and 45 years. In fact 70%, 95%, 60% and 90% of the marketers in Wurukum market, North bank market,

modern market and High level market respectively fall within this age limit. The high percentage of marketers that fall within this age group could be attributed to the offensive odour of the condiment of *Prosopis africana*, which tends to discourage younger people from marketing and utilizing it.

Table 2: Gender of Marketers of prosopis condiment

Market	Gender	Frequency	Percentage (%)
Wurukum	Male	0	0
	Female	20	100
North Bank	Male	0	0
	Female	20	100
Modern Market	Male	0	0
	Female	20	100
High level	Male	0	0
	Female	20	100

Source: field survey, 2012

Table 2 shows that 100% of marketers of condiments of prosopis in all the selected markets in Makurdi are females. Female marketers (100%) dominate the trade. This finding is in line with the findings of Ancha, Abu and Omafu (2011). They also concluded that 100% of the marketers of

prosopis seeds in Makurdi are females. Awono et al (2002) also concluded that in Cameroon, women dominated the retail trade in *Dacryodes edulis*. The lack of male marketers could also be attributed to the offensive odour of the product.

Table 3: Sources of supply of condiment of prosopis in Makurdi Metropolis

Market	Sources of supply	frequency	percentage (%)
Wurukum	within the State	15	75
	outside the state	5	25
North Bank	within the State	14	70
	outside the State	6	30
Modern Market	within the State	12	60
	outside the State	8	40
High level	within the State	17	85
	outside the State	3	15

Source: field survey, 2012

From **Table 3**, 72% of the marketers of condiment of prosopis get their supply from within the State, while 28% of the marketers get their supply from outside the State, mostly from Kogi, Nassarawa, Anambra and Enugu States. This shows the high level of production and processing of condiment of prosopis in Benue State. It was also observed that

most of the marketers and consumers of the product obtained from outside the State were non-indigenes of Benue State, who preferred condiment from their places of origin because they were already used to it. Also 60% of the marketers that obtained their supply from within the State produced and processed the product by themselves.

PRODUCTION, TRANSPORTATION AND STORAGE OF CONDIMENTS OF PROSOPIS IN MAKURDI METROPOLIS

According to the marketers of condiments of *Prosopis* africana in Makurdi, production of the product starts by first gathering the fruits from the bush. The fruits are then broken with stones to collect the seeds. The seeds are then cooked for a long period of time (between 8 and 12 hours). After this cooking, the cotyledons are peeled from the seed coat. After peeling, the seeds are cooked again for more than one hour. When the water is now dried, the seeds are removed and washed with the aid of a basket. seeds are then collected in leaves (mostly leaves of Isorbelina doka) or leather sacs and kept for about five days to ferment. After fermentation, the seeds are pounded and covered with polythene sacs until the next day. The condiments are now prepared and will show a black or brownish coloration. According to the producers, the black colour is an indication of perfect preparation and gives better flavour.

Processing of condiments of *Prosopis* africana involves cutting the condiments to various dimensions for marketing, while

those gotten from other states are sundried. The condiments are cut into near spherical balls (like the size of an egg) for marketing. A ball that weighs about 10g is sold for N10.00.

Condiment of *Prosopis africana* is usually in commercial transported buses. commercial motorcycles (Okada), and wheel barrows or carried on the head to the market. The survey showed that an average of sixty naira (N60.00) is spent daily in transporting the product and other soup ingredients to the market. Those who own shops in the market usually leave their stock in the market. An average of N2, 000.00 is spent in transporting condiment of Prosopis africana and other soup ingredients from the east to Makurdi. Storage of condiment of Prosopis africana in Makurdi involves gathering the balls in nylon containers after proper drying and putting them in a plastic or metallic container.

In storing the seeds of *Prosopis africana*, the seeds are collected in a sac and tied. In some cases, kerosene is added to the seeds to prevent insects from attacking and destroying the seeds.

According to the producers and marketers of condiment of prosopis in Makurdi, the fruits and seeds are usually most abundant between March and April. Large quantities of these seeds are gathered and stored within this period. The hard seed coats make it difficult for insects to destroy the seeds. This cheap and easy way of storing these seeds accounts for the availability of the seeds throughout the whole year.

DEMAND FOR CONDIMENT OF PROSOPIS IN MAKURDI METROPOLIS

In comparism with other condiments (seasoning cubes, other spices, condiment of Parkia biglobosa), this survey revealed that seasoning cubes were of highest demand in the selected markets in Makurdi, closely followed by condiment of prosopis. The main reason for the high demand of seasoning cubes was taste and preference of the consumers. Most consumers who use seasoning cubes disliked the foul smell of condiment of prosopis and parkia, while those that use prosopis did so because of preference, its low price and its medicinal value (they say it improves eyesight).

CONCLUSION

The tree *Prosopis africana* and its products are of great importance in Makurdi, Benue and the entire Nigeria. The condiment of prosopis, which is just a product derived from the tree, is known to

give taste and flavour to soup and is also medicinal as it is believed to improve eyesight. The continuous increase in prices of this condiment in Makurdi is as a result of the increasing cost of production and demand of the product in the town. More and more people are getting involved in the production, marketing and utilization of this condiment in Makurdi. The condiment has good potential as a typical non-timber forest product.

However, most of the producers and marketers of this product are mostly petty traders that lack the wherewithal for efficient production, processing marketing of this product. It is, therefore, recommended that government should encourage the production and marketing of this product by assisting producers and marketers with capital (in form of soft loan) to increase their markets. Also, if small and medium scale enterprises are encouraged to engage in the production of condiment of prosopis and if considerable attention is given to its processing and packaging, the production and utilization of the product will increase. This will generate job opportunities and increase the standard of living of the people of Benue State in particular and Nigeria in general.

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