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# The Role of Women in Production and Marketing of Palm Oil in Eastern Nigeria

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#### Abstract:

This paper examines the role of women in the production and marketing of palm oil in eastern Nigeria. It discusses the activities involved, which begin with the establishment and management of the oil palm to produce fruits, from which oil is extracted. Other activities include harvesting and processing of fruit bunches into oil. Women are known to be involved in all stages of extracting oil from the fruit which are sterilization and digestion of fruits, pressing of fiber, clarification, storage of oil and separation and cracking of nuts. In all these, women in eastern Nigeria adopt largely traditional methods which are time consuming, laborious and inefficient because of low oil extraction efficiency and poor oil quality. Women are also shown to be a force in marketing both as wholesalers and retailers. The major constraint faced by the women is lack of capital. The paper recommends that women should be encouraged to organize themselves into cooperative societies to be able to access funds to upgrade their activities and income.

**Keywords:** Women, eastern Nigerian, oil palm production

### 1. Introduction

In eastern Nigeria, like in other parts of Africa, women are known women are known to contribute about 30% of work force, 70% of the production of food for household consumption and sale, 90% of the basic processing of foodstuff, 80% of food storage and transport, 60% of harvesting and marketing activities (FAO, 1966). Rural women actively participate in many agricultural and animal husbandry related activities besides the usual role of child bearing and home keeping. Ogbonna (1989) stated that female labour is more productive than male labour in food processing and also that women account for more than half of the labour force in palm oil processing and marketing. Studies carried out in NIFOR reveal that in oil palm nursery management, women are the preferred labour force as they appear to take care of the seedlings better than men.

Before the oil boom Nigeria depended on agriculture and for the Eastern Region, oil palm was the prime commodity crop. Oil Palm, *Elaeis guineensis*, Jacq, is found in abundance in Eastern Nigeria where it is believed to have originated (Omoti, 2003). Although all parts of the oil palm have some economic value to humans, especially in Eastern Nigeria, palm oil is the chief product of the palm. Palm oil is the second largest vegetable oil in the world market, though it is impossible to accurately assess world production because of the unrecorded quantities produced in the groves, small holder plots and farms which are used for the farmers domestic purposes or sold locally.

Before 1970, Nigeria's palm oil production accounted for 43% of the world production, but this has declined to less than 7% (National Agric Project, 1997). Presently the bulk of palm oil produced in Nigeria (over 80%) comes from the wild oil palm groves (Omoti, 2003). Over 70% of these groves are found in Eastern Nigeria, and since the major processors and marketers of oil palm fruit and oil are the rural farm households in which majority are women, the role of women in oil palm production and marketing becomes important as it affects the socioeconomic life of the rural population. This paper therefore will attempt to discuss the various activities carried out by women in oil palm production and marketing and the constraints faced by the women and finally recommend actions that may ameliorate those constraints.

## 2. Palm Oil Production Activities

In the East Nigeria just like all parts of Nigeria palm oil production and its marketing still provides for about 80% of rural small scale farmers in which women form a great percentage.

Activities involved in the production of palm oil start from the establishment of the palms. In Nigeria there are about 2.1 million ha of wild and semi wild groves of the oil palm (Omoti, 2003) Estate (large organized plantations) and small holder schemes (1-10ha) occupy about only 600,000 ha. It therefore follows that at present about 75% of palm oil produced in Nigeria comes from the groves. Since majority of rural small scale farmers who are responsible for the exploitation of the oil palm groves are known to be women

(Ibekwe, 2008), they play a very significant role in the production of palm oil in Nigeria especially in the Eastern part of the country in which over 70% of the groves abound.

The major activities in palm oil production and the involvement of women in the activities are discussed below:

# 2.1. Establishment of the Oil Palm

The natural habitat of the oil palm is usually the secondary forest where shifting cultivation is practiced. The oil palm usually sprouts after clearing the forest for planting of other crops. Because of the importance of the palm to man, the interaction between humans and the palm, the palm groves are densest where the human population is largest as in southeastern Nigeria. (Corley and Tinker, 2007). Oil palm does not naturally grow in the primary forest or the savannah. In rural farming men are known to be responsible for clearing the forest for cropping. When this is done oil, palm seeds on the forest floor sprout, especially after the clearing is burnt. As the seedling establishes, women who are responsible for weeding the farms get involved in protecting the palm seedlings. Therefore, although the palms emerge through natural regeneration, the survival depends on the role women play in protecting and managing them during weeding and other farm activities.

In plantations and small holder schemes, women are only involved in manual watering and weeding of seedlings in the nursery. They are also involved in carrying the seedlings to the fields for planting. During plantation maintenance women are engaged in ring weeding the palms.

#### 2.2. Harvesting of Bunches

Harvesting of oil palm bunches involved the use machete or cutlass to detach ripe bunches from the axils of the leaves. Traditionally in eastern Nigeria, harvesting of the oil palm is an exclusive preserve of males. Culturally, it is a taboo for women to harvest bunches from palm trees. However, evacuation of these bunches, picking and evacuation of loose fruits, are performed by women.

#### 2.3. Processing of Fresh Fruit Bunch

In Nigeria, traditional processing of oil palm bunch starts with cutting the bunch into sections. The sections are kept in heaps for 2-4 days depending on the state of the harvested bunch. The heaps are covered with banana/plantain leaves or sprinkled with water to loosen the fruits from the spikelet (Ndon, 2006). This process is carried out by women, although often times the women hire men to cut the bunches into sections.

#### 2.4. Processing of Fruits into Oil

Extracting oil from palm fruits involves the following steps:

- 1. Sterilization: This involves boiling the fruits in large drums or pots for 3-4 hours to soften the mesocarp.
- 2. Digestion: In this process, boiled fruits are pounded in a large wooden mortar or drum sunken into the soil, with a long stout wooden pestle until the pulp (mesocarp) is detached from the nut. In some areas, this pounding is done with the legs after the fruits have been fermented by soaking in canoe-shaped wooden containers for many days.
- 3. Pressing: Traditionally pressing is done by applying pressure on a handful of digested mesocarp with both palms to extract the oil. This method has been gradually replaced with hand operated screw press. In this case a mixture of nuts and crushed mesocarp is pressed and it requires 2-4 men to turn the screw press and the oil is extruded into receiving containers.
- 4. Clarification: Crude palm oil obtained after pressing contains water and other impurities. The oil is cooked in big pots and the oil floats on top water and is decanted while the impurities remain at the bottom of the pot or drum.
- 5. Storage: The oil obtained is stored in drums or jerry cans for marketing.
- 6. Separation: Palm nuts are manually separated from the fibre (mesocarp without oil), washed and dried.
- 7. Nut cracking: After drying, nuts are again manually cracked using cracking stones to obtain the kernel which is bagged for sale.

Ibekwe (2008) in a study carried out in Imo State, Nigeria observed that majority of women processors, use this traditional method of processing. Okolo *et al.*, (2009) also observed that processors utilize traditional methods because of the high cost of power operated mills

However, this traditional method of processing is time consuming, labour intensive, inefficient, yielding very low oil, often of poor quality. Usually 25-75% of potential palm oil is lost (Nwanze, 1965). Although, these traditional methods abound (Omoti, 2003; Okolo 2002), machine assisted small scale processing has grown popular.

## 3. Palm Oil Marketing Activities

Palm oil is used in numerous food and non-food application. Marketing is the performance of all business activities involved in the flow of product from the point of production until the good gets to the hand of the final consumer (Moro 1999; Kotler, 1980). Palm oil marketing therefore may be considered to include processing, storage, grading, transportation and pricing.

Traditionally, processing and storage are known to be performed by women. With the advent of mechanized processing, men are getting involved in processing and are taking great interest in marketing, at the primary level (farm gate). However, even at that, women still are a force in the marketing of palm produce. Ekinne *et al.*, (2006) found out that in Ikwerre and Etche Local Government Areas of Rivers State, Nigeria, the ratio of males to females involved in marketing of palm oil was 6:4. They also discovered that the producer and wholesale markets have oligopolistic structure while retail market was competitive in nature. The situation is the same in most parts of eastern Nigeria, although the retail market is dominated by women.

#### 4. Benefits Derived by Women in Production and Marketing of Palm Oil

Although women in oil palm growing states in Nigeria have defined roles in agriculture, they constitute a major workforce in the oil palm production sector. Studies have shown that this is because of the profitability of the sector. Ibekwe (2008) showed that every N1.00 invested in palm oil processing yielded 0.68k gain and that net farm income were found to be N150,304.00 per year per processor. This is, therefore, good income generating activity for women.

#### **5. Constraints**

The major constraint faced by women oil palm producers has been shown to be the availability of capital. With adequate capital the women would be able to acquire land and get involved in plantation establishment. They will be able to hire labour for more intensive harvesting of bunches from the groves to increase their processing capacity, which can be easily achieved with the acquisition of modern processing equipment. This will enable them increase the palm oil production and consequently income and thereby improve their standard of living.

The absence of mills with high throughput is another constraint. Most women engage in palm oil production as individuals and rent spaces in traditional mills to process their fruits. This makes for a long wait for a turn to process. Fruits deteriorate and oil produced is of therefore of poor quality. Such oils attract low prices.

#### 6. Recommendation

Women should be sensitized and encouraged to organize themselves into cooperative societies to be able to access funds for the procurement of modern processing equipment and land for plantation establishment.

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