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Kola as an Indispensable Article of Trade in West Africa

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Abstract

This study examines the origin of kola-nuts trade and the indispensability of kola-nut trade in West Africa. Desk research was carried out using past published literature. The study established the fact that kola nut production was indigenous to the West Africa Forest and pinpointed the actual origin of kola-nut especially Cola nitida to be along the western coast of Africa from Sierra Leone to the republic of Benin. On the other hand, the areas of Ijare and Idanre in Ondo State of Nigeria are currently believed to be the places where Cola acumunata originated. The dominant variety of kola-nut grown in Western and Eastern parts of Nigeria was cola acumunata and Cola verticillata.

However, in terms of production, before the 19th century the production of cola nitida was limited to the forests west of the Volta River in Ghana. Both linguistic and ethnographic data were used to trace the origin of kola-nut and developed a chronology with regard to the origins and trade routes for kola-nuts. The research work however established the importance of kola-nut production and trade to the economies of West Africa countries where they are produced and traded. It was however recommended that considering the indispensability of kola-nut trade to West Africa particularly Nigeria, the government should take proactive steps to increase the scope of production and trade of this crop in order to improve the livelihoods of kola-nuts farmers and traders as well as increase it contributions to the national economy.

Keywords: Kola nuts; West Africa; Trade routes; Linguistic data; Ethnographic data

1. Introduction

Most tree crops are perennial crops which are alive for many years and also produce their fruits several times before dying [1]. Perennial crops are esteemed or rated high for a combination of their total production and the quality of the harvested product[2].Among the perennial tree crops which contribute substantially to the economy of many nations include cocoa, kola, cashew, coffee, oil palm, mango, orange and so on.

Among the tree crops listed above, kolanut is the second most important indigenous cash crop in Nigeria. In other words, kolanut is the second most valuable tree crop in Nigeria after cocoa in terms of export and foreign exchange earner.

Kola tree is native to African continent and is cultivated to a large quantity with outstanding growth performance in Nigeria. Ivory Coast, Ghana, Brazil and the West Indian Islands also cultivate kolanut [3]. Nigeria produces two million metric tons of kolanut annually which represented 70% of the world's kolanuts production [4]. According to [5], there are about 40 kola nut species dominant in West Africa while the kola species of economic importance especially in Nigeria, West and Central Africa, the Caribbean Islands, Mauritius, Sri Lanka and Malaysia are *Cola acuminate* and *Cola nitida*.

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A typical kola tree could reach a height of 40-60 feet and produces star-shaped fruits or pods each containing two to five kolanuts. The fruits are usually borne in clusters with the seeds developed in a white seed shell or coat. The seed referred to as the kola nut contains two very large fleshy cotyledons united through a tiny plantlet [6].

Kola tree has long, ovoid leaves pointed at both ends. The leaves are large and tough with dark or green colour. Kolanuts are generally in three colours which could be white, pink and red. Each pod may contain any combination of the three colours [7]. Kolanut has a sweet and rose-like aroma with a bitter taste when chewed but the bitter taste gets milder or sweetens upon continuous chewing.

The classification of kola plant is in a state of instability because it was formerly placed in the cocoa family Sterculiacea but in 2003, following the angiosperm phylogeny it is now usually subsumed in the mallow family *Malvaceae*[8].

Aside *cola nitida* and *cola acumunata* which are of more economic values in Nigeria and other nations of the world, *cola verticillata* and *cola anomala* are also among the most common edible species. These four varieties of kolanut have similar chemical compositions and use. The chemical components include caffeine, theobromine, kolatin, theophylline and glucose. The quantities of theobromine, kolatin and glucose are very small. The first three ingredients, that is, caffeine, theobromine and kolatin are alkaloids which help stimulate the nervous system and the skeletal muscles [9]. Caffeine have an effect on the central nervous system, theobromine activates the skeletal muscles, kolatin works on the heart, glucose serves as source of energy in the body while theophylline is used in the treatment of asthma and to prevent sneezing and shortness of breath.

Kolanut production is predominant to tropical rain forests of Africa. Though it is a lowland tropical crop, it thrives best in regions with an annual rainfall ranging from 1250-1750mm,an annual average temperature of at least 24ºC, and a well-marked dry and wet season. However, the most suitable soil for kolanut cultivation is a well-drained fertile soil rich in humus. Kola tree can also tolerate moderate dry season and as such can be cultivated in dry regions as long as it is over ground water.

Historically, Kolanut was introduced to Ogun State from Agege in 1902 from where it spread to other South-south and Eastern part of Nigeria [10]. Since then, kolanut is generally grown in the Southern and Western part of Nigeria where there is favourable condition for it to grow while its major market is in the northern part of the country.

The place of kolanut as foreign exchange earner before the dependence of the economy on petroleum cannot be over emphasized [11].

In Nigerian tradition, kolanut holds great social significance for many ethnic groups and is a very important aspect of tradition. In other words, it is an important cultural symbol for many ethnic groups. The Igbo kolanut (Oji Igbo) '*Cola acuminata'*, is among the greatest symbol among the Igbo, and belongs to the mysteries of Igbo history, culture and tradition. Kolanuts are prized in cultural practices like community meetings, rites of passage ceremonies for the Igbo people of Nigeria. It is also used as medicine and given to guests at funerals, naming ceremonies and at weddings. Aside the social benefits of kolanuts, it has been researched and confirmed that kolanuts have many health benefits. Stories about the many health benefits of kolanut go back thousands of years [12]. Kolanuts have also been observed to have some effects which when consumed in large quantities are dangerous [13].

According to [14],kolanuts contain substances that stimulate the body, as such may be a helpful natural remedy for some common conditions; but may not be appropriate for everyone. The kolanut and its extract have been used in health supplements, performance enhancers and energy drinks in recent times [15].The seed of kolanuts contain antioxidant for which kolanuts are used for managing type2 diabetes in traditional medicine. Kolanuts are also traditionally chewed to reduce hunger and fatigue, remedy hangovers and aid digestion [16].Aside being used as masticatory agent and substitute for alcoholic drinks, *cola nitida* has gained favour with the people of northern Nigeria. Kola nut is also used as an ingredient in the production of kola group of beverages such as Coca Cola.

According to history, in the 1880s, a pharmacist in Georgia United State of America, John Pemberton, took caffeine extracted from kolanuts and cocaine-containing extracts from coca leaves and mixed them with sugar, other flavouring agents, and carbonated water to formulate or invent Coca-Cola, which was the first cola soft drink. But since 2016, the cola recipe no longer contained actual kola nut extract.

Other types of cola drinks are pepsi cola, Bigi cola and so on. Kolanuts are also used as blend in such incredible potions as kola-wine, kola-cocoa and kola-chocolate. Kola nuts play a key role in the preparation of some local or traditional medicines. Kolanut is also used in the manufacture of drugs in pharmaceutical industries [17]. In summary on the uses

of kola nuts, today millions upon millions of people ingest kolanut extract as one of the ingredients in products created by pharmaceutical, dietary and food and drink industries.

Today, kolanut is mostly grown or cultivated in Africa especially in the forest and has found ready market almost everywhere in West Africa including the savannah and southern Sahara many hundreds of kilometres north of its production zone. Although fresh kolanuts are usually available for sale in African countries, in the United States of America (USA) one is more likely to encounter it in the form of an extract. Kolanuts are also exported in large quantities to other European countries where they are utilized industrially. The standard of living of those involved in kola trading activities in both rural and urban centres of African countries especially where it is produced in large quantities have improved over the years due to its economic contribution to both domestic and national markets. However, this give credence to the fact that kola nut trade is an indispensable trade in African continents of the world.

Objective of the study

This research work was carried out to pinpoint and establish the importance of kola nut production and trade to the economies of West African countries where kola nuts are produced and traded as well as the contribution of these to the livelihoods and standard of living of the people.

2. Justification for the study

Kolanut is regarded as an article of trade in Africa which is subject to north-south exchange between forest and savannah despite the fact that great care is needed to preserve it due to it susceptibility to different pests and diseases. Since a lot of people ranging from producers (farmers), processors, marketers, transporters and so on depend on kola nuts for their livelihoods, there is the need to carry out scientific investigation as regard the indispensability of kola nuts to West African trade. *Cola nitida,* however, being the only kolanut of inter-regional and international trade will be focused on in this research work for analysis and in order to determine the origins of this specie of kolanut production and to establish the routes of distribution in the savannah.

3. Methodology

This article or research work adopted desk literature using findings from various past published literature. The study area was West Africa sub region which included countries such as Sierra Leone, Senegal, Guinea, Liberia, Côte d'Ivoire, Ghana, Benin Republic, Nigeria and Cameroon. The study seeks to trace the origin of kolanut in this region and evaluate the significance of kolanut trade to the economy of each of the country.

4. Kolanut trade routes in West-Africa

Kolanut was highly traded almost everywhere in West Africa in the savannah where demand was high in the absence of tea coffee or other preparations. Kolanut performed the roles of tea coffee and it's consumption tended to increase with the spread of Islam and its strong disregard and prohibitions of alcoholic drinks. Although kola was often associated with rituals and ceremonies in the forest areas though alcohol was also drunk, it consumption and use was also on the increase during this period.

In terms of origin of kolanuts, for *cola nitida,* the specie was originally found along the western coast of Africa from Sierra Leone to the republic of Benin with the highest occurrence and variability in the forest area of Cote d'lvore and Ghana [6]. *Cola nitida* was planted through Senegal, Guinea, Liberia, Côte d'Ivoire, and Ghana towards the western part of Nigeria[18]. However, these areas have been accepted as the centre of origin of *cola nitida*. These areas have remained for long the most prominent sources of kolanuts to the West African trading routes. On the other hand, the areas of Ijare and Idanre in Ondo State of Nigeria are currently regarded as the place where *Cola acumunata* originated [19] with its original area of distribution stretching from Nigeria to Gabon. This variety also occurred spontaneously in the mountainous areas of Angola, Zaire and Cameroon. It has also been cultivated in Angola, Fernando Po and Tanzania.[20].

On the other hand, in terms of production, though kola was indigenous to the whole forest area of West Africa only certain parts have been important historically in the production of *Cola nitida*. Kola producing areas in West Africa can therefore, be divided into two broad parts. The first division is for *cola nitida* which was the most important variety in terms of trade between forest and savannah and also because it regions of production was geographically separated from the zones of production of other varieties. The other division comprised of zones where other varieties with less economic importance are produced. These are *cola acumunata, verticillata,* and *anomala.*

Table 1 Words for Kola in the Languages of the West African Forest

Languages	Language-Sub family	Words for Kola
Kisi	West Atlantic	Kolo
Temme	West Atlantic	Kola,tola
Gola	West Atlantic	gola
Limba	West Atlantic	Tutugi,tugwi
Mano	Mande	go
Dan	Mande	go
Gerze	Mande	Tugule,tugure
Toma	Mande	Ture
Guro	Mande	Gure
Mande	Mande	Tui,kui,tolo,toil.
Kono	Mande	wuro
Yoruba	Kwa	Obi
Igbo	Kwa	Oji
Edo	Kwa	Ewe,eve
Ijaw	Kwa	dubo

Sources: CHENDU 1965; 74

Table 2 Words for Kola in the Languages of the West African Savannah

Languages	Language-Subfamily	Words for Kola
Wolof	West Atlantic	Guro
Fula	West Atlantic	Woro,goro
Diola of Fogmy	West Atlantic	Guru
Sonike	Mande	Goro
Bambara	Mande	Goro,woro
Malinke	Mande	Woro
Juula	Mande	Wuro
Samo	Mande	Gure
Susu	Mande	Holai
Koranko	Mande	Oro,woro
Songhay	Songhay	Goro
Hausa	Chadic	Goro
Gbari	Kwa	Gwolo
Guan	Kwa	Kapuse

Before the 19th century the production of *cola nitida* was limited to the forests west of the Volta River in Ghana, except for very limited output in Nupe areas near the confluence of River Niger and River Benue in Nigeria. Due to the fact that

cola nitida was generally acceptable and in high demand among Muslims and areas of production were far away, it had to be transported over long distances for it to reach the most eastern markets in the Central Sudan.

On the other hand, the dominant variety of kolanut grown in Western and Eastern parts of Nigeria was *cola acumunata.* Some of these kolanuts were traded outside these zones but the marketing was prominent in these regions*. Cola verticillata* was also cultivated in the forest Yoruba and Igbo land where it was highly utilized but some was exported further north even to Borno and Central Sudan although demand there was far less than for *cola nitida. Cola anomala* was only cultivated in Bamenda in north western Cameroon and was exported north where it was accepted as a substitute for *cola nitida* in the market of Central Sudan.

In the first decade of the 20th century *Cola nitida* trees were usually planted in the most important producing areas as this has probably been for many centuries

The spread of kola trees from some areas to others in West Africa was result of cultivation, the movement of villages or villagers, the opening of new lands and local trade probably resulted in the planting of trees as well as it allowed natural germination and the spread of wild stands of kola. This argument is supported by linguistic data and by the traditions which record the movement of people in the area of kola production

Linguistic data shows that the likely origin of cultivation for *Cola nitida* was in the Guinea-Liberia-Sierra Leone border area but do not provide evidence for authenticating the date of initial development.

5. Map for the languages

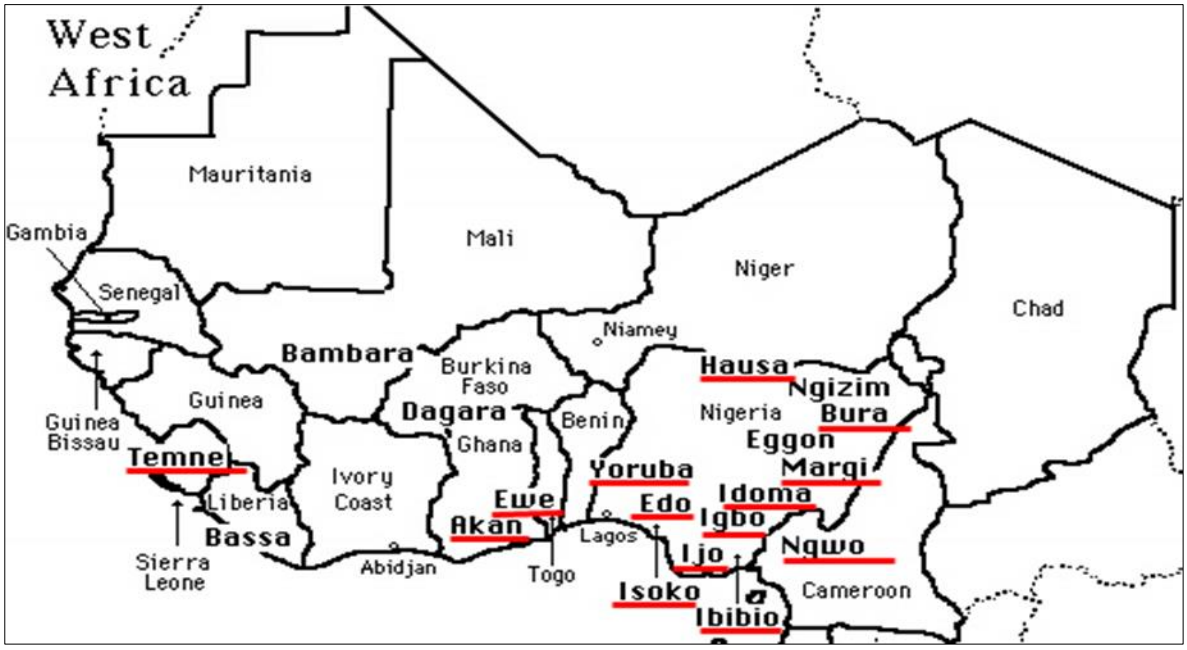

Figure 1 Map of West Africa Showing Languages of Ethnic Groups. Source: Phonetics.ucla.edu

- Ethnographic data primarily collected by Person suggest that kola already was commercial crop when Mande-speaking groups in Sierra Leone settled in the forest where it was cultivated. The first Mande group probably moved into the forest in the mid-15th century with the major movements dating to the 16th century. Ethnic boundaries were relatively stable by the early 17th century. Hence the ethnographic data give some reliable basis for the reconstruction of chronology. The trade had developed before the 15th or 16th centuries but major transformation occurred then.
- Kola trees can grow in the forest-savannah fringe south of approximately 10^{o}N latitude but the main area for *Cola nitida* has been between 6^{o}N and 8^{o}N from the Volta region in Ghana to the rivers of the Upper Guinea coast. Nearness to the savannah was significant in determining potential output with the most productive region beginning from 125 to 150 kilometres inland and ending approximately 300 kilometres from the coast.

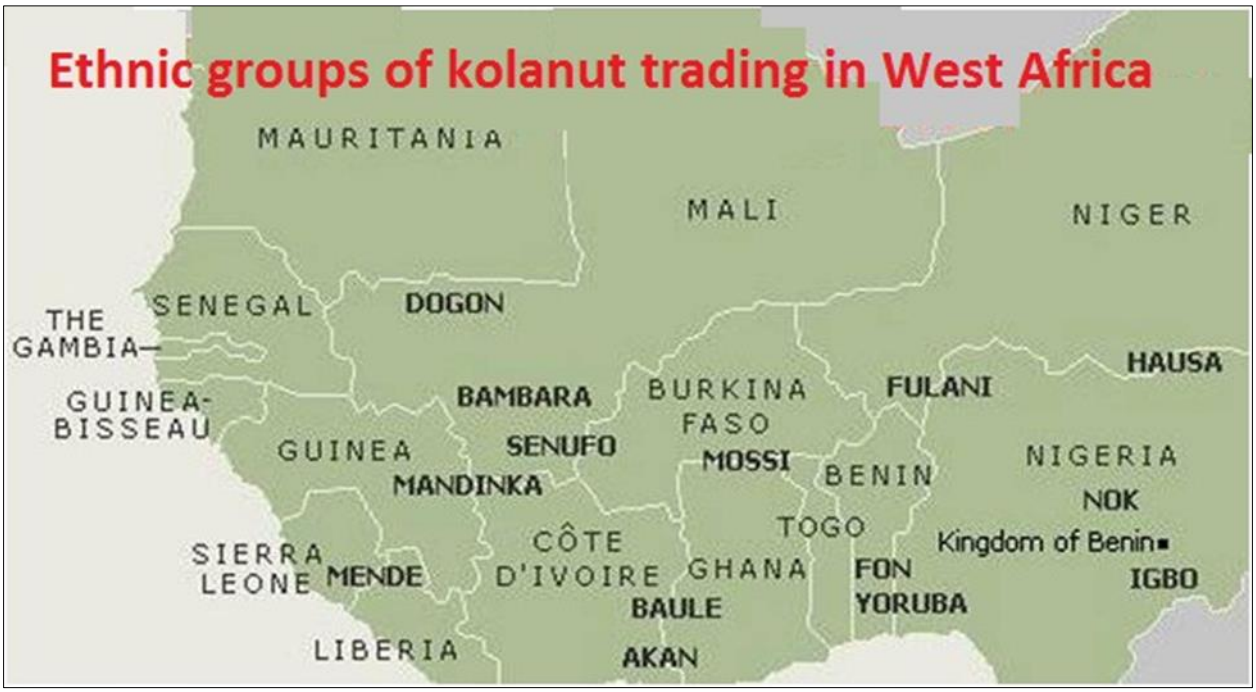

Figure 2 Map of West Africa Showing Ethnic Groups of Kolanut Trading. Source: Hobotraveler.com

The sole position of Asante in Ghana as the only centralized region to emerge from an area of kola production highlights an important dimension of kola production and trade close correlation between ecological specialization and cultural boundaries. The sharp division separating producers from traders and consumers coincided with the ecological divide between forest and savannah.

It was however, noticed that the market for kola in the savannah probably existed by the13th century and possibly much earlier. This market was large enough to have by then come to the attention of observers in North Africa. This supports the record in which kola trading antedates the Mande migrations into the forest in the 15th and 16th centuries

After the middle of the 19th century some changes occurred in the sphere of commerce in Africa which affected the established patterns and also predicted new era in the kola trade. These changes were associated with the abolition of the Atlantic slave trade and the emergence of legitimate trade in vegetable products.

Kola nevertheless, became one of these new products and as for such other commodities as gold, gum, hides and skins, oil palm and so on which became important in the commercial revolution of the 19th century, kola history was already an old one.

As earlier stated, kolanuts were traded along the Upper Guinea coast as early as the 16th century. Nevertheless the trade of the last half of the 19th century was basically different which part of the new departure was in the economic history of Africa.

By the mid19th century some kolanuts were exported from Africa to Europe, the united State of America and England primarily for pharmaceutical purposes and also for cola drinks which later became very famous.

In the year 1860, about 66 tons of kolanuts were imported into England. This volume increased to145 tons in 1870, 378 tons in 1879 and by 1910 Chevalier estimated that total African exports reached almost 1000 tons. However, not all of these were *cola nitida* as some other varieties were also exported.

Chevalier and Perrot 1911 [21] data showed that *Cola acuminata* was exported from Lagos to Brazil as early as 1851. The new kola trade was similar to other branches of the commercial revolution based on the fact that improved transportation predominantly sea-borne traffic in the early stages and later on rail and road transport facilitated the trade and created vent-for- surplus. As Hogendorn1976 [22] has confirmed that this situation prevails when advancement in technology brings about the marketing of crops on scale which greatly surpasses earlier output.

6. Conclusion

Kolanuts, an important article of trade in Nigeria and some other West African countries have been traded for many centuries creating sources of livelihood for kola farmers, processors, marketers, transporters, and so on. However, considering the values of kolanuts in terms of health benefits, industrial uses and so on, the origins of different varieties of these nuts have been traced to some West African countries. The production of kolanuts has also spread to some other areas in West Africa which could be proved through the use of linguistic and ethnographic data. However, advancement in technology has brought about commercial revolution based on the fact that improved transportation system predominantly sea-borne traffic in the early stages and later on rail and road transport facilitated the trade and created rooms and openings for increased production of kolanuts.

It is however recommended that since kolanut production and trades have become a big and veritable industry in Nigeria and some of the neighbouring countries which many people depend on for their livelihoods, the various governments of these countries should take proactive steps in widening the scope of production of this crop as well as proffering solutions to the various marketing problems faced by kolanut traders.

Compliance with ethical standards

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Disclosure of conflict of interest

The authors do not have any conflict of interest to declare. All co-authors have seen and agreed with the contents of the manuscript and there is no financial interest to report. We declare that the submission is original work and is not under review at any other publication.

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