

AGRICULTURE AND PRE-COLONIAL IGBO ECONOMY: THE NNEWI EXAMPLE

By

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Abstract

Scholars of Eurocentric perspective has opined that pre-colonial African economy of which Igbo land is a part was not dynamic and to a large extent underdeveloped. This is because agriculture which was the main-stay of the pre-colonial African economy was not advanced and lacking in certain elements that boost agricultural production such as mechanized farming and some farming techniques like the application of chemical fertilizers and irrigation systems. But this view when subjected to critical interrogation lacks much merit. This is because even though pre-colonial African agricultural economy was not as developed as that of Europe it still possessed some basic elements that enabled it to maintain production that served and sustained the indigenous population from one season to the other. Obviously, the agrarian economy of pre-colonial Igbo land had a few challenges which included the limitations associated with the use of simple farm tools, unpredictable environment and weather conditions as well as lack of control over plant pests and animal diseases, nevertheless they were able to maneuver the situation to the point that food production in Igbo land during the pre-colonial era was not largely hindered. Hence the aim of this paper is to use the Nnewi example to elaborate what pre-colonial agriculture in Igboland was like and as well analyze the basic elements that facilitated agricultural production in pre-colonial Igbo land, highlighting on how the challenges were handled. It concludes on the premise that although pre-colonial Igboland had its limitations, it was far from being undeveloped and lethargic as it was an economy that was developing at its own pace.

Keywords: Agriculture, Igboland, Economy, Africa, Pre-colonial

Introduction

In pre-colonial Igbo society agriculture was very essential for economic progress. This is observed when the quantity of persons who participate in it is considered. The farming profession in pre-colonial Igbo society was a noble profession. At that era everybody was involved in farming activities. Most families produced enough of such staples as yam, cocoyam, and vegetables to last them all the year.

Pre-colonial Igbo agriculture could be said to be quite efficient, though this could be argued with the view that pre-colonial African agriculture was static, inflexible, uniform, and essentially simple subsistence economy. But still it would be argued that the agricultural economy of pre-colonial Africa was actually efficient and progressive. According to Hopkins (1973), throughout their history, most West Africans (the Igbo inclusive) have won their living from the land. Agriculture was the chief activity in the greater part of the region, as it was in other pre-industrial societies as foodstuffs form the largest share of the value of goods and services produced round the year. Furthermore, Hill (1962), notes that agriculture remained the matrix in which indigenous economic activity is set. He posits that it was not necessary to give up farming in order to enter occupation such as craft manufacture and trade which are frequently undertaken on a part-time or seasonal basis. On the contrary an agricultural surplus often made it possible to finance additional types of productive enterprise. It has to be highlighted here that the Neolithic revolution elucidated by Chukwu (2015), which involved the domestication of plants and animals was one of the great events in world history and one of the outstanding achievements of the indigenous inhabitants of Africa including the Igbo. Also the Igbo by means of agriculture had provided more assured supplies of food, it made possible the creation (and appropriation) of a surplus, it stimulated a degree of urbanization and specialization, and it permitted an increase in population, since the maximum size no longer depended on the numbers that could be supported at the leanest time of the year by hunting and gathering. Agricultural activities in Igbo land was also intensive as shown by the fact that using such simple tools as the machete and the hoe the Igbo reduced to either grass land or palm bush vegetation areas which must have been originally tropical rain forest. According to Afigbo

(1981) the commitment of the Igbo people to agricultural activities in the pre-colonial era is also seen in the system of land tenure practiced therein of which there was no freeborn who had not a piece of land over which he enjoyed usufructuary rights. It was the important position agricultural activities occupied among the people that caused the Igbo to hold the farming profession in high regard. Thus Nnewi, which is a key town in Igboland, during the pre-colonial era had its economy deeply rooted in agriculture, though it was mainly at the subsistence level.

The Agrarian Economy in Nnewi

According to Okeke (2018; personal communication), before the coming of the Europeans Nnewi people were good farmers. They were very hardworking and committed to it. He rather stated that most men who married plenty wives in those days did so, so they could raise man power to assist them in farm work. What these men normally did in those days was that they shared their farm lands and gave portions to their various wives and children to cultivate on and generate food for the family. Likewise, Igbokwe (2018; personal communication), also pointed out that Nnewi people in pre-colonial times were very hardworking farmers as they were not traveling a lot then. He further stated that the men were very committed to farm work hence they were mostly polygamists as ones wealth was estimated then by the number of wives he had. The reason for the plenty wives was mostly because of farm work, the wives and the children were all assisting the men in the farm work to provide something for the family to eat and to be able to attend to other needs. So farming was the order of the day then. Igbokwe, further stated also that the men did the tilling of the land and the cultivation of the crops, the women did the caring and tendering of the crops as well as the weeding but the bulk of the work especially the most tedious ones were done by the men. Hence, farm work was the main economic activity in Nnewi at that time.

Also, Okeke (2018) stated as well that farm work at that time was done with human strength and that was why many hands were needed. At that time also farm work was mainly done at the subsistence level, people were mostly concerned with what to eat, thus the sole aim of farming was for the sustenance of the household, though sometimes they use their farm produce to purchase the things they do not produce, things like salt and fish.

In terms of farm labour, Igbokwe (2018) noted that some men, especially the wealthy ones with large farm lands did not only rely on their family to do the farm work, they most times hire young men who work for them in their farms and convey the farm products to the house where they are stored. Igbokwe further stated that his own father had farm lands in various places like that too, and so he hired young men who worked for him and helped conveyed the farm produce from one point to the other until it reaches home where it is stored. These young men are then rewarded with some portions of the farm produce. Hence, these young men hired may not have their own farm lands but they survived by moving from one place to another working for other people in their farms. So anyhow you looked at it, it was all about farming. Along this same line Okeke (2018) also pointed out that another means by which some men at that period raised manpower for farm work other than their family/household was by forming labour associations made up of clique of friends. This clique of friends takes turns in helping each other out in their farms at specified days and time on such days the man's wife/wives would prepare meals for his friends whenever they come to help him out in his farm.

Furthermore, with regards to labour Hopkins (1973) notes that demography is, or, more accurately, should be a central theme in African economic history, for the greater part of the continent's gross 'national' product was and still is derived from the application of human power to the land. This is largely because in pre-colonial Africa labour was a scarcer factor than land in the production system. Thus, Hopkins further noted that population explosion is a comparatively modern event in world history, he highlighted that pre-industrial population were small and that under population was at least as common as overpopulation down to the nineteenth century and was certainly not peculiar to West Africa or even to Africa as a whole. India and Latin America were underpopulated until at least the beginning of the twentieth century and so too were countries of white settlement such as North America and Australia. This therefore explains the reason why agricultural as well as other economic activities in pre-colonial Nnewi relied heavily on family/household labour to enhance production.

It has to be noted also that not all labour was organized on the basis of multifunctional domestic units. Additional labour was provided mainly by slaves, though like earlier stated, a small number of hired hands were used as well. According to Hopkins (1973), the main concentrations of slaves were in areas where the development of domestic exchange activities created employment opportunities which could not be met by local, free labour. He further stated that slaves were fairly specialized workers, though they were found in a variety of occupations. A few privileged slaves held senior civil and military positions. Others were found in skilled jobs such as craft manufacture. The majority however performed work which was usually menial, sometimes grueling and occasionally dangerous. Slaves were employed as domestic servants, they acted as carriers, they labored to build towns, construct roads and clear paths, they were drafted as front-line troops and they were common in all types of agricultural work. Hence, Okechukwu (2019, personal communication) noted that in Nnewi slavery had been in existence long before the trans-atlantic slave trade which was facilitated by the Europeans. He noted that Nnewi in the pre-colonial times was notorious for fighting many wars of expansion and these wars were executed by troops dominated by slaves. Okechukwu further noted that wealthy and prominent personalities in pre-colonial Nnewi built their houses mostly with slave labour and these slaves were as well used to clear the paths leading to the houses of these personalities. Again, these prominent personalities like Milikwe in Abubo Nnewichi one of the villages in Nnewi had large expanse of land of which their household alone was not sufficient enough to cultivate hence slave labour was extensively used for farm work by these personalities. These slaves were mostly brought to Nnewi from wars as captives, it was only in rare occasions that these slaves were bought by means of trade as slave trading was not predominant in Nnewi until the Europeans popularized it. It has to be noted here that there is a difference between slavery and slave trading. Slavery is the condition in which one person is the personal property of another. While the buying and selling of people who have already become slaves is the slave trade. These two terms are not synonymous. Also, slavery as understood by Europeans and as practiced by European settlers in the Americas, was vitally different in concept from that of the African. Both theory and practice, to a European a slave meant a person who was the absolute property of his master. Neither in law nor in custom did the slave have any protection against the whim of his master, the slave could never own property, never marry without his master's consent nor, apart from the chance of abnormal conditions, could he ever earn his own freedom or beget free descendants. He was a tool to be used and discarded when broken. He could be sold away to from his family or witness his children being taken away to disappear forever under auctioneer's hammer. There was no obligation on the owner to treat his slave with consideration and humanity, and it was not a crime if a free man killed a slave. But in Africa, the legal position of a slave was not much better but his customary situation was significantly different. As a household slave, he was regarded as a member of his master's family and received comparable treatment with the free members of the community. He was a worker but a worker with rights. He was most unlikely to be sold away from his family or harshly treated unless guilty of serious misconduct. If he proved to have high management ability or military skill, he could rise to a position of eminence in his master's household. In the Niger-Delta, for example he could even become head of the household and even advance to become a conquering general or senior administrator like Jaja of Opobo. This was indeed how slavery/slave labour was utilized in pre-colonial Nnewi to augment or support family labour. Thus, slave labour was a veritable source that boosted the labour force in the agrarian economy of pre-colonial Nnewi.

Regarding the dominant farm products produced in pre-colonial times in Nnewi, Igbokwe (2018) noted that yam and cocoyam were mostly predominant. Men were more involved in yam production while the women were more involved in the production of cocoyam. He stated that there was no much of cassava in those days. At this point it would be important to highlight on the origin of the cassava crop in the Africa society. The cassava crop first was grown in South or Central America. It did not previously grow in Africa. Cobby (1976) noted that Cassava was brought in Africa by the Portuguese in the sixteenth century, but it was much later that the crop spread throughout Africa. It was from Brazil that the Portuguese brought the cassava crop into Africa. Jones (1959) as well noted that cassava was first introduced into West Africa from where it spread to other parts of Africa. Coursey and Booth (1977) also highlighted that the crop entered into West Africa through the Gulf of Benin and the Congo River towards at the sixteenth century was rounding off. They regard the Portuguese as the ones who

spread the crop in Africa. Be that as it may, it is pertinent to state that cassava actually became a staple food in African between the nineteenth and twentieth century.

Okafor (2018; personal communication), as well acknowledged that yam and cocoyam were the predominant farm produce in pre-colonial Nnewi but he also added that palm products were also produced in Nnewi at that point in Nnewi's history. Okafor, further stated that yam and cocoyam were mainly for consumption while palm produce were produced both at the subsistence and commercial level, as people from other parts of Igboland and beyond do come to Nnewi to buy palm produce mostly palm oil.

It is important to note at this point that in as much as farming was the main economic activity in Nnewi during the pre-colonial times, it was not the only economic activity in the community then, according to Igbokwe (2018), apart from farming, people also traded on native cows at that time, he started that the people that were actually dealing on such cows were people from Adazi and Awgbu area and that was where his father always went to buy the native cows and he normally goes with a few young men to assist him. When he came back, he would take care of the cows for some time and then sells them off at the Eke Ama-obi market. He further noted that his father engaged in the production and sale of necklaces for women. He normally went to buy elephant materials like elephant eye lids from people who travelled long distances and when he came back, he sat down and then tied them in a stylish pattern and then sold them to the women who wore them as necklace in those days. Igbokwe (2018), as well highlighted that Nnewi people were also hugely involved in the production and trade of palm produce especially palm oil and kernel during that period as Nnewi had a lot of palm trees at that time.

It should at this point be stated that the economic activities in Pre-colonial Nnewi to a very large extent was able to sustain the people and enabled them to have a good and comfortable life. Igbokwe (2018) highlighted that the economic activities of pre-colonial Nnewi actually helped them to a great extent in the sense that they were able to live a good life, feed, build their houses (they lived in thatched and mud houses) and take care of their needs and the needs of their families. At that time there was no much difficulty in getting what to eat as feeding was what really mattered in the economy of that time and they were able to at least feed well. Also Okeke (2018) as well noted that at that period life was fairly simpler and less complicated in the sense that it was not as difficult as it is today to put food on one's table, as long as you have right to a piece of land (and most men did had because as a son you are entitled to a portion of land), with hard work you can always produce what to eat both for yourself and your family. At this point it has to be stated that in pre-colonial Igboland as in most pre-colonial African societies the right people had over land was usufructuary as what prevailed was mostly communal ownership of land and not necessarily individual ownership. It could be argued that such system of land tenure which prevailed in pre-colonial Igboland inhibited the development of natural resources. Furthering this argument Pedler (1955), posits that land which is an essential factor of production has been prevented by custom and law from coming under the influence of economic forces.

Thus, this line of argument is of view that communal ownership of land as practiced in pre-colonial Igboland was less beneficial to the pre-colonial Igbo economy when compared to the advantages of individual tenure and therefore condemned communal ownership as a primitive obstruction to the economic development pre-colonial Igbo societies. But it has to be stated here that the conventional dichotomy between backward communal ownership and advanced individual tenure could be misleading. According to Turner (1971), African land laws no less than indigenous systems of cultivations, varied greatly even within restricted areas and ranged from land that was indeed communally owned and worked to land that was held virtually as freehold. Thus, households frequently made use of common land and individual holdings simultaneously, as they did in medieval Europe. Hence, if individual tenure is to be the criterion of a progressive system of land law, then there was undoubtedly an element of modernity in the rules governing the use and disposal of land in Igbo land and West Africa in general. Again, even though the greater part of the land was owned communally, it would be wrong to conclude that this arrangement was a barrier to progress. This is because under systems of extensive agriculture such as shifting cultivation and rotational bush fallow, it was important for the farmer to secure the general right to cultivate land within a given area but the actual ownership

of a specific plot, which was destined to lie fallow for a number of years was not a matter of significance. Usufructuary rights were more crucial and these were clearly delineated and could often be inherited, furthermore, the household or individual concerned usually had a clear title to the crops produced on communally owned soil and received guarantees regarding tenure. In other words, it was the products of the scarce factor which is labour that was closely defined, whereas rights over land which was in general an abundant resource were less specific. Where population was dense and period of fallow short or non-existent, as was the case with permanent cultivation, then claims on individual plots became stronger and, in these circumstances, freehold tenure, pledging, and even the sale of land was recognized in customary law. It is as well essential to note that methods of acquiring, holding and disposing of land differed not only spatially, but also through time. In summary therefore, indigenous land laws were neither irrational nor antediluvian, but were a reflection of the conditions governing agricultural production in Igboland and West Africa in general. There was a factor market in land, though it was very limited. The explanation of this limitation is not that Africans were busy maximizing social rather than economic values, but that land was not scarce enough to acquire a market value. Households (and individuals within households) had scope for enterprise in securing and exploiting land within the dominant, so-called communal system of property ownership. Thus, if indigenous land laws in Igboland were a constraint on development, how was it then that these same laws were consistent with a widespread and rapid expansion in the production of export crops during the early part of the colonial period? Essentially the system of land tenure in pre-colonial Igboland did not prevent development. Of course, African systems of land tenure undoubtedly underwent important changes in the twentieth century, but these were a consequence and not a prerequisite of export growth.

Okeke (2018) also noted that farm work was very tedious for them at that time because they were merely using their bare hands with a few farm tools like hoes and machetes, which was the reason many hands were always needed. This is why it could be argued that agriculture remained stuck in a subsistence groove in Igboland and in West Africa in general, because indigenous farmers failed to invent or adopt the technology needed to raise productivity. This contention is usually based on assumptions about the role of the plough and some other advanced agricultural systems. But for the purpose of this discussion the analysis would be confined to the use of the plough. According to White (1962) the plough played a crucial role in the development of European agriculture from the sixth century onwards. Goody (1971) as well argued that the absence of the plough from Africa south of the Sahara helps to explain some major economic and political contrast between Africa and Europe. On the other hand, according to Hopkins (1973), to cite the plough as an example of the technological disparity between Europe and Africa is to draw attention to an important fact, but to imply that the presence of the plough would have transformed the development potential of West Africa (Igbo land as well) is to advance a very different case, and one that is open to question. African farmers relied on simple tools such as the digging stick, the hoe and the matchet, though according to Hopkins (1973), a hand plough which technically was half-way between a hoe and a simple mould board plough, was in use in the Gambia at an early date. It is possible that West Africans did not employ this heavy European plough because they did not know of its existence, but this explanation is unsatisfactory because West Africa had long-standing and close connection with North Africa where ploughs other than the simple scratch plough were common. It would rather be suggested here that the plough was not used in Igboland and in West Africa in general because it was unsuitable, or too costly or both. The plough is of greatest use in areas where soils are heavy and land cannot be cleared by fire. These conditions are more typical of Europe than Africa. Moreover, draught animals are needed to work a plough effectively. It is difficult for beasts of burden to live in the forest region (of course Igbo land is in the tropical rain forest), and the plough was not the right implement to use in an area that is filled with trees. Also, it has to be noted that ploughing in the savanna part of West Africa could most likely lead to soil erosion. But all the same, the plough could have been used in some parts of West Africa where the soils were not likely to erode easily, where draught animals were available and where cereal cultivation favoured the creation of a field-type landscape. Yet it has to be explained here that the plough was not adopted in these areas because its greater cost did not guarantee a more than proportionate increase in returns. Ploughs and draught animals were expensive to buy and draught animals are also expensive to maintain. The plough can prepare more land in a shorter time than can manual labour but according to McLoughlin (1970), this achievement often involves a fall in output per man hour and in some cases in output per acre as well.

Farmers' incomes need to rise some way above the level needed for subsistence before they can afford to adopt new techniques such as plough. Even so a more advanced technology will be used only if it is more profitable than the existing methods of production or if it essential to ensure survival. Neither of these conditions appears to have applied to pre-colonial Igboland and West Africa where a relatively simple technology was developed which was the type that well suited its requirements. Hence even in the twentieth century during the colonial era virtually the whole of the massive expansion of domestic foodstuffs and export crops which occurred was produced with the aid of traditional tools as the use of the technically superior farm implements proved economically unrewarding. So, to suppose that the failure to adopt a more complex agricultural technology was a cause of underdevelopment in Igboland and Africa is to put the plough before the ox, and invention before need.

Therefore essentially, Okafor (2018), pointed out that to a very large extent farming did help Nnewi people during the pre-colonial era, this is mostly because through it they were able to provide food for their families and as well generate income through the trade on palm produce.

An Analysis of Pre-Colonial Agriculture in Igbo Land/Africa

In view of the above narrative on pre-colonial agriculture in Nnewi it has to be noted that two points can be deduced from the way pre-colonial agriculture in Igboland and by extension Africa was practiced. First is that Africans/Igbos have been productive before the arrival of the European colonizers into their territories. This is illustrated by the fact that most families were able to produce enough staple such as yam, cocoyam and vegetables to last them all through the year. African/Igbo societies were able to master their environment to the extent that they were able to eke out a living by it. Flint (1966) described the intensity of the productive endeavors of the Igbo societies in the pre-colonial times by noting that by just using such simple tools as the machet and the hoe the Igbo reduced to either grass land or palm bush vegetation areas which must have been originally tropical rain forest.

Green (2009) noted that farmers in pre-colonial Africa faced two key challenges which were scarcity of labour and a hostile environment. To buttress on the scarcity of labour it has to be stated that pre-colonial agriculture in Igboland cum Africa was not mechanized, it was predominantly manual and therefore plenty hands were always needed for agricultural production. This challenge was tackled by the polygamous nature of most pre-colonial Igbo/African families. Men, their wives and their numerous children as well as domestic servants and slaves made up the labour force of pre-colonial production system in Igboland/Africa. Members of each family were the ones who toiled on their land for the production of their various farm products. It is important to note as well that family labour in pre-colonial times was as well augmented by labour associations whose members took turns in working in the farms one another. Hence the Igbo/African people were productive and were meeting their various needs before the European colonizers came.

Regarding the hostile environment, it has to be stated that in many regions of Africa including Igbo land the environmental conditions were sometimes unfavorable for agricultural production. But the pre-colonial Africa/Igbo people handled this challenge by finding ways to maneuver the weather conditions. They structured their farming activities to suit the weather variations. Green (2009) as well noted that due to the abundance of land in pre-colonial times, African farmers could simply open up a new field once a given land is exhausted or when they probably want to increase their yields. They as well used a lot of inputs like manure to keep the land fertile.

Hence, though Igbo/African farmers in pre-colonial times were not able to transform nature on a large scale as they were without modern machineries and modern inputs like chemical fertilizers and pesticides making them vulnerable to minor changes in the land and weather conditions, they were never passive victims of such conditions. Iliffe, (1995), noted that they were innovative and adapted well to changes, as their system of production were flexible in dealing with the existing conditions. Pre-colonial Igbo/African farmers were quite productive and to an appreciable extent did make an impression on nature.

Another point to be deduced is that pre-colonial Igbo/African agriculture was both underdeveloped and developing at the same time. It was underdeveloped in the sense that agricultural production at that period was dependent on environmental factors such the weather and was vulnerable to them as well. A slight alteration in weather conditions could tremendously hamper production. Both their crops and animal were susceptible to pests and diseases and in most cases, they had little or no control over such conditions making them to suffer heavy losses.

On the other hand, pre-colonial Igbo/African agriculture was developing. This is because farmers were dynamic in their system of production. Irrespective of the hostile environmental factors that arose from time to time, pre-colonial Igbo/African farmers still managed to continue on their agricultural productions. They maneuvered the weather conditions, structured their farming activities to suit weather variations, quarantined their animals in periods of influenzas, and tried as much as they could to manage with production in the face of pest attack and animal diseases. Though these challenges do lead to a reduced production whenever they arise, agricultural production never ceased because of them. It has to be highlighted that it was the dynamic nature of the Igbo/African agriculture that enabled it to easily adapt to the increased volume of agricultural production system introduced by the Europeans.

Conclusion

In conclusion therefore, it is clear that before African societies and the Igbo society in particular came into exploitative contact by its permanent links with Europe in the 15th century, it had attained an enviable level of sustainable development. They had advanced materially and developed at their own pace. In pre-colonial Igbo economy, agricultural activities remained key to their material well-being when the quantity of persons who participated in it both in full or partially is considered. In Igboland at that time everyone got involved in agricultural activity. Most families produced enough of such staples as yam, cocoyam, cassava, and vegetables to last them all the year. There were some communities whose soils were so fertile and who gave so much of their time to farming that by the dawn of modern times they had started producing for outside markets. They exported some of their surplus agricultural products to areas outside Igboland, and helped to supply the needs of certain Igbo groups whose soil had deteriorated so badly that they had increasingly come to pay less and less attention to farming. It suffices to state that Igbo agriculture had by the First millennium A.D become so advanced that it could support the civilization with which the Igbo find have been associated. And it must have taken centuries of slow development for it to attain that stage. Hence, although pre-colonial Igbo economy had its limitations it was far from being undeveloped and lethargic as it was an economy that was developing at its own pace.

References

- Afigbo, A.E., (1981). *Ropes of sand*. London: Oxford University Press.
- Chukwu, J. C. (2015). Traditional Igbo economy: challenges to growth and development. *Journal of cultural, society and development*, Vol.10, pp. 35-42
- Cobley, L. (1976). *An introduction to the botany of tropical crops*. Chicago
- Coursey, D. G. and Booth, R. H. (1977). 'Root and tuber crops' in C. L. Leakey and J. B. Wills (eds), *Food crops of the lowland tropics*. London
- Flint, J.E., (1966). *Nigeria and Ghana*. Michigan: Knopf
- Goody, J. (1971). *Technology, tradition, and the state in Africa*. London: Methuen
- Green, E. (2009). *Production systems in pre-colonial Africa*. Chicago: University of Chicago Press.
- Hill, P. (1962). Some characteristics of indigenous West Africa economic enterprise. *Economic Bulletin of Ghana*, Vol.6, pp. 3-14.
- Hopkins, A. G. (1973). *An economic history of West Africa*. New York: Longman Group.
- Igbokwe (2018), personal communication
- Iiliffe, J. (1995). *Africa: The History of a Continent*. Cambridge: Cambridge University Press.
- Jones, W. O. (1959). *Manioc in Africa*. London: Routledge.
- McLoughlin, P. F. (Ed). (1970). *Africa food production systems*. Baltimore
- Okafor (2018), personal communication
- Okechukwu (2019), personal communication
- Okeke (2018), personal communication

- Peddler, F.J. (1955). Economic geography of West Africa. *American Economic Review*, Vol. XLpp.215-240
- Turner, V. (Ed). (1971). *Colonialism in Africa, 1870-1960*. Cambridge: University of Cambridge press
- White, L. (1962). *Medieval technology and social change*. London: Oxford University Press.