

## Indigenous Agricultural Techniques and Calendar of the Nupe Peasant Farmers of Nigeria in the Pre-Colonial Period

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By

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### **Abstract**

*The paper examines the indigenous agricultural techniques and calendar of the Nupe peasant farmers in the pre-colonial period. The agricultural techniques included efficient systems of shifting cultivation, inter-cropping, adoption of marshland and irrigation farming and so on. There was also a highly reliable farming calendar which worked with six seasons and twelve lunar months. Because of efficient agricultural techniques and reliable farming calendar, it was not surprising that Nupeland did not experience serious food problems in the pre-colonial period (Iyela, 1987).*

The Indigenous agricultural system and calendar of an area play important roles in determining the success or otherwise of farming activities. For instance, in the pre-colonial period, communities with efficient agricultural techniques and reliable farming calendar experienced huge successes in agricultural production. Even, in the modern period, nations with advanced agricultural techniques are also, known to have been highly successful in agricultural activities.

In the pre-colonial period, the Nupe peasant farmers of Nigeria realized the importance of having an efficient agricultural system and reliable farming calendar. It is not surprising that the people devised their own agricultural techniques and calendar. It is an examination of these, that forms the main focus of this paper.

### **Agricultural Techniques**

The type of agricultural system practiced in an area dictate the types of agricultural tools which are used. Thus, most of the Nupe peasant farmers in Niger State before 1900 practiced agriculture on a small scale and used mainly, simple hand

tools. The common tools used by the peasant farmers were hoes, machets or cutlasses, pick axes and axes (oral interview, Abu Maji). The various type of tools had different traditional shapes which had been adapted as a result of long experience in their usage. There were two main types of hoes. These were those used for deep cultivation as in the making of yam hills and those used for light cultivation or weeding. The machet or cutlass was used mainly for cutting holes. Matchets were also used for clearing high and low bushes, for felling and logging trees, for harvesting and cutting yams, etc.

### Shifting Cultivation

The agricultural system practiced by the Nupe peasant farmers in Niger state during this period was based on shifting cultivation. this was combined with an efficient system of crop rotation. Uguru, (1981: 59) in his book, defines shifting cultivation as

*The opening up of an area of land which has been under grass or bush fallow for some period, cropping this land until the nutrient reserves of the soil no longer gave a good yield of crop then abandoning the land to revert to the natural vegetation fallow, and shifting to a new area under grass fallows where the whole process is repeated.*

Thus, under the shifting cultivation practiced in the area, farmland were cultivated for periods that ranged from four to seven years till the nutrient reserves of the soil no longer gave a good yield of crops. The farm land was then abandoned temporarily for periods between 4 and 15 years in order that it would revert to the natural vegetation fallow and thus fit for cultivation. In place of the abandoned farmland, a new farmland was then brought under cultivation.

### Crop Rotation

During the period of cultivation, the peasant farmers also practiced the system of crop rotation. Different types of crop rotation were practiced here and this depends on the crop which was planted on a farmland brought under cultivation. There were some main rules for this which most of the peasant farmers observed. For instance, a crop like yam was a one-year crop and this was one of the first crop in the circle of the

same farmland. On the other hand, it was known that millet and sorghum, grew well when planted as a second year's crop. Thus, where the rotation began with millet and

sorghum, bulrush-millet was left out in the first year and added later, since it was realized that it did not grow well when planted as a first crop on new field, especially if the rains began late. On the other hand, land on which the millet and bulrush-millet crops and sorghum were planted in succession may loose their nutrient reserves faster

than land planted with varying crops and thus had to be abandoned after only three years (Oral Interview, Suleiman Minna).

### **Inter-Cropping**

It must be pointed out that it was not only the system of crop rotation that was practiced by peasant farmers in the area. They also adopted the practice of planting certain crops together on the same farmland. This practice of inter-planting certain crops between others was one of the most characteristic features of “the intensive and economic farm techniques of the peasant farmers of the area” (Nadel, 1942). The system of inter-planting varied from place to place in the area and involved many main combinations. For instance, in some areas, millet, bulrush-millet and sorghum were planted together on the same mound, sorghum on the top and bulrush-millet and late millet on the flanks of the mound. In some other areas, yam and okro were frequently planted together, yam on the top of the mound and okro at the foot. Still further, in other areas, after bulrush-millet or maize had been reaped, beans were sown in their place, that is, on the same ridges or mounds, between the still growing late millet and sorghum plant (Iyela, 1997: 67)

### **Selection of Special Varieties of Crops**

Not only did peasant farmers in Niger state prior to colonial rule practice the system of inter-planting certain crops on the same farmland, they also adopted other farm techniques like the selection of special varieties of crops which were grown in a large number of different varieties. For instance, among Nupe peasant farmers, sorghum (*eyi*) grew in three different varieties. These were kuyi, *dindorogi*, and *ekpa*, with the latter said to be the finest and best taste. Again, two varieties of rice were also grown. These were the sweet rice, which was a six-month crop in the river marshes and a variety which mature in ninety days on the less well-irrigated inland farms. Apart from rice, there was *Shenshere* which once planted, produced year after year without the need for replanting. The peasant farmer also grew what was known as *Emagi*, a type of vegetable which was specially grown and which took only about three months to produce (oral Interview, Mohammed Bello).

### **Adoption of Marshland and Irrigation Farming**

Apart from the above, another important factor in the productive system was the adoption of marsh land and irrigation farming by the peasant farmers in the area.

The cultivation of marsh-land farms known as *bata* was adapted to the conditions of a natural annual irrigation by the flooded rivers and water courses. Small irrigation schemes along river courses and small streams were established by the peasant farmers. As a matter of fact, the existence of such streams, water courses and flood plains accounted, mainly, for the human settlements along them. This was hardly surprising. The rivers and streams provided the water needed for human consumption

for agricultural purposes, the fertile soil from silt deposits carried from upstream and “the economic importance of both amphibious and aquatic creature.” These made the areas attractive for human settlement and centres of production. It should be emphasized that of all these, settlement along the rivers and streams for human consumption and agricultural purposes appeared to be the most important. It was for this reason that the peasant farmers embarked on irrigation farming. The irrigation area was divided into square plots, each consisting of four to six ridges, running parallel and two ridges at right angles on the upper and lower end. The ridges were flat and narrow; they did not connect at the corners, but left small channels open. By means of these ridges, the water from the flooded river was distributed evenly on the cultivated plots using the simple water lift known as *Shadoufs* (Oral interview, Abdullahi Jamilu).

### **Farming Calendar**

The calendar used by the Nupe peasant farmer was an agricultural calendar. This was based on lunar months and began with the appearance of the first rains, roughly in April. From the beginning of the first rains, the peasant farmers counted twelve, thirteen and on some occasions, fourteen months until the new rains stopped. The last month of the old year, meaning the 13<sup>th</sup> and 14<sup>th</sup> month, was then identified with the first month of the new year. The year was divided into six seasons, each made up of two months. These were the periods known as *gbama* (first rains), *Zuzuka* (rainy season), *Malika* (heavy rains), *Sabaka* (time of growth), *gbafere* (cold season) and *banagu* (hot season). However, it must be pointed out that on some other occasions, peasant farmers used *Zuzuka* and *yikere* to denote the whole rainy season and the whole dry season respectively (Iyela, 1997).

The first agricultural activities of the year, for the peasant farmers in Niger state was the clearing and burning of the farms. This was usually carried out during the dry season between the months of January and April on farms which had been fallow or on virgin land to be brought under cultivation for the first time. Grasses and shrubs were cut and afterward the farms burnt. Old farms were also cleared by burning the dead stalks, leaves and undergrowth that were left there from the previous year. The dead plants were allowed to rot on the fields and the fertilizing substance was washed into the soils by the rains which fell in the weeks or months between the harvesting and the following dry season. Furthermore, co-operation existed between the peasant farmers and the nomadic Fulani herdsmen who came down regularly in the dry season to find pastures for their herds. The peasant farmers invited the head of the nomadic group and on many occasions, induced him by presents of food or rendered assistance in the building of his camp on the fallow land. In this way, the land was matured (Oral Interview, Abu Maji).

After clearing, burning and manuring operations during the dry season, the next agricultural activities was sowing and planting.

As mentioned earlier, peasant farmers here possessed an elaborate calendar system which worked with six seasons and twelve lunar months and thus was not difficult for them to determine the beginning of the rainy season. An informant revealed that the appearance in April of a small red insect called *gbama* signified the coming of rains. The first light showers were usually ignored until heavy rains would have softened the soil. It was after this that the sowing and planting of different crops began. This exercise continued until the end of April or the beginning of May, ushering in the period for the first weeding known as *gongi*. This agricultural activity was to clear the ridges for growing plant and to remove roots, leaves, and undergrowth which the burning of the farms had destroyed. This was followed by the second weeding (nuuu) of crops about three weeks later and then the third weeding or hoeing known as *sawogi* and the fourth weeding or “pulling” out which was called *muya*. After weeding, the next agricultural activity of the year was the second phase in the farming circle. This was the harvesting of crops and which usually began in the month of July (Iyela, 1997).

### **Conclusion**

This paper examined the indigenous agricultural techniques and calendar of the Nupe peasant farmers of Nigeria in the pre-colonial period. It was pointed out that the farming techniques included inter-cropping, shifting cultivation, crop rotation, marshland and irrigation farming and so on. It was also observed that the Nupe peasant farmers had a highly reliable farming calendar which worked with six seasons and twelve lunar months. The efficient indigenous farming techniques coupled with the reliable farming calendar ensured the success of agricultural activities in Nupeland during the pre-colonial period.

### **References**

- Iyela, A. (1987). *Colonialism and famines in Niger province, 1900 – 1945: A study of an aspect of colonial under-development*. Unpublished MA Thesis, Ahmadu Bello University, Zaria.
- Iyela, A. (1997). *Policy resilience and food problems in Northern Nigeria; 1945 – 1985: A case study of Niger state*. Unpublished Ph.D Dissertation, University of Jos.
- Nadel, S. F. (1942). *A Black Byzantium*. London: Oxford University Press, page 210.
- Oral Interview, Abdullahi Jamilu, 42 years, farmer Wushishi, 4-3-89.
- Oral Interview, Abu Maji, 59 years, farmer, Bida, 7-6-90.

Oral Interview, Mohammed Bello, 72 years, farmer, Wushishi, 7-3-89

Oral Interview, Suleiman Minna, 62 years, farmer, Minna, 8-5-89

Oral Interview, Tijjani Mustapha, 69 years, farmer, Wushishi, 7—89

Uguru, O. O. (1981). *An introduction to agriculture for tropical areas*. London: Thomas Nelson and sons Ltd, page 59.