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Comparative ecological perspectives on food security by Abanyole of Kenya

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ABSTRACT

This paper focuses on implications of sustained food deprivation situations on the behavioural patterns of the Abanyole of Western Kenya. Using an ethnographic approach, the paper examines two ecosystems occupied by the Abanyole; the first ecosystem manifests typical indigenous, socio-cultural features, while the second epitomizes a cosmopolitan outlook. The study uses a comparative ethnography to show that while land is the main means of production in the two ecological niches, the amount of this critical resource that is available for household dispensation, and the strategies employed to exploit it, varies. This, the study finds, has implications for food security situations among households in the two areas. In addition, when faced with food deficit situations, the Abanyole resort to varying and contrasting coping mechanisms distinct to each ecosystem.

Keywords: Food security, agrarian, ecological perspectives, ethnography, Abanyole, Kenya.

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INTRODUCTION

There is general unanimity that in agro-based economies, the level of food security directly corresponds to productive forces such as the quality and amount of land available, the utilization of appropriate technology and, generally, the level of adoption of recommended agricultural husbandry (Fleuret and Fleuret, 1982). These are indispensible variables of measure for households' food security in rural areas that, by and large, depend on crop and animal farming as their main means of subsistence. Among horticultural societies for instance, the general view is that populations that apply modern and suitable technology to optimally exploit available land resources, succeed in achieving greater success in food production than those which do not (Fleuret and Fleuret, 1982; Connelly and Chaiken, 1987; Chaiken, 1988).

This paper is based on a study of two populations of Abanyole sub-ethnic group in Kenya who claim the same ancestral and cultural descent, but, as a result of economic and socio-political reasons, occupy different ecological zones. The ancestral land of the Abanyole, the community in focus, is located in Vihiga County, within the Western Province of Kenya. It is from this indigenous locale that the first sample of Abanyole population studied here was drawn. This ancestral area is generally referred to as *Ebunyole* (the land of Abanyole). The Abanyole here exhibit a much more traditional outlook; apparently, they are conservative in nature and tend to lean towards a traditionally oriented economy and way of life. The second study group was drawn from the Abanyole population that migrated to Lugari area of Kakamega County, in the eastern part of the same County. The factors attributed to the emigration to Lugari included population and land pressures in the indigenous Bunyore region, the search for new economic opportunities in the new settlement area, and a sustained but persuasive effort by the local political class to relocate part of the Abanyole population to the new settlement. Lugari is, essentially, a settlement scheme that was formerly occupied by white settlers in the pre-independence and early post-independence era in Kenya. Following a new political dispensation after Kenya achieved self-determination, land was alienated from the white settlers under a state-driven, Million Acre Scheme. Lugari then became a hub for agricultural activities; an area occupied by people from diverse socio-cultural backgrounds and hence attaining a cosmopolitan image.

The focus of this study was towards the realm of agricultural food sourcing strategies as defined by a particular environmental niche, and the extent to which this impacts on food availability and food related behavior. Studies on environmentalism tend to agree that human social and cultural behaviour is, to a large extent, determined in a mechanistic fashion by the natural habitat. American anthropologist, Otis Mason and the German zoologist and geographer, FredrichRatzel, for instance, consider natural habitat as delineating social and behavioural particularities which in their totality, may be said to constitute a cultural area (Marvin, 1968). Hawley (1950) argues that not only does the environment exert a permissive and limiting effect on a people's culture, but also has a creative, causative force to necessitate some distinctive mode of life among humans. While the above authors see the essential determinants of cultural institutions as the physical environment, Wissler (1923) refers to the dominant food source as greatly influencing culture area formations. This gives the effects of food production a mediating role between habitat and culture.

According to Government of Kenya (1996), the food poverty level in the region that covers Luanda Division stood at 54 to 63% of the population as compared to Lugari Division which had a lower level of 45 to 54% of the population. This study's objectives were therefore meant to assess the food situations among Abanyole in *Ebunyole* and Lugari regions, to analyze the factors behind such situations, and to examine the coping mechanisms in the wake of food deficit periods. In the latter case, the study's intent also entailed identifying emergent behavioural adaptations associated with sustained hunger situations.

Study population

Abanyole

The Abanyole constitute one of the sub-groups of the larger Abaluyia ethnic group in Kenya, which occupies most of what is administratively the Western Province of Kenya. Abanyole, in particular, are inhabitants of an area locally referred to as *Ebunyole*; an area that is within the administrative district of Emuhaya. The district is surrounded by *Abashisa*, *Abalokoli*, and *Abetakho* - all sub-groups of Abaluyia, and to a greater degree, the Nilotic Luo (*Abanyolo*) tribe. Although the relationship between Abanyole and their fellow Abaluyia neighbours is generally amicable, owing to long historical misunderstandings over boundaries particularly in areas around Maseno, their association with the Luo has, largely, been frosty.

There is no consensus yet by researchers and scholars on the actual origins of Abanyole. However, it is generally agreed that, from wherever they had originated (probably in *Misri*, Egypt), the fore parents of Abanyole exited at the shores of Lake Victoria. They then travelled to Kit Mikayi near Kisumu, before sojourning at a place called Esianganyinya in the present Wekhomo Location. It is from Esianganyinya that Abanyole spread out to other parts of the current *Ebunyole* region. Gideon Were (1967), on the other hand, suggests that the ancestors of Abanyole may have hived out of the Banyole (Bunyuli) of Eastern Uganda. They then travelled through Kadimo, to Sakwa and to Akala in Nyanza Province, before settling in *Ebunyole*.

The genealogy of Abanyole is traced to one, Anyole son of Mwenje. Anyole is said to have had several sons, among them being Amutete, Asiratsi, Amang'ali, Andongoyi (Tongoyi), Asiekwe, Asakami, Amuli, Mwiranyi, Ambayi, Asikhale, Amuhaya and Muhando. These sons had different mothers. Nowadays, the term *Anyole* is often invoked in a camaraderie manner by Abanyole in reference to "one of our own"; a kinsperson.

One of the main characteristics of the Abanyole community is their salient clan differentiations; with the clans named after the sons of *Anyole*. Not only has this influenced the politics of the day in Bunyore, but it too has led to chauvinistic feelings and disparaging attitudes among member clans. Gideon Were (op. cit.) makes reference to twelve clans that are found among Abanyole. Among the prominent clans here are the *Abasiekwe, Ababayi, Abakhaya, Abasikhale, Abasiratsi, Abamuuli Abamutete, Abamang'ali, Abatongoi, Abasakami* and *Abamutsa*. *Aba-* in this context refers to "those belonging to-". The clans are, in this case, traced to the sons of Anyole.

The basic landholding unit of the Abanyole is the extended family. This family essentially comprises the grandparents, the married sons and their families, and the unmarried children. Traditionally, extended family members built their homes on the same piece of property, but each elementary family cultivated its own field. Each of these elementary families constituted a consumption unit in its own right, and in this regard, it is defined as a household. Rights over land ownership were established either by inheriting a piece of the grandfather's land, being apportioned a piece by one's father, or by cultivating a piece of virgin land. In addition to these plots owned by individual families, there used to be some sections that were under the control of the clan head. A part of this land served as a communal grazing ground for all members of the clan. Another part was traditionally held in reserve and in times of need could be allocated by the head to individual clansmen whose property this land became after they had first cultivated. With the 1955 Swynerrton Plan that ensured land consolidation, adjudication and registration in the names of individual titles in Kenya, this trend has now become history.

The traditional tenure system of the Abanyole favours male children who would, ultimately, receive an equal or

nearly equal share of the family land and cattle. If a man died before his sons inherited his property, one of his brothers acted as a trustee until the sons came of age. If a man had no direct descendants, his brothers or their sons inherited his property.

From a traditional perspective, the social and *dejure* relationship between a M*unyole* (a person of Anyole descent) husband and his wife, just like in other Abaluyia sub-tribes, was ill-balanced. Traditional customs and conventions were defined to prejudice against the wife's status:

> ….she has no ownership status whatsoever …she has no right of ownership to any object she handles…she has no right to dispose of any of these objects unless she acts upon her husband's instructions... she has no right over her children in her quality as the mother…she has no legal independence or individuality… (Wagner, 1939: 13-14).

Though seemingly overstated, Wagner's contention, above, brings forth the asymmetrical power relations that existed between men and women among Abanyole people.

Emuhaya district

Emuhaya district was hived out of the then Vihiga District, and now Vihiga County. Apart from Vihiga, the district is bordered by Butere, Siaya and Kisumu. The district was created in 2007 during the period of heightened political activities leading to the General Elections held in Kenya in the same year. At the time of the study, between the years 2007 and 2008, Emuhaya was divided into two administrative divisions, this are, Emuhaya and Luanda divisions. According to the 1994-1996 Vihiga District Development Plan, the area currently covered by Emuhaya District had then a population of 115,000 people. This was projected to increase to 150,000 people by 2003, at a population growth of 3% per annum. However, the 1999 figures provided by the National Poverty Strategic Report Paper (PSRP) showed a population of 161,712 people. The district covers an area of 173.2 sq. km. Based on this and using the PSRP population figures, Emuhaya has a population density of 867 persons per square kilometer against a national average of 230 persons per square kilometer. This makes Emuhaya one of the most densely populated areas in Kenya. Etambale et al. (2008) says that at least 20% of the residents in Emuhaya District are landless. This has resulted in a high poverty level of over 60%.

The district is well favoured with precipitation patterns, enjoying an annual rainfall that ranges between 1800 and 2000 mm. The rainfall is well distributed throughout the year with only two months of dry spell – December to February. The two main agricultural seasons are located between the months of March to August when the area witnesses the long rains, and between the months of September to November during the short rains. The temperatures in the district vary between a mean maximum of 26 and 32°C, and a mean minimum of 14 and 18°C.

In Emuhaya, land size and use reflect a system where population density and tradition intersect to define a pattern of small parcels of land and an indigenous-based agricultural husbandry. The terrain is characterized by undulating hills and rocky sections (hence the major township and a division, Luanda or eLuanda, aptly named after the term ‘rock’). Limitation on land has resulted in a sustained overuse of the available pieces, leading to the depletion of essential soil ingredients that are necessary for positive crop output. As a result of being greatly constrained by land sizes, peasant farming is the most actively pursued mode of agriculture. Maize is the staple crop and hence dominantly cultivated. Other food crops produced, most of which are of indigenous regime, include cassava, sweet potatoes, arrow roots, beans, groundnuts, millet, sorghum, and a variety of traditional vegetables. In a nutshell, there is a broad spectrum of food crop regime, although seriously hampered by spatial challenges. Cash crops are also produced, albeit to a small extent. Most farmers involved in cash crop farming cultivate eucalyptus trees for the local construction industry. A few others cultivate coffee and tea, although the impetus in this farming area has been severely dented by poor market prices and deficiency in land.

Lugari District

Lugari district was carved out of the larger Kakamega District (now Kakamega County) in 1998. It borders Kakamega and Nandi to the South, Bungoma to the West, Uasin-Gishu to the East and Trans Nzoia to the North. It occupies an area of 670.2 sq. km. According to the 1999 Population and Housing Census, Lugari had a population of 234,536 people and a density of 350 persons per square kilometer. At the time of study, the district was divided into three administrative divisions, viz., Likuyani, Lugari and Matete.

Lugari has favourable precipitation patterns. General climate and rainfall patterns are of equatorial type. Temperatures vary between 6 and 23°C in the high altitude areas and between 18 and 24°C in low altitude areas. The rainfall patterns are bimodal, with the long rains occurring in March to September and the short rains coming in October through to November. December to February is normally a period of dry spells. The average annual rainfall is between 1000 and 1600 mm.

About 90% of the district's population lives in the rural areas mainly participating in farming activities. Lugari

boasts relatively large parcels of land with much more discernible and finite borderlines. According to statistics provided by the Lugari District Development Plan (2002 to 2008), the average farm size for small-scale farmers is about 5 acres, while that of large-scale farmers is 12.5 acres. The main cash crops grown are maize (which has the dual role of being both a cash and food crop), coffee, sugar cane, sunflower and a variety of fruits. Food crops include beans, sweet potatoes, cassava, sorghum and millet. Other farming activities undertaken include poultry keeping, bee keeping, fish farming and dairy farming.

METHODOLOGY

The study focused on the Abanyole living in Luanda Division of Emuhaya District in Vihiga County, and those who had emigrated to Lugari Division of Lugari District in Kakamega County. Core anthropological methods that included key informant interviews, focused group discussions, informal interviews, and the observation method were utilized in the collection of data. Data on households was collected by use of questionnaires, through the survey method which targeted 300 households – of whom 200 were from Luanda, and 100 from Lugari. The disparities in the number of sampled households between Luanda and Lugari may be explained by the cultural homogeneity and a high population density in the former compared to the latter. Both qualitative and quantitative information were elicited from the enlisted methods of data collection.

In Lugari, purposive sampling procedure was used to identify Lugari Division as the ideal study site. This consideration was arrived at due to the relatively high density of the Abanyole population residing in the area compared to those living in other parts of the district. For more or less the same reason, in Lugari Division itself, there was a conscious and deliberate move to pick Lugari location as the ultimate study area. In Emuhaya District, the study purposively sampled Luanda division for data collection owing to the greater population density in the area compared to Emuhaya Division (938 persons per square kilometre in Luanda compared to 928 in Emuhaya). Since issues relative to hunger constituted the major dependent variables in the larger study, the assumption was that the denser the population per square area, the greater the challenges relative to food security.

FINDINGS AND DISCUSSION

Land resources and resource management in Luanda and Lugari

Land is the main means of production and, thus, at the core of human existence for both the Abanyole in Luanda and those in Lugari. On the landholdings, crop farming and, to a lesser extent, livestock keeping constitute the main survival strategies for the respondents. Indeed, the critical role that land plays in the lives of the Abanyole is exemplified by the fact that it was the single most important factor in the emigration of the Diaspora group to Lugari.

In the household survey, the study findings showed the mean and standard deviation of land owned by households of Abanyole respondents in Luanda being 1.7 and 1.2 acres respectively, while that owned by the Lugari respondents was a mean of 3.4 acres, with a standard deviation of 3.9 acres. In Luanda, it was noted that a huge majority of the respondents (92%) possessed less than 3 acres of land. Indeed, the entitlements over the land was further eroded by the fact that what was commonly referred to as 'household land' by most respondents was, in fact, family land that is co-jointly claimed by a number of related households. In effect, the de jure ownership rights over pieces of land by the respondents would more often than not, be much less than the quoted amount. If this be the case, and size of land owned taken as the most decisive factor relative to food security, then Luanda stands precariously vulnerable to hunger situations.

While, according to the study, the mean acreage of land owned by the Abanyole in Lugari (3.4 acres) is twice that owned by those in Luanda, it however falls short of the district average (5 acres) of land owned by small-scale farmers as revealed by District Development Plan (Government of Kenya, 2002). To their credit, a majority of these lands had been clearly demarcated and ownership much more apparent than was the case with Luanda. Given this situation, Abanyole in Lugari were observed to possess the potential for better achievements in the food sector than those in Luanda.

In both areas, as the staple crop, maize plays a defining role in terms of levels of food security. It is from maize that the popular maize meal, *obusuma*, is prepared. An increased production of maize would therefore be a positive indicator on households' food situation. Production of maize is dependent on factors such as soil fertility levels, climatic conditions, size of land under the maize crop, availability of labour, farm husbandry, use or nonuse of appropriate and recommended agricultural technology, and so on. While some of these factors may be extraneous, others are within the reach and control of farmers.

Basically, the eco-systems of the two regions are significantly different. Although both areas are favourably endowed with precipitation patterns that are experienced around the same period, climatic conditions in Luanda support two maize production seasons annually, as opposed to one season in Lugari. The first season that coincides with the long rains (*erotso)* runs from March to August, while the short rains characterize the second season (*esubwe*), and runs from September to November. Basically, the long rains are much more dependable and hence utilized by farmers in Luanda than is the case with the short rains. In principle therefore, the dual farming season may seem a plus for the Luanda dwellers.

In the study, spatial allocation of the maize crop was considered a major determinant in gauging households' food situation. Table 1a and b provides a breakdown of the size of land under the maize crop in the study areas, and the mean and standard deviation of the same, respectively.

Table 1a. Size of land under maize by respondents in Luanda and Lugari (in acres).

Land size (acres)	Luanda		Lugari	
	Frequency	Percentage	Frequency	Percentage
1 acre or less	158	79.0	49	49.0
1.1 – 3 acres	40	20.0	36	36.0
3.1 – 5 acres	2	1.0	8	8.0
5.1 – 7 acres	0	0.0	4	4.0
7.1 – 9 acres	0	0.0	2	2.0
Over 9 acres	0	0.0	1	1.0
Total	200	100.0	100	100.0

Table 1b. Mean and standard deviation of land under maize crop in Luanda and Lugari.

Area	Number of respondents	Minimum	Maximum	Mean	Std. Deviation
Luanda	200	0.00	4.0	1.0	0.7
Lugari	100	0.00	12.0	1.9	2.0

The statistics above indicate that, using the mean as a measure, the size of land under maize in Lugari is about double the size of that under the same crop in Luanda. The standard deviation is, however, more telling; the figure rises by about 150%. Therefore, on the basis of size of maize land alone, Lugari's food situation seems much more secure than is the case with Luanda.

Extraneous natural factors aside, agriculturally acceptable crop husbandry is essential if good yield is expected in farming. In maize farming, issues such as the soil texture and quality, the depth/width/length between seed holes, plant-time discipline, types and amount of inputs used – are all imperative if positive results have to yield. In order to gauge the knowledge and extent of application of appropriate and recommended agricultural technology, respondents were asked on the methods used in ploughing and planting maize, and the choice and use of the variety of maize seed. Table 2 gives the technology utilized in breaking and/or ploughing land.

Table 2 reveals that the hoe (*jembe/imbako*) is the most utilized implement among respondents in Luanda (85%), while in Lugari, the oxen plough is more popular (64%). As a plough implement, a *jembe* has the disadvantage of being much more laborious and time-consuming when compared to the use of an oxen plough. Moreover, time remaining constant, a *jembe* covers less ground or square area compared to an oxen-drawn plough.

Jembes are virtual must possession as tools of labour by not only Abanyole, but by the Abaluyia families at large. From a social perspective, the *jembe* symbolizes a hardworking individual (*omundu owe imbako*). The presence of a *jembe(s)* by household members would therefore be an indicator of their self-sustainability and hard workmanship.

On the other hand, in both Luanda and Lugari, oxen ploughs are a preserve of a few farmers, but may be available for hire by those in need. In this case, affordability is a factor in accessing and using this implement. Due to this factor, the plough may not be within the reach of a number of farmers. Variations on the size of land under the maize crop in Luanda and Lugari (Table 1a) also contributes to option choice between the two implements by the farmers. This too could be the determining factor on the use of tractors by 10% of the respondents in Lugari; a situation not observed in Luanda.

In this regard, based on the agricultural implements as resource, yet again, Lugari has the potential to outdo Luanda in maize production due to the relatively higher levels of compliance to agriculturally productive instruments. Winnick (1966) would, in relation to this, conclude that Lugari has better techniques of mastering the environment that, henceforth, enables the area to achieve higher levels of cultural adaptations than Luanda. According to White (1959), the technological sector determines other sectors in society. In this case, the superior agricultural technology in Lugari determines a better agricultural economy than is the case with Luanda, and, an imminently more secure food situation.

In order to realize optimal output, the recommended variety of seed and fertilizers need to be applied. The cost implication in this exercise is far-reaching, and most farmers may be left out as a result of this. Chemical fertilizers and certified hybrid seeds have the best returns, yet expensive and may therefore be out of the reach to many farmers. Table 3 shows a major contrast relative to respondents in Luanda and Lugari who apply chemical fertilizers.

That a paltry 14% of respondents in Luanda compared to 74% of those in Lugari use the more productive chemical fertilizer, ominously points to a situation of

Table 2. Technology used for breaking/ploughing by respondents in Luanda and Lugari.

Type of technology	Luanda		Lugari	
	Frequency	Percentage	Frequency	Percentage
Hoe only	170	85.0	15	15.0
Ox-plough only	6	3.0	64	64.0
Hoe or ox-plough	24	12.0	0	0.0
Tractor only	0	0.0	10	10.0
Tractor or ox-plough	0	0.0	1	1.0
Total	200	100.0	100	100.0

Table 3. Type of fertilizers used by respondents in Luanda and Lugari.

Type of fertilizer	Luanda		Lugari	
	Frequency	Percent	Frequency	Percent
Farm/compost manure	100	50.0	14	14.0
Chemical fertilizers	28	14.0	74	74.0
Manure or chemical fertilizer	62	31.0	12	12.0
Neither manure nor fertilizers	10	5.0	0	0.0
Total	200	100.0	100	100.0

gloom amongst the Luanda farming community. According to agricultural extension officers based in Luanda, due to its prohibitive cost, most farmers who use chemical fertilizers apply the stuff sparingly – in small, inadequate doses. Such applications may not have positive impact on maize output.

Although farm and compost manure was applied by 50% of the respondents in Luanda, the agricultural extension officers interviewed were rather critical of the methods and quality of the manure used. Apart from the uncertainty in gathering raw materials for these resources, most farmers applied the manures that had not properly matured.

On maize seed, it is significant that less than a quarter of respondents in Luanda use certified hybrid seeds compared to a near full house who use this type of seed in Lugari (Table 4). It is also telling that a larger percentage of respondents in Luanda (55%) plant the low-yielding store or farm seed which, usually, would directly be sourced from previous harvests. Apart from the mere use of this type of maize as seed being at the very least anachronistic, farmers would use as many as six seeds in a single hole – in place of the recommended two or three – in anticipation of reaping more. A more or less similar situation, where more seeds than the recommended are planted in a single hole, is documented in Wandere's (1991) study among the Abamarama of Western Kenya.

Maize output and food security situation

Against this backdrop, the Abanyole in Lugari fare far better in terms of maize output on the annual count. So, although Luanda boasts having two maize production seasons in comparison to Lugari's one season, this factor does not positively impact on a composite annual maize yield. This is attested by the wide disparities in the average total maize harvested annually by respondents as displayed on Table 5.

The fact that about 72% of respondents in Luanda hardly harvest over 5 bags annually, speaks volumes about a potential food crunch here. In contrast, only 14% of the respondents in Lugari harvest less than 5 bags annually. It is also notable that the ceiling for annual harvest in Luanda is 10 bags while a significant bracket of respondents in Lugari (66%) surpass this ceiling. Pearson correlation indicates significant relationship between annual maize output in Luanda and Lugari at 0.01 level, which shows how production of the staple food; maize is significantly higher in Lugari compared to Luanda. More telling too is the fact that some respondents in Luanda (8%) never see their crops through to its final harvest term. The same cannot be said of Lugari. Ostensibly, in Luanda, maize is consumed while still green on the farm as either a roast or boiled meal. Households involved in such premature consumptions are typically much more vulnerable to hunger situations, and would be more dependent on external food sources.

Adaptive/coping mechanisms in hunger situations

The preceding tabulations and discussion presuppose a scenario where at one point or another, the consumption

Table 4. Type of maize seed used by respondents in Luanda and Lugari.

Type of seed	Luanda		Lugari	
	Frequency	Percent	Frequency	Percent
Certified seed	49	24.5	94	94.0
Store/farm seed	111	55.5	2	2.0
Either of the two	40	20.0	4	4.0
Total	200	100.0	100	100.0

Table 5. Average annual maize yield of respondents in Luanda and Lugari.

Yield (in 90 kg bags)	Luanda		Lugari	
	Frequency	Percent	Frequency	Percent
None	16	8.0	0	0.0
Less than 5 bags	127	63.5	14	14.0
5 – 10 bags	57	28.5	20	20.0
11 – 15 bags	0	0.0	33	33.0
16 – 20 bags	0	0.0	6	6.0
21- 25 bags	0	0.0	6	6.0
26 – 30 bags	0	0.0	7	7.0
Over 30 bags	0	0.0	14	14.0
Total	200	100.0	100	100.0

Pearson Correlation *p*-value = -.009.

units in Luanda and Lugari would – though at varying levels- acquire their respective staple foods from sources other than those locally generated. It is for example evident that characterized by an unstable food base, for the population of Luanda to be secure in food, external food sourcing would be inevitable. This contention was ascertained by the respondents, when asked to comment on the source of food consumed by household members (Table 6).

Data on Table 6 shows wide disparities between the Luanda and Lugari samples in modes of food acquisition. The Luanda group seem to be heavily dependent on external sourcing, with almost three quarters of the respondents (71%) relying more on purchases for their diet. Most critical, however, is the fact that an insignificant percentage of respondents (0.5%) have this staple food solely sourced from the family farm. This is in variance with Lugari where 20% of the respondents source the staples wholly from the family land. Also significant, is the fact that almost a half of the respondents in Lugari (47%) depend mostly on the family farm than on purchases. Using the *t*-test for one-sample test, the mean for food source in Luanda is 1.96 (partially from family farm but mainly purchased), while for Lugari is 2.46 (partially purchased but mainly from farm). These two means are significantly different at .001 C.I.

Thus, faced with perennial cases of low maize output, Luanda suffers virtual absolute food deficits and must, imminently, source expensive imports elsewhere. Imports and purchases have been criticized in wide-ranging researches for competing with local resources, and therefore not auguring well with a sound food security situation and, in effect, positive nutritional outcomes (Fleuret and Fleuret, 1982; Connelly and Chaiken, 1987; Chaiken, 1988; Wandere, 1991). As for Lugari, maize shortfalls among a selected number of households are easily recouped through purchase of the same from within.

For the Luanda population in particular, a popular survival and coping strategy worth of mention involved the invocation of a social reciprocity measure, *okhusuma.* Conventionally, *okhusuma* was considered a form of social support mechanism for members of the Abanyole community who experienced irredeemable food constraints. Such victims would, in this case, offer labour in anticipation of being given cereals or other foods as a gesture of appreciation. Typically, an individual who goes *okhusuma* would rise early, go to the targeted *shamba* and without seeking audience with the owner, commence working. Somehow, the owner comes to know about the presence of the 'stranger' in the *shamba* and out of 'sheer embarrassment', gives the person some foodstuff in return. It is like a rehearsed act, yet a very significant symbolic gesture of reciprocity.

The term *okhusuma* has now been redefined to include highly imbalanced relationships that clearly manifest market features. It is now used interchangeably with *okhurunda*, a term that refers to purchasing foodstuff

Table 6. Main source of staple food among the respondents in Luanda and Lugari.

Source of food	Luanda		Lugari	
	Frequency	Percentage	Frequency	Percentage
Wholly from family farm	1	0.5	20	20.0
Partially from family farm but mainly purchased	142	71.0	30	30.0
Partially purchased but mainly from farm	51	25.5	47	47.0
Wholly purchased	6	3.0	2	2.0
None of the Above	0	0.0	1	1.0
Total	200	100.0	100	100.0

t - test to compare means = 1.96 for Luanda and 2.46 for Lugari.

(mainly cereals) at the market place – an activity that is basically performed by women. Thus, *okhusuma* is gradually acquiring characteristics of impersonal relations that are strongly founded on economic benefits; an anti-thesis of its initial spirit. Secondly, although still upholding personal features in the sense that one can conveniently visit a kinsperson or friend in anticipation, other *okhusuma* relationships lack the labour component, as food may be given in spite of no work having been done for the provider.

In this study, 40% of the Luanda respondents confirmed to using this strategy as a way to cope when faced with situations of food deficit. On the other hand, 80% of the Lugari respondents had, at one time or another, hosted kinspersons from *Ebunyole* who had visited them in line with this particular institution.

The other version in the reciprocal relations is more profit-oriented. It involves lending food (*okhuhambia)* to an individual in dire need by one with abundance. Although trust is the binding factor in this transaction, the issue of security implicitly plays a role here.

Characteristically, the person in need visits the lender to-be where he/she puts her request. The latter asks for time to consider the request, as put to him/her. In the meantime and in a clandestine manner, he/she makes investigations on the ability of the applicant to repay the requested foodstuff by say, checking on the production potential of the crops grown by the would-be borrower. This acts as security. Satisfied with the capability of the person, the prospective borrower is sent for and a verbal agreement is entered. The amount of food borrowed is measured in a basket (*esimwero*). An empty smaller basket (*indubi*) in which the agreed additional foodstuff will be put when returned, ostensibly as interest (*injeresio*), would then be placed on top of the borrowed stuff. In order to keep at arm's length other prospective borrowers (as this would usually be a period of food scarcity), this transaction would normally be undertaken at dusk. Watts (1988) enumerates a more or less same scenario of borrowing food among the Hausa of Nigeria.

Okhusuma and *okhuambia* as socially sanctioned reciprocal relations, were clearly distinguished from others such as begging (*okhusaba*), a behaviour considered more of a vice and hence frowned upon. *Okhusaba* stood for extreme dependency, and thus portrayed such individuals negatively - as worthless lay-abouts. But in the current situation where resources and opportunities for economic empowerment are fast diminishing, *okhusaba* based on reasons to do with hunger is becoming more of a norm. *Okhusaba* may manifest itself in various forms. First, it may take the form of blatantly begging for cash or food in market places and homes. In such cases, the reasons given by the needy person to evoke sympathy are within the realm of hunger or food requirements. For instance, the ostensible reason could be self-centered as in the beggar seeking alms for personal food needs (e.g., *endi inzala omwana wanje* - translated to mean 'I am hungry, my child') or, it could be on behalf of the more vulnerable and empathetic lot, children in particular (*abaana bakonile inzala* – meaning 'my children slept hungry').

CONCLUSION

In this study, land was identified as the main subsistence and economic resource for sustenance for both Abanyole in Luanda and Lugari. However, the study revealed significant disparities between Luanda and Lugari, in terms of size of land owned by individuals. The mean size of land owned by the respondents in Lugari is about twice that owned by those in Luanda. It was also observed that, in Luanda, a number of respondents perceived the family land (shared by a number of households) as, actually, household land. This self-deception highlights the dependency on meager family resources, which sinks such individuals even deeper into the abyss of vulnerability. Sequentially, the amount of land under the staple crop, maize, is much more among the Lugari respondents than those in Luanda (mean difference of about 1 acre, and standard deviation difference of about 1.3 acres).

The study also revealed that the mode of farming adaptations varied in the two regions. For instance, in Lugari, there was a relatively higher compliance in the use of more advanced farming husbandry and technology

than was the case in Luanda. The resultant effect was a better yield for the Lugari respondents than for those from Luanda. Faced with this food crunch, the Luanda Abanyole resort to higher levels of sourcing expensive food imports as a coping strategy, than is the case with those in Lugari. Furthermore, traditionally based survival methods such as the reciprocity measures locally referred to as *okhusuma* and *okhuambia*, are kept alive and increasingly explored.

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