

## Aliyu Salisu Barau

Geography Department, Federal College of Education, Kano PMB 3045 Kano, Nigeria  
[aliyubarau1@yahoo.co.uk](mailto:aliyubarau1@yahoo.co.uk) Mobile: +2348023893014

### **Biodiversity Security in the Kano Emir's Palace Gardens: Explanations on Variety, Mystery and Reality**

#### **Introduction**

Cities reflect the increasing human impacts on domestication of the natural landscapes but the contemporary quest for sustainability emphasises conservation of the natural heritage of the biodiversity. In the case of Kano, the city has recently lost grip of its centuries old intrinsic sustainable patterns largely due to rapid expansion and densification the city witnesses especially from its core. The only exception being the 16<sup>th</sup> century Emir's Palace; the largest and oldest traditional palace in Africa South of Sahara. The Palace is located on 11°59'32.67N and 8°31'06.02. It is also the largest built environment in the ancient walled city and its gardens (locally called *sheka*) constitute about two-third of its total size making it the largest concentration of floral and (some) faunal species in the city and its suburbs. The spatial components of the palace include sizable gardens that presently constitute the largest sink for biodiversity in this dry-land city witnessing unprecedented expansion and densification. Hundred thousands of birds make the palace gardens their permanent and safe abode; and tens of tree species are only found in the palace gardens. The gardens cool the palace in addition to their aesthetics. However, there is sharp contrast between the palace and other surrounding parts of the city.

#### **Research Aim and Objectives**

This paper sets to investigate the nature and trends of the ancient gardens and how they are sustained despite the changing reigns, dynasties and reconstructions of the palace spaces. The specific objectives are: to identify the floral and faunal composition; the role of place folklore and the gardens; the role of the Emir(s) in sustaining the gardens; and to examine the role of the gardens for promoting urban biodiversity security.

#### **Methods**

Field measurements and observations were undertaken at the two gardens for identification of the floral and faunal species. That was achieved through mounting of quadrats. Series of interviews with a purposively sampled section of the palace residents aged between 60 and above were carried out. Further measurements and analysis of the gardens were carried using the Google Earth satellite images as well as Kenting Africa Airphoto mosaic of 1980.

#### **Findings**

- The scrublands in this palace have been in existence for centuries and it was converted into gardens during colonial regime and many exotic species were introduced. They served as places for leisure seeking, cattle rearing, royal folkloric services and security. The palace residents hold the gardens with awe many believe there are spirits that reside in the gardens
- The two gardens (east/west) are sanctuaries of some endangered plant and animal species and which are exclusively found in the palace within 25 miles radius of the city.
- Results of field survey indicate that the gardens have tree neighbourhood of 1.5 metres; with leaf layer of more than 10cm; the average height of trees is 12 metres; the frequency of exotic species is higher than that of local species; and the average girth of trees is 1.3 metres.

- The palace has the largest concentration of colonies of *bats* and *cattle egret* more than in any known place in Kano City and beyond.
- The continuity in the existence of the *sheka* through changing dynasties and reigns is influenced by the traditional and indigenous folklores that sanctify the gardens and consequently give them due regard and protection.

**Table 1 Faunal and Floral Composition of Emir's Palace Gardens**

Floral Composition		Faunal Composition		
Local Species	Exotic Species	Birds	Animals	Insects
<i>Balanites aegyptiaca</i> (desert date)	<i>Azadirachta indica</i> (neem)	Cattle egret	Monkey	Beetle
<i>Ficus thonningii</i>	<i>Mangifera indica</i> (mango)	Vesper Bat	Antelope	Ants
<i>Adansonia digitata</i> (baobab)	<i>Psidium guajava</i> (guava)	Ostrich	Tortoise	Earthworm
<i>Tamarindus indica</i> (tamarind)	<i>Carica papaya</i> (pawpaw)	Crow	Rats	Grasshopper
<i>Khaya senegalensis</i> (mahogany)	<i>Vitis xx</i> (grape)		Snails	Bee
<i>Luffa aegyptiaca</i> (loofah gourd)	Flamboyant			Scorpion
mushroom spp.				Firefly
<i>Borassus aethiopum</i> (deleb palm)				

### Conclusion

Biodiversity security achieved by the Kano Emir's Palace is a result of triple heritage of confluence and influences of African, Islamic and western concepts of environmentalism. At the moment, the Palace gardens could be used as tool or strategy to raise public consciousness on city greening projects in many urban centres.

**Table 2 Google satellite Image showing the two gardens at Emir's Palace Kano**

