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The use of myths in forest conservation: Lessons from the Bini experience in Nigeria

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ABSTRACT: Combinations of social surveys and direct field observations were used to study the potentials of using myths in forest conservation in five rural communities in Benin kingdom of Nigeria. In each village, twenty-five rural dwellers that had maintained continuous domicile in the villages for the past ten years were selected and interviewed with the aid of a semi-structured matrix. The acceptability of the myths was determined against several socio-economic indices, which include age, sex, religion belief, education and economic status. Also, the relative abundance of the botanicals identified in the myths was determined within 2-Kilometer radius of each community. Eight myths, which were capable of serving as disincentives to deforestation, were found to be in existence and commonly revered in the study area. Further classification of the myth adherent respondents along different socio-economic features revealed that sex, religious belief, level of education and economic status of the respondents could not be regarded as pre-requisites to the myths mindedness as the observed results differ significantly from the expected results (X²-test) at 5% level. Most of the botanicals identified in the myths are now rare on the abundance scale and could be described as being endangered; hence efforts are now required to conserve them in the study area.

Key Words: Myths, Forest Conservation, Nigeria

Introduction

The Binis of Edo State, Nigeria are widely reputed to be an ethnic group with a very high reference for their arts and culture, which they pass from one generation to another. Binis occupied a land area that is located in the tropical region with a humid climatic condition (NYSC 1999) that supports luxuriant growths of diverse plant species. Recently, a rapid rate of deforestation has been reportedly witnessed in Benin Kingdom (Kayode 2002) due to a number of factors, which include logging, farming, construction activities and population pressure.

Previous study by Kayode (2003a) had now revealed that some Nigerian traditional beliefs and culture could serve as disincentives against deforestation. In fact a number of researchers, such Pasey (1997), Tsegaye (1997) and Tengberg *et al* (1998) had advocated that such traditional ecological knowledge is required for the sustainable use and management of natural resources. This study therefore is an attempt to identify some Bini forest myths and examined their conservation potentials.

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Materials and Methods

Combinations of social surveys and direct field observations (after Kayode *et al.* 1997 and Kayode 2003b) were used in this study. Five rural communities: Obadan, Obaje, Okhuaighe, Okomu and Ugo, were selected within 50-kilometer radius from Benin City. In each village, twenty-five rural dwellers that had maintained continuous domicile in the villages for the past ten years were selected and interviewed with the aid of a semi-structured matrix. The interviews were conducted with a fairly open framework that allowed for focused, conversational and two-way communication. The Bini forest myths were identified and the respondents justified their conservation implications.

The acceptability of the myths was determined against several socio-economic indices, which include age, sex, religion belief, education and economic status. The relative abundance of the botanicals identified in the myths was determined within 2-Kilometer radius of each community using the abundance scale of Bongers *et al.* (1988) as follow: less than 5 individuals as rare, 5 to 10 as occasional, 11 to 30 as frequent, 31 to 100 as abundant and over 100 individuals as very abundant.

Results and Discussion

Eight myths, which were capable of serving as disincentives to deforestation, were found to be in existence and commonly revered in the study area. They are as follow:

1. *Egbi-ite* i.e. forests in areas where the remains of the indigenes' forefathers were interred were prohibited from exploitations. Rituals are usually performed in such forests. It is believed that offenders are liable to incur the wrath of the spirits of the ancestors. Such offenders might be infected with numerous incurable diseases and/or sudden death. *Conservation Implication(s) of the Myth*: This myth creates fear in the minds of the indigenes and they are kept off of *Egbi-ite*. Consequently, these forests are protected from abuse.
2. *Irialo* (Liana) must not be used to tie firewood or any other forest products from the forest to the community's neighbourhoods. It is believed that offenders are liable to misfortunes that might include sudden death. *Conservation Implication(s) of the Myth*: This myth prevents the abuse usage of *Irialo*, which apart from constituting important components of the forests also plays important roles in the dynamics of the forests
3. Any *Uloko* (*Milicia excelsa*) that germinated near human settlements must be protected and prevented from exploitation. It is believed that such *Uloko* maintained close proximity with sprits. Thus, offenders are liable to incur the wrath of such spirits. *Conservation Implication(s) of the Myth*: This myth had helped in the conservation of *Uloko*, which is a poorly regenerated and highly endangered species in Benin Kingdom.
4. The vicinity of *Ubilesau* (*Entandrophragma cylindricum*) is usually considered as a suitable site for rituals to be offered to the ancestors. Thus, felling of this tree is highly prohibited. It is believed that offenders are liable to incur the wrath of the spirits of the ancestors. *Conservation Implication(s) of the Myth*: This tends to conserve *Ubilesau*, a species that is nearing extinction in Benin Kingdom.
5. The leaves of *Ikhimi* (*Newbouldia leavis*) are used during the confinement of traditional chieftaincy titles and also as a medium of communication with the ancestors. Hence this species is prohibited from being used as fuel wood. *Conservation Implication(s) of the Myth*: This myth aimed at the conservation of *Ikhimi*, a non-cultivated species, whose continued existence had depended on wildlings over a long period of time.
6. Some trees used traditionally as boundary makers must not be destroyed. These trees are used in settling boundary disputes and administering justice in traditional courts. The species include: *Usi*(*Adansonia digitata*), *Arinyan* (*Azelia africana*), *Ukhu/Ugiegbeghukhu* (*Alstonea boonei*), *Ike* (*Bambusa vulgaris*), *Ogwe* (*Irvingia gabonensis*), *Oraebo/Olueboh* (*Jatropha curcas*), *Okhighan* (*Spondias mombin*) and *Owewe* (*Spathodea campanulate*). Offenders are liable to fines, which varies

from one community to another. *Conservation Implication(s) of the Myth*: Apart from the fact that all these species are presently endangered and are poorly represented in the sapling stage, they all have ethnomedicinal values in Benin Kingdom. Thus this myth helps in their conservation.

7. Forest communities along *Olokun* and *Oghu* streams were believed to be the habitats of sprits and deities. Hence exploitations of any products within their boundaries are prohibited. *Conservation Implication(s) of the Myth*: this helps in the conservation of the forest communities.
8. Some market days were classified as *Eke* market days. The Binis are prohibited from going to farms on *Eke* market days. It is believed that *Elimiu* (Evil sprits), who are capable of inflicting offenders with demonic diseases, move around the forests on *Eke* days. *Conservation Implication(s) of the Myth*: the myth is meant to regulate the exploitation of forest products and thus help in the conservation of forest species.

The acceptability of the myths among the respondents is shown on Table 1. Over 80% of the respondents were above 20 years old. Thus, they could be described as mature adults with relatively high knowledge of the myths and the consequences of disobedience to the myths. 86% of the respondents confirmed their believe in the efficacies of the myths. Further classification of the adherent respondents along different socio-economic features (Table 2) revealed that sex, religious belief, level of education and economic status of the respondents could not be regarded as pre-requisites to the myths mindedness as the observed results differ significantly from the expected results (X^2 -test) at 5% level.

Table 1. Myths acceptability among respondents in Benin Kingdom, Edo State, Nigeria

Age Class (Yrs)	No. of Respondents*	Respondents observing the myths (i.e. Adherent Respondents)
< 20	20 (16%)	15 (75%)
20-40	26 (21%)	22 (85%)
41-60	54 (43%)	46 (85%)
>60	25 (20%)	24 (96%)
Total	125 (100%)	107 (86%)

*Figures in brackets are the proportion (%) of respondents

Table 2: Socio-economic classification of the myths adherent respondents in Benin Kingdom, Edo State, Nigeria.

Age Class (Yrs)	No. of Respondents	Socio-economic features*									
		Sex		Religion			Education		Economic Status		
		Male	Female	Xtians	Muslim	Others	Literate	Illiterate	Low	Medium	High
< 20	15	10 (67)	5 (33)	13 (87)	2 (13)	0 (0)	15 (100)	0 (0)			
21 – 40	22	14 (64)	8 (36)	10 (45)	9 (41)	3 (14)	20 (91)	2 (9)	18 (82)	4 (18)	0 (0)
41 – 60	46	22 (48)	24 (52)	28 (61)	13 (28)	5 (11)	38 (83)	8 (17)	32 (70)	10 (22)	4 (8)
> 60	24	16 (67)	8 (33)	12 (50)	6 (25)	6 (25)	17 (71)	7 (29)	16 (67)	6 (25)	2 (8)
Total	107	62 (58)	45 (42)	63 (59)	30 (28)	14 (13)	90 (89)	17 (16)	66 (62)	20 (19)	6 (19)

*Figures in brackets represent the proportion (%) of respondents.

Table 3. Abundance of identified botanical species in the recognized myths by respondents in Benin Kingdom, Edo State, Nigeria.

S/N	Identified Botanical Species	Abundance
1.	<i>Adansonia digitata</i>	Rare
2.	<i>Afzelia africana</i>	Rare
3.	<i>Alstonea boonei</i>	Rare
4.	<i>Bambusa vulgaris</i>	Rare
5.	<i>Entandrophragma cylindricum</i>	Rare
6.	<i>Irvingia gabonensis</i>	Rare
7.	<i>Jatropha curcas</i>	Rare
8.	<i>Milicia excelsa</i>	Rare
9.	<i>Newbouldia leavis</i>	Rare
10.	<i>Spondias mombin</i>	Occasional
11.	<i>Spathodea campanulate</i>	Rare

Thus, these features especially, education, economic and religion status which ought to have eradicated respondents perception of the myths had had little or no effects on the indigenes of the study area. Table 3 revealed that most of the botanicals identified in the study area are now rare on the abundance scale. These species could be described as being endangered; hence efforts are now required to conserve them in the study area.

Myth constitutes an important aspect of the indigenous knowledge. The use of the indigenous knowledge as a disincentive to forest over exploitation had proved to be a sustainable conservation measure (Lebbie and Gurien 1995, Agesen 1998) in some parts of Africa where population pressure as well as the increasing demands for agricultural lands (Dunn 1997) are fast diminishing the proportion of the forest which invariably constitutes the custodian of the remaining flora and fauna diversities. Thus the myths should be preserved by means of documentation and in folk stories to be told to the younger ones. Also the local media-prints and electronics-should assist in the preservation of these myths. Radio and television jingles could be developed and broadcast such on regular bases to further enhance peoples consciousness of these myths.

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References

- Aagesen, D. L., 1998. Indigenous resource rights and conservation of the monkey-puzzle tree (*Araucaria araucana*, Araucariaceae): a case study from southern Chile. *Economic Botany* **52**(2): 146-160.
- Bongers, F., Popma, J., Meave del Castillo, J. and Carabias, J., 1988. Structure and floristic composition of the lowland rain forest of Los Tuxtlas, Mexico. *Vegetatio* **74**: 55-80.
- Dunn, J. E., 1997. Responding to pressure on local natural resources: the story of three villages in southeastern Nigeria. *Journal of Environmental Management* **51**(4): 361-371.
- Kayode, J, Ibitoye, A. O. and Olufayo, O., 1997. Private participation in taungya Agroforestry system in Ondo/Ekiti Region: Problems and Prospects. *International Journal of Urban and Regional Affairs* **1**(1):54-57.

- Kayode, J., 2002. Ethnobotanical survey and conservation of plant species used for curing malaria in Edo and Ekiti States of Nigeria. *NISEB Journal* **2**(4): 247-252.
- Kayode, J., 2003a. Conservation and Yoruba forest taboos. *The Nigerian Field* **69**: 53-61.
- Kayode, J., 2003b. Ethnobotanical in grains and cereals storage in Ekiti State, Nigeria. Pp 240-245. Oboh, G. (Ed.) Biotechnology: A tool for Global Development. Proceedings of the 16th Annual Conference of Biotechnology Society of Nigeria.
- Lebbie, A. R., Guries, R. P., 1975. Ethnobotanical value and conservation of sacred groves of the Kpca Mende in Sierra Leone. *Economic Botany* **49**(3), 297-308.
- NYSC, 2000. *Orientation Program for Youth Corpers in Edo-State, Nigeria*. 16 Pp.
- Posey, D. A. 1997. Indigenous knowledge, biodiversity and international rights: learning forests from the Kayapo Indians of the Brazilian Amazon. *Commonwealth Forestry Review* **76**(1), 53-60.
- Tengberg, A., Ellio-Jones J., Kiome, R., Stoching, M. 1998. Applying the concept of agrodiversity to indigenous soil and water conservation practices in eastern Kenya. *Agriculture, Ecosystems and Environment* **70**(2/3), 259-272.
- Tregave, B. 1997. The significance of biodiversity for sustaining agriculture production and role of women in the traditional sector: the Ethiopian experience. *Agriculture, Ecosystems and Environment* **62**(2/3), 215-227.