

Ethnobotanical Studies on Bamboo (*Bambusa vulgaris*) in Ekiti State, Nigeria

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Issued 01 September 2009

Abstract

The study identified the factors responsible for the decrease in the number of Bamboo individuals in Ekiti State, Nigeria from the relevant stakeholders. Reasons attributed to this decline included sporadic increase in the rates of deforestation, construction and burning activities. Strategies proposed, by the respondents in the study area, that could conserve the species were documented.

Key words: Ethnobotany, *Bambusa vulgaris*, conservation, Ekiti State, Nigeria.

Introduction

Bamboo, *Bambusa vulgaris*, is a species that is noted for its utilization for making fences and as scaffolding in construction in Ekiti State Nigeria. Recent field observation revealed that there is a gross dearth of investment on this species. The number of individuals of this species appeared to be decreasing in the study area, though; no demographic study had been reported on the species in Nigeria. Construction workers had continued to lament on the increasing difficulties in obtaining enough bamboo culms and on the cost of culms that are now beyond the reach of resource-poor users. Consequent on the above, ethnobotanical studies that would consider the indigenous knowledge of relevant stakeholders on this species are being considered as desirable. It is expected that such studies will determine the abundance status of this species, establish the indigenous knowledge about its

silviculture and ecology and propose a workable strategies that would enhance the sustainable utilization of this species in the study area.

Materials and Methods

Ekiti state was divided into three zones based on the existing political delineation, previously described by Kayode and Omotoyinbo (2008) as Ekiti Central (EC), Ekiti North (EN) and Ekiti South (ES). In each zone, 100 relevant stakeholders, consisting of construction workers, farmers and building contractors were selected and interviewed with the aid of a semi-structured questionnaire matrix, according to Kayode *et al.* (2009). The perception of the respondents on the abundance of Bamboo as well as the constraints that presently hindered Bamboo productions were defined.

Key informants, consisting of officials of the Ekiti State Ministries of Environment and Works as well as the Ekiti State Housing Corporation were also interviewed. Strategies that could ensure the conservation of this species in the study area, as identified by the stakeholders were documented.

Results and Discussion

The results obtained revealed the existence of a general consensus on the demography of the species. Most of the respondents (Table 1) believed that the population of *B. vulgaris* in the study area had declined tremendously. Reasons attributed to this decline included sporadic increase in the rates of deforestation, construction and burning activities. Table 1 revealed that Ekiti South had least value (of 84%) among the respondents who believed in the population decline of this species. This could be attributed to the fact that the zone presently harbours considerable proportion of the existing secondary forest available in the state where considerable number of *B. vulgaris* could still be obtained with relative ease but in Ekiti North where the vegetation is fast changing to derived savanna, the difficulty in obtaining *Bambusa vulgaris* is easily noticeable.

None of the respondents had cultivated the species before this study was conducted (Table1). And none

of them express willingness to cultivate the species. Respondents believed that it is only God that plant the species not man. Most of the respondents (98%) lacked silvicultural knowledge of the species. The 20% that claimed to know were 'shallow' in their knowledge as they were only able to define the ecology of the species as that which grow beside streams and coppice very well by sending out secondary shoots. Clear indications abound that respondents lacked requisite knowledge about the 'gestation period' of the species. This might probably one of the reasons why respondents were not willing to invest on the species.

The observation above is further strengthened by the fact that the species presently does not offer considerable economic returns. Field observation revealed that *Bambusa vulgaris* is presently considered a 'free gift' from nature. Quite often extractions were carried out by paying relatively little or nothing to the land owners where the species abound.

Also most of the respondents were of the opinion that the present rate of extraction of the species was high. This was attributed to its utilization in the construction industry. Similarly, its herbal usage, most especially by the resource poor, in curing gonorrhoea, worms and respiratory diseases were also considered important. But while the usage in construction was considered predatory and inhibitory, the herbal utility was non-predatory. The utilization in construction industries made respondents to believe that *Bambusa vulgaris* offers a promising economic return in future. To achieve this therefore, the following were proposed:

- (a) There is urgent need to bring the impending disappearance of *Bambusa vulgaris* to the consciousness of the populace.
- (b) The policy makers should evolve strategies that would enhance the cultivation of this species.
- (c) The setting up of some small scale industries where the culms of the species could be processed, especially to floor tiles as widely done in Vietnam (Doney and Wroe 2006) would provide ready market and rewarding returns for investments in the species.

References

Doney, M. and Wroe, M. 2006. Top floor. *Developments* 36: 23-27.

Kayode, J. and Omotoyinbo, M. A. 2008. Ethnobotanical utilization and conservation of chewing sticks plant species in Ekiti State, Nigeria. *Research Journal of Botany* 4(1):1-9.

Kayode, J., Ige. O. E. and Opeyemi, I. O. 2009. Conservation and Biodiversity Erosion in Ondo State, Nigeria: (1). Assessing Wood used for Carving in Ondo Kingdom.

Ethnobotanical Leaflets 13: 564-567.

Table 1. Eco-demographic features on *B. vulgaris* in Ekiti State, Nigeria.

Features	Description	Proportion (%) of Respondents			
		EC	EN	ES	Average Total
Population of <i>B. vulgaris</i>	Stable	0	0	0	0
	Decline	90	92	84	89
	Undecided	10	8	16	11
Investment on <i>B. vulgaris</i>	Cultivated before study	0	0	0	0
	Willing to cultivate	0	0	0	0
Silvicultural knowledge	Possessed	2	3	2	2
	Lacking	98	97	98	98
Present economic returns	Low	100	99	100	100
	High	0	1	0	0

Extraction rate	Low	1	1	2	1
	High	99	99	98	98
Future economic	Likely	100	100	100	100
	Unlikely	0	0	0	
0					