



ETHNOBOTANICAL STUDY OF BAMBOO FROM SOME VILLAGES OF GONDIA DISTRICT, MAHARASHTRA STATE, INDIA

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ABSTRACT

Bamboo belongs to family Poaceae, sub-family Bomboideae, tribe Bambuseae. There are four species found in Gondia district namely *Bambusa arundinacea*, *Bambusa vulgaris*, *Dendrocalamus strictus* and *Schizostachyum pergracile*. Data was collected from various categories of people. Total 23 villages are surveyed for the ethnobotanical study of Bamboo. It was found that people of the study area are well knowledgeable in utilizing bamboo for various purposes. This knowledge disappearing day by day from the communities because new generation neglecting it. Accordingly, there is urgent need to document this knowledge.

KEY WORDS: Bamboo, Ethnobotany, Gondia district.

INTRODUCTION

Bamboo belongs to family Poaceae, sub-family Bomboideae, tribe Bambuseae. The Bamboo is the largest members of the grass family. Bamboo is known for fastest growing with reported growth per day is 100 cm. Bamboo species are found in abroad range of sizes. Some of largest can grow over 98 ft tall, and be as large as 6-8 inches in diameter while the smallest reach only several inches in high. Bamboo is found to grow in most parts of the world; it flourishes in warmer climates, especially in Asia and South America. It has traditionally much economic and cultural significance in South Asia, South East Asia and East Asia as well as South America where it has been used as a food source, a medicinal source, a raw product for ropes, textiles, boards, ornaments and handicrafts, furniture or a building material.

India is home to almost 45% of world's bamboo forest, two third of which is in North East. India produces 4.5 million tons of bamboo in about 10.03 million hectares forest. Worldwide there are about 1600 bamboo species distributed in about 121 genera (25 herbaceous and 96 woody). India has 18 genera and 128 species of Bamboo. The principal bamboo genera found in India are *Arundinaria*, *Bambusa*, *Chimonobambusa*, *Dendrocalamus*, *Dinochloa*, *Gigantochloa* etc.

Gondia district belongs to Vidarbha region of Maharashtra. It is known as lake district. In north, it is bounded by Balaghat district of Madhyapradesh, in East,

Rajnandgaon district of Chhatisgarh, in South and West, Gadchiroli and Bhandara district respectively. The district lies between 20.39⁰ to 21.38⁰ North latitude and 79.27⁰ to 80.42⁰ East longitudes. Total area of the district is 4843.12 km² of which 2644.07 km² area comes under forest, including Navegaon National Park and Nagzira Wild-life sanctuary. The district consist of eight talukas namely Amgaon, Deori, Gondia, Goregaon, Morgaon-Arjuni, Sadak-Arjuni, Salekasa and Tirora. The main rivers of the district are Wainganga, Bag, Pangoli and Gadhvi. The main crop of the district is Paddy (Rice). Gond, Halba and Kawar are the tribes which are the inhabitants of the forest.

There are four woody species of bamboo found in Gondia district namely *Bambusa arundinacea* (Retz.) Wild, *Bambusa vulgaris* Schrad, *Dendrocalamus strictus* (Roxb.) Nees and *Schizostachyum pergracile* (Munro) R. B. Majumdar. Among these species *Bambusa vulgaris* is cultivated^[1]. The utilization of Bamboo species are documented by various authors from different regions^[2-36]. The tremendous population of Bamboo is found in forest region of the district. Tribals and others utilize Bamboo for their daily needs. Some villagers of the district traditionally involve in trade of handicrafts prepared from Bamboo. Therefore, some villages of Gondia district are selected for ethnobotanical studies of Bammboo.

MATERIALS AND METHODS

The present study carried out in some tribal and non-tribal villages of Gondia district. Dhanegaon, Daldali, Chandsuraj, Toyagondi, Sundri, Kakodi, Chandalmeta, Murpar, Bagheda, Baghdongari, Chintatola, Asoi, Bhawanitola, Mangezari, Dakhran Sukdi, Fulchur, Ghoti, Gangazari, Mazzitpur, Kodlohara, Dawniwada, Bharitola are the villages where undertaken for the study. Data was collected on utilization and trade of Bamboo in the study area.

Ethnobotanical data on Bamboo was collected on the basis of questionnaire during Feb-2015 to July 2015. Data was collected from various categories of people including men, woman, Mukhiya, Patel, Tribal leaders, farmers, shepherds, housewives, children, workers, forest dwellers, Bamboo trade men, local medicine men, elders as well as youth of the study area.

RESULTS AND DISCUSSION

It is observed that following different types of equipments are prepared from Bamboo and Bamboo materials are used for various purposes.

A. Agricultural equipments

1. Nangar, Plough: Handle of the plough is known as muthiya prepared from culms of Bamboo.
2. Dattar, Datari or Patta: Agriculture field is prepared using this equipment for transplanting. Handles are made from bamboo culms.
3. Spade or Phawda and Kudal: It is used to dig soil and to prepare raised nursery beds. Handles are made from Bamboo.
4. Bullock- Carts or Gada: It is used for transportation. Some parts made from bamboo.
5. Sickle or Era or Satad: Sickle is used to harvest crop and for weeding. Handle is made from bamboo.
6. Axe, Tangya, Kurhad or Mars: Handle is called as *bet*.

B. Construction for hut and Houses

1. Bamboo houses: Poor people make their houses using Bamboo (for pillars, roofs and walls). Bamboo walls then plastered with mud.
2. Lashing: Bamboo rafters are tied with soft cane lashing called as *ner*. *Ner* also used to bind in fencing.
3. Morrya and Khumri: Men and Women wear Morrya and kumbhari while working in the field during monsoon season.

C. Other construction works, food, medicine and musical instrument

1. Frame work: Bamboo culms used for frame work.
2. Door: Tribal people used bamboo to prepare doors.
3. Mats: Bamboo slits use to make mats.
4. Cages: Tribal and non tribal villagers make cages for their pet animals. The cage used for poultry is called bendwa and for parrot is pinjara.
5. Ladders or Sidi: It helps to climb on roofs and on trees.

6. Harvester- Hooks or Shekoti: The fruits like mango, drumstick are harvested by these types of equipments.
7. Water container: Big size, hollow Bamboo used as water storage container when they roam in the forest.
8. Kitchen utensils: Dai is stick made from bamboo, which is used as stirrer equipment.
9. Bamboo platforms (Mandav) for vegetable cultivation: Farmers use bamboo as supporting material for climbers.
10. Support: Most of the people cultivate Banana in their kitchen gardens. Bamboo culms are used to support.
11. Food: Tender shoots (Wasta) are cut into pieces and cooked as vegetable and prepare wada. Seeds of Bamboo used for chapatti preparation.
12. Foot Bridge: Bundle of Bamboo canes used to make foot bridges on rivulets and rivers.
13. Medicinal use: Bamboo strips are used to bind plaster on bone fracture region by local herbal medicine men. Dermal layer of Bamboo used to cure wound.
14. Musical instruments (Flute): It is also known as Paul or Bansuri.
15. Blind stick or Old man stick: Blind men, women and old persons used bamboo sticks to support while walking.
16. Cradle, Zulla or Ukad: Bamboo strips are weaved into cradle for child. In local language, it is called as ukad.
17. Cot, Palang or Katul: Katul is use for sleeping. Katul is manufactured from Bamboo.
18. Khunti: It is used to hang clothes, calendar and carry bags.
19. Clothes dryer: Clothes after washing dried on bamboo culms.

D. Handicrafts

1. Basket, Wodga or Hara or Tukna: These containers are used to store grains and other daily needs.
2. Supa or Supda: After harvesting paddy grains are separated using this equipment. In Gond tribe, it is called as setin.
3. Hand Fans or Bizana: Fans are made from Bamboo strips. Poor people and interior people used hand fans in hot days.

E. Other uses

1. Bamboo charcoal: Some tribals earn money from bamboo charcoal.
2. Fire: Branches of Bamboo cut by people and use as fire source for cooking.
3. Bamboo fencing: Tribals used bamboo for fencing.
4. Animal fodder: In starvation period people use leaves as fodder for their pet animals.
5. Bamboo pipe or Nara: Veterinary local practitioners used bamboo pipe to give liquid medicine orally to cattle.

6. Night lamp or Torch: Night lamp is made from greenish immature bamboo. In night, people roaming in their hamlets using night lamps.
7. Pulp and paper industry: The bamboo cut by forest department and sold for paper industry.

There are four woody species of bamboo found in Gondia district namely *Bambusa arundinacea*, *Bambusa vulgaris*, *Dendrocalamus strictus* and *Schizostachyum pergracile*. Among these species, *Bambusa vulgaris* is cultivated (Kahalkar, 2009). *Schizostachyum pergracile* is rare. It is found only small patches of Daldali area in Darekasa. Internodal region of the species is long. Due to this special character, it is used to make flute. *Dendrocalamus strictus* is known as Ranz or Calcutta bamboo. This species found in boundaries of forest and

near rivers. It is used for cultivation work. *Bambusa arundinacea* is natural growing species found near bank of rivers and in dense forest.

Total 23 villages are surveyed for the present study. Salekasa and Deori tahsils of the district are covered by dense forest. People of the district have skills to make handicrafts. They weave baskets, containers and other handicrafts. These products are collected by local traders and sold in local markets and big markets like Gondia, Bhandara, Nagpur, Kamphthi, Itwari etc. Some families totally depend on this type of occupation for their earnings. Bamboo is cultivated by people as well as forest departments. Government collects currency from the cultivation of Bamboo.



Bamboo plants



Flowering and fruiting



Edible shoot of bamboo



Roof



Fencing



Fencing



bullock- cart



Poultry house



Wodga



Morrya



Kudo (Measuring apparatus)



handicrafts at market



Wodga (Container)



Supa



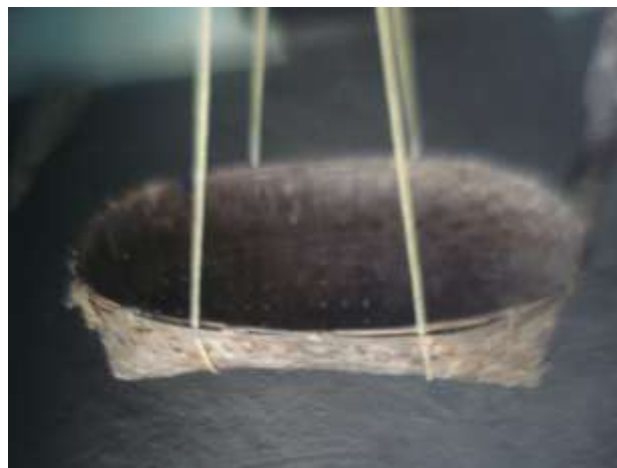
Hand fan



Flute



Axe



Cradle

CONCLUSION

The present study show forest dwellers possess a vast knowledge on usage bamboo plants. They use bamboo for their daily needs. It was observed that villagers use bamboo from their surroundings. Utilization of bamboo

may affect the local diversity and possibilities of availability in their natural habitats. Local people use bamboo in sustainable manner. They cut only some culms and retain other culms for new regeneration from old culms. It was found that men and women of the study

area are well experienced and have tremendous knowledge in utilizing bamboo for various purposes. This knowledge disappearing from the communities day by day because new generation neglecting it. Hence, there is urgent need to document this knowledge and enhance interest to cultivate bamboo in large scale in their home gardens and on waste lands.

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