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## Sustainable use and conservation of wild food plants through indigenous wisdom

NISHANTH GURAV<sup>1</sup>, MOHAMED ABDUL KAREEM<sup>2</sup>, ZBYNEK POLESNY<sup>1</sup>

<sup>1</sup>*Czech University of Life Sciences Prague, Fac. of Tropical AgriSciences, Czech Republic*

<sup>2</sup>*The University of Trans-Disciplinary Health Sciences and Technology, Centre for Conservation of Natural Resources (CCNR), India*

### Abstract

Globally, biodiversity loss is one of the most pressing environmental issues. Tribal communities in the Bastar region of Chhattisgarh, India, such as the Gond are known to be well-versed in their local biodiversity and practice sustainable harvesting. This knowledge however is disappearing at a rapid pace due to urbanisation. This study aims at documenting traditional plant use management that can be used in local conservation strategies. A mixed-methods approach was applied involving visits to randomly selected villages and conducting focus group discussions to understand the perspective of the community. Followed by this, semi-structured interviews of 50 randomly selected (25 men and 25 women) locals were conducted.

The preliminary results show that the locals use 100 wild edible plants which include leafy vegetables, tubers, fruits, and flowers. As part of the ethnobotanical documentation data recorded included local names and uses, parts used, and harvesting techniques. The results show that local communities apply species-specific sustainable harvesting practices and various methods of preparation of tuberous plants (17 species) and that the medicinal-food relation in plant use is a common aspect. The study also found that local communities preserved certain forest patches called sacred groves leaving them undisturbed for hundreds of years. Identification and botanical documentation of 50 sacred groves showed that the community-managed sacred groves had strict prohibitions on the use of plants especially trees inside the sacred groves. The results from the interviews and observation show there is a clear presence of biodiversity conservation practices with 80 % of the respondents agreeing to practice sustainable harvesting practices.

**Keywords:** Ethnobotany, sacred forests, sacred groves, sustainable harvesting, wild edible plants