

ROLE OF ETHNIC GROUPS AND SACRED GROVES IN CONSERVATION OF PLANT GENETIC RESOURCES

The indigenous and ethnic people of the world have learnt to live in most hostile environmental condition in this universe. The most interesting feature associated with these indigenous and ethnic has been found that, they live in localities which are immensely rich in biodiversity. It is estimated that about 300 million indigenous people are living in world, out of which nearly half i.e. 150 million are living in Asia, about 30 million of which are living in Central and South America and a significant number of them are living in Australia, Europe, New Zealand, Africa, and Soviet Union. These ethnic and indigenous people have played a vital role in conservation of environmental management and development process as they posse's traditional knowledge which has been useful in Eco-restoration. It has been noticed that these people know how to live with harmony in nature.

In India, 68 million people belonging to 227 ethnic group and comprising of 573 tribal communities derived from six racial stocks namely - Negroid, Proto-Australoid, Mongoloid, Mediterranean, West Breachy and Nordic exists in different part of the country (Pushpgandhan). These ethnic people mostly the indigenous tribals live close in the vicinity of forests and have managed and conserved the biodiversity of their localities since long time. These tribals take shelter from forest and utilize wild edible plants both raw and cooked. The flower and fruits are generally eaten raw where as tubers, leaves and seeds are cooked. Tribals utilize forest produce, forest timber and fuelwood. These tribals are living in forest since ages and have developed a kind of affinity with forests.

India is a country with large ethnic society and has immense wealth due to which it is rich in biodiversity. There are 45,000 species of wild plant out of which 9,500 species are ethnobotanically important species. Of these 7,500 species are in medicinal use for indigenous health practices. About 3,900 plant species are used by tribals as food (out of which 145 species comprise of root and tubers, 521 species of leafy vegetables, 101 species of bulbs and flowers, 647 species of fruits), 525 species are used for fiber, 400 species are used as fodder, 300 species are used in preparation and extraction of chemicals which are used as naturally occurring insecticides and pesticides, 300 species are used for extraction of gum, resins, dyes and perfume (Arora). In addition to these a number of plants are used as timber, building material and about 700 species are culturally important from moral, cultural, religious, aesthetic and social point of view of. Indian sub-continent is one of the twelve mega-centres of biodiversity representing two of the eighteen hotspots of biological diversity one occurring in Western Ghat and another in North- Eastern Himalaya (Zeven and Zhikovsky). Floristically 141

endemic genera belonging to over 47 families of higher plant occur in India In India 11.95% of the world's biodiversity has been conserved by ethnic people in many ways(Arora). Botanical survey of India has reported 46,214 plant species are found in India of global flora of these 17,500 represents flowering plants. Thirty seven of these are endemic and found in North -East of India.

1 PLANTS ARE CONSERVED IN NATURAL HABITAT AND IS BEING WORSHIPPED BY TRIBALS AS HOME OF GOD AND GODDESS.

A list of such plants is presented in table

LIST OF PLANTS WORSHIPED AND CONSERVED BY TRIBALS ON ACCOUNT OF MAGICO - RELIGIOUS BELIEFS.

S.No	Local Name	Vernacular Name	Scientific Name	Family Name	Name of God and Godess residing in plants
1	Aam	Amra	<i>Mangifera indica</i> Linn.	Anacardiaceae	Lord Vidhyadhara
2	Arjun	Arjun	<i>Terminalia arjuna</i> W &A	Combretaceae	Lord Brahma
3	Bijapura	Nibu	<i>Citrus medica</i> Linn	Rutaceae	Lord Brahaspati
4	Bilva	Bel	<i>Aegle marmelos</i> Corr	Rutaceae	Lord Shiva
5	Nimba	Name	<i>Azadirachta indica</i> A. Juss.	Meliaceae	Serpent King
6	Basil	Tulsi	<i>Ocium santum</i> L	Lamiaceae	Goddess Lakshmi
7	Baka	Agasti	<i>Sesbania grandiflora</i> (Linn) pers	Fabaceae	Lord Narayan
8	Karavira	Kerabi	<i>Nerium indicum</i> Mill	Apocynaceae	Lord Ganesh

9	Nilapadma	Kamal	<i>Nelumbi nucifera</i> Gaertn	Nymphaceae	Godess Ambika
10.	Sweta padma	Madar	<i>Calotropis gigantea</i> (L) R.Br	Asclepiadeceae	Lord Shiva

2. CROP PLANTS CONSERVED BY TRIBALS AS SOURCE OF FOOD.

3. DIVERSITY OF PLANTS CONSERVED BY TRIBALS AS WILD FRUITS, SEEDS, BULB, ROOTS AND TUBERS FOR EDIBLE PURPOSE -

The same is presented in table

PLANTS CONSERVED BY TRIBALS FOR EDIBLE PUROSE

S.No	Scientific Name	Local Name	Family Name	Uses
1	<i>Aegle marmelos</i>	Bel	Rutaceae	Fruits are roasted and eaten
2	<i>Amorphophallus paenonflodium</i>	Suran	Araceae	Petiole/ Bulb as vegetable
3	<i>Achyranthus aspera</i>	Chirchita	Amranthaceae	Tender shoots as vegetable
4	<i>Bauhinia purpurea</i>	Keolar bhaji	Convolvulaceae	Leaves, Flowers, Seeds as Vegetable
5	<i>Bauhinia vahlii</i>	Sehar	Ceasalpiniaceae	Leaves as Vegetable
6	<i>Dioscorea alata</i>	Dudhia aru	Dioscoreaceae	Tubers as Vegetable
7	<i>Curculigo orchioides</i>	Kali musli	Amaryllidaceae	Roots and Tubers as vegetable
8	<i>Xylia xylocarpa</i>	Jambu	Mimosaceae	Seeds asvegetable
9	<i>Entada pursaetha</i>	-	Mimosaceae	Seeds as vegetable
10	<i>Dioscorea bulbifera</i>	ratalu	Dioscoreae	Tubers as vegetable

4. PLANTS ARE CONSERVED IN NATURAL HABITAT IN FOREST USED AS ANTIDOTE OF SNAKE BITE AND SCORPION- STING BY TRIBAL HERBAL HEALERS

5. PLANTS ARE CONSERVED IN NATURAL HABITAT AND USED FOR SETTINGBONE FRACTURE AND IN ORTHOPEDIC TREAT-MENT OF TRIBAL HERBAL HEALERS.

6. PLANTS CONSERVED BY TRIBALS IN NATURAL HABITAT AND UTILISED AS MEDICINAL HERBS

7. PLANTS ARE CONSERVED IN ABONDENED SITES OF SHIFTING AGRICULTURE BY TRIBALS

8. PLANTS ARE CONSERVED IN SACRED GROVES OF TRIBALS AS IN - SITU CONSERVATION OF BIODIVERSITY.

Table - PLANTS GROWING IN SACRED GROVES IN INDIA

S.No	Name of plant	Uses
1	<i>Butea monosperma</i>	Medicinal, Dye
2.	<i>Cordia dichotoma</i>	Food, Medicinal
3.	<u><i>Ravuolfia serpentina</i></u>	Medicinal
4.	<i>Alstonia scholaris</i>	Medicinal
5.	<i>Helicteres isora</i>	Medicinal
6.	<i>Bambusa arundinacea</i>	Basketry, medicinal
7.	<i>Boswellia serrata</i>	Medicinal
8.	<i>Calotropis gigantean</i>	Medicinal
9.	<i>Carissa congesta</i>	Medicinal
10.	<i>Diospyros montana</i>	Medicinal