ROLE OF ETHNIC AND INDIGENOUS PEOPLE OF NORTH WESTERN HIMALAYAN REGION OF HIMACHAL PRADESH IN THE CONSERVATION OF PHYTO-DIVERSITY THROUGH RELIGIOUS AND MAGICO-RELIGIOUS BELIEFS.

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ABSTRACT

Plants has special role in religious, cultural and social ceremonies of every communities of the nation. The use of plants in different religious practices is possibly the earliest and most prevalent form of religion. Traditional knowledge related to various religious and supernatural beliefs and folklores help the rural and indigenous communities in the protection of local plants from destruction. The taboos, festivals, rituals and other cultural aspects play important role in the preservation and protection of surrounding phytodiversity on the basis of religious ground. The plants are also conserved by these ethnic and indigenous people that serve as a source of wild edible food, and as a source of agricultural and horticultural plants. Some of the indigenous plant species are conserved by the ethnic and indigenous people through agricultural cultivars improvement programme which increase productivity and incorporates the traits for providing the resistance against different pests and diseases. But as insitu mode of conservation, these plants are mostly conserved by tribal or indigenous people of study area due to their sacredness and being worshipped by tribal people or indigenous people as home of God and Goddess and for magico-religious beliefs.

Keywords: Conservation, Indigenous People, Magico-religious, Traditional knowledge, Phyto-diversity, Himachal Pradesh
INTRODUCTION

The plants are used in many ways including worshipping God's and goddesses for the protection and betterment of human life. Worship is performed with traditional rituals for human well-being in every human society. Many tribal communities preserve this tradition through folklore and worship their local deities right from occasion of birth to mourning death. Many parts of plants like bark, twigs, flowers, fruits and seeds are offered to appease the gods. There are many plants such as *Aegle marmelos*, *Ficus religiosa*, *Ficus benghalensis* and *Thevetia nerifolia* etc are grown in temples courtyards and near the different religious institution are considered sacred plants by different tribal and ethnic communities of country. They conserve the plants by all means which are used in different ritual rites and religious ceremonies (Sharma and Pegu, 2011). The state Himachal Pradesh lies in the lap of North-Western Himalaya.

Himachal Pradesh is not merely a physical land mass but a vibrant and spiritually charged mass of land known as “Dev Bhoomi” – land of Gods. It is the land where the components of nature is worshiped- the plants, animals, planets and five elements (Choyal and Kumar 2015) with an altitude varies from 350-6,975m with total geographical area of 55,673sq.km. It is known for its natural beauty, traditions, customs and cultures (Kharwal and Rawat 2009).

Himachal is a great repository of herbal plants and act as a good hot spot in Northwestern Himalayan mountain ranges for growth of plants of ethnobotical importance. The tribal of Himachal Pradesh mainly constitute Gaddis and Gujjar communities who are the inhabitant of hills and rural and remote areas of study region. The plants of Himachal Pradesh occupies an important place in mythology due their sacredness and their role in various religious rites and ceremonies. The indigenous or tribal people of Himachal Pradesh plays important role in the conservation of their area due to their faith on the traditional knowledge about the use of local plants for various purposes such as food, fibre, shelter, religious and magic belief, fodder and mainly for the treatment of various diseases or incase of primary health care. So they conserve these plants for their future benefits. They conserve plants in their natural habitat or as “Sacred groove” because these plants are being worshipped by indigenous people or tribal people as a home of God and Goddess. The tribal and indigenous communities of Himachal Pradesh having good faith on spiritual powers of local deities, magico-religious beliefs and taboos. They believed that some plants of the forests are the abode of local deities i.e local deities and Gods reside on trees in the forest. They thought that if they do not show any regards or respects to these plants, then god will cause harm to them. So they protect them from cutting and from exploitation. Therefore, they preserve the plants which they consider sacred for social cultural and religious purposes. Their taboos, festival rituals and other cultural aspects are closely related with conservation of surrounding phytodiversity on the basis of religious ground. Thus this paper emphasize the role of ethnic and indigenous/tribal people of Himachal Pradesh in the conservation of phytodiversity through religious and magico-religious beliefs. The studies regarding to the religious and magico-religious importance as mode of insitu conservation were carried out by several workers as Sen Sharma (1989), Sood et.al (2005), Kapoor and Rangra (2008), Sharma and Pegu (2011), Choyal
and Kumar (2015) and Sharma and Seth (2020). All these workers were reported about the religious and magico-religious beliefs related to conservation of local biodiversity by rural and indigenous communities.

MATERIALS AND METHODS

The completion of study was made possible by doing field survey of hilly tribal and rural area of Himachal Pradesh. Study area present at altitudinal ranging from 1800 to 6401 m. above mean sea level. About 70% of the total alpine area of the North-West Himalayas is present in Himachal Pradesh. This region has diversity in its soil, physiographic condition, land use pattern and cropping system. The medicinal plants were collected from time to time during flowering and fruiting season. The plants collected from study area were consisted of almost all parts so that they can be easily identified and to provide maximum information a herbarium of plants was also prepared.

The information related to collected plants was gathered by discussing with indigenous and tribal people, local Purohit, Gurus, Tantarik and Saints inhabiting the study area who play an important role in the conservation of local plants with their natural habitat due to their religious and magico-religious usefulness. Study material from various reference books and research papers were also referred. The whole available information is then written stated in form of report.

OBSERVATION AND RESULTS

The following observations have been recorded on the role tribal and indigenous people in the conservation of phyto-diversity of study areathrough religious and magico-religious beliefs.

Plants which are conserved in their natural habitat which are considered by tribal as religious plants and magic belief associated with them.

Many of plant of Himachal Pradesh are conserved in their natural habitat by tribal people due their religious importance and they considered then as home of God and Godness. The indigenous people or tribal people worship flowers and tresss as they believe that God and Godness reside in them. Some plants with their parts and products plays an significant role in religious ceremonies. Some plants are use by some tantrik and other superstitious people for magic work and to get rid from bad evils eg Some people of study area hang fruit of Lal mirch (Capsicum annum) and Nimbu (Citrus medica) on the door to get rid from the evil effect of bad evils. Some people believed that the use seeds Sarson (Brassica compestris) and Lalmirch (Capsicum annum) and deshi ghee which are brunt on the fire as dhooni to get rid from magic, bad spirit and bad eye. On the day of Awansha, the twigs of Tirmir (Zanthoxylum armatum) are hang on the door to get rid from evil sprits.
Religious importance of local plants which forms the basis of conservation for rural communities as insitu conservation are

1 *Daturainnoxia* Mill.(Solanaceae)-Datura
    **Religious uses**-Flowers and fruits are offered to appease Lord Shiva.

2 *Emblica officinalis* Gaertn.(Euphorbiaceae)-Amla
    **Religious uses**-Twigs of plant considered sacred and worshipped on “Panchbhikhma” (Religious festival of Hindu). Small pieces of it’s wood along with Sandal wood (Santalum album) which is offered by one and all the last rite funeral as taken of departed soul.

3 *Euphorbia royleana* Boiss.(Euphorbiaceae)-Chuin,Dandathor
    **Religious uses**- Phylloclade is planted during the boys birth ceremony.

4 *Ficus benghalensis* Linn. (Moraceae)-Bargad, Badyaa
    **Religious uses**- This tree is considered sacred as symbolic of “Trinity” Brahma, Vishnu and Mahesh. The roots of this plant believed to be abode of Lord Brahma, trunk of lord Vishnu and branches of lord Shankar. This plant is worshipped during all religious ceremonies.
    This tree is also considered as wish fulfilling tree (KalpaVriksha) in Hindu scriptures. This tree is also worshipped by ladies as a symbol of “Sati Savitri” who brought her husband to life by worship of this tree. The wood is used for performing “Hawans” during religious ceremonies.

5 *Ficus glomerata* Roxb.(Moraceae)-Umaraya
    **Religious uses**-Plant is considered sacred and worshipped. Stem wood is used for performing “Hawans” during religious ceremonies.

6 *Ficus religiosa* Linn. (Moraceae)-Peepal
    **Religious uses**-Whole plant is considered sacred and worshipped in all religious ceremonies. Wood of this plant is used in performing “Hawan”.
    Leaves of this plant are used in worship of Rishies and this tree is considered as abode of Goddess ‘Bhavani’ and this tree is as tree of fertility. This tree is worshipped by followers of Lord “Budha “because it is believed that Gautam Buddha get enlightenment under this tree.

7 *Glorisasperba* L.(Liliaceae)-Nagrugdi
    **Religious use**-Flowers of this plant are offered to appease Lord Ganesha.

8 *Hordeum vulgare* (Poaceae)-Jaou
    **Religious uses**-Seeds are used as one the important constituent of materials used in “Hawan” during religious ceremonies. It’s seedlings are kept on the occasion of “Navratri” festivals. Worship for prosperity and happiness.

9 *Lawsonia inermis* Linn. (Lythraceae) – Mehandi
    **Religious uses**-Paste of leaves is applied on the hands and young bride and bridegroom at the time of marriage ceremonies.

10 *Mirabilis jalapa* Linn.(Nyctaginaceae)-Shivkali
    **Religious uses**- Flowers are used as offering to deities specially to appease Lord Shiva.
11 **Musa paradisiaca** L.(Musaceae)-Kela

**Religious uses-** Plant is considered sacred and it’s leaves are used in all religious ceremonies like marriage , “Grihparvesh” (House warming ceremony ) and death rituals. Fruit is offered to appease Lord “Satyanarayana”.

12 **Ocimum sanctum** Linn.(Lamiaceae)-Tulsi

**Religious uses-** The plant considered sacred and worshipped during “Panch-bhikam festival”. Leaves of this plant are used in Mangalgauri, Ganesh and Navratripuja. The dead body is placed before this plant prior to its last rites.

13 **Oryza sativa** L. (Poaceae)-Dhan, Chawal

**Religious uses-** Whole plant with seeds are worshipped during festival “Shairya” for happiness and prosperity. Crushed seed flour is used for making local dish “Chiladu or Ankilan (Chalerian) which are eaten with milk and sugar on the occasion of religious ceremonies and festival such as Diwali ,Lohri and during marriage ceremonies. During marriage ceremony , this dish is considered sacred and is eaten by bridegroom as a “Mahouk” before going to bride house. Fleshy part (Fruit) of this plant known as “Mooli” is worshipped on the “Hoi” festivals for long life of children.(Raphanus sativus Linn.)

14 **Saccharum officinarum** L (.Poaceae)-Gana

**Religious uses-** Stem of this plant is used in preparations of “Gur” “Shakkar” and “Sugar” which is used in the preparation of “Prashadam” in worshipping of deities. “Gur prepared or cholle (Cicer arietinum), when roasted is used as “Bhog” to appease Goddess “Santoshi Mata”. Whole plant is considered sacred and worshipped on “Hoi” ( a holy day when mother do fast for good for health and life of their son).

### Table 1:

<table>
<thead>
<tr>
<th>Sr. No.</th>
<th>Scientific Name</th>
<th>Family</th>
<th>Local name</th>
<th>Associated deity</th>
<th>Magico – religious belief.</th>
</tr>
</thead>
<tbody>
<tr>
<td>01.</td>
<td><em>Aegle marmelos</em> (L.) Corr.</td>
<td>Rutaceae</td>
<td>Bil, Bilpatri</td>
<td>Lord Shiva</td>
<td>The tree is said to possess thousand of powers. It is commonly believed that a person who wear amulet of Bil plant no misfortune comes to him or family and he become skilled in speech.</td>
</tr>
<tr>
<td>02.</td>
<td><em>Betula utilis</em> D.Don</td>
<td>Betulaceae</td>
<td>BojPatra</td>
<td>Lord Shiva</td>
<td>All ancient and spiritual books like “Ramayana”, “Mahabharata” etc. were written on it’s bark in India. Bark of “BojPatra” is used by Hindu’s “Tantriks” for the preparation of talishman and amulets.</td>
</tr>
<tr>
<td>03.</td>
<td><em>Butea monosperma</em> (Lamk.) Taub.</td>
<td>Fabaceae</td>
<td>Dhak, Palah</td>
<td>“Budha”, Saraswati</td>
<td>Budhist also considered the tree sacred based on the legend that Queen “Mahamaya” seized a branch of “Plah” tree at the time birth of her son “GauthamBuddha”. The people donot allow the pregnant ladies to go near the tree believing that evil spirt resides on the tree.</td>
</tr>
<tr>
<td>04.</td>
<td><em>Ficus benghalensis</em></td>
<td>Moraceae</td>
<td>Bargadh, Barh</td>
<td>Lord Brahma , LordVishnu and Lord Shiva</td>
<td>This tree is sacred which is considered the symbolic of “Trinity”, the roots believe to be abode of Brahma, trunk of Vishnu and branches</td>
</tr>
<tr>
<td>No.</td>
<td>Plant Name</td>
<td>Family</td>
<td>Common Names</td>
<td>Folklore</td>
<td></td>
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<td>-----</td>
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</tr>
<tr>
<td>05.</td>
<td><em>Ficus religiosa</em> L.</td>
<td>Moraceae</td>
<td>Peepal</td>
<td>Hind regarded this tree as the abode of Goddess Bhavani and the tree is also regarded as tree of fertility. Leaves are used in Ganesh Puja and Rishi Puja. It is believed that as the leaves of this tree dry up the patient get relief and ultimately cured. Tribal people of Himachal Pradesh believed that evil spirit resides of this tree and do not permit their ladies and children to visit it during night.</td>
<td></td>
</tr>
<tr>
<td>06.</td>
<td><em>Juniperus cropoda</em> Boiss.</td>
<td>Cupressaceae</td>
<td>Shur, Shugpa</td>
<td>This old tree is treated sacred in Lahul valley and commonly planted near “Gompas”. A pinch of pulverized leaves and some seeds of mustard are burnt to produce smoke by “Lamas” in chanting mantras to drive away the evil spirit from the body.</td>
<td></td>
</tr>
<tr>
<td>07.</td>
<td><em>Mangifera indica</em> L.</td>
<td>Anacardiaceae</td>
<td>Amb</td>
<td>This tree is considered sacred. Lord Buddha used to rest under this tree and wood of this tree called “Samdhas” which are used in case of Havan and other religious ceremonies. It is believed that if a person see the first inflorescence and inhales the smeared inflorescence for three times will not be bitten by snakes for that particular year.</td>
<td></td>
</tr>
<tr>
<td>08.</td>
<td><em>Phyllanthus embilica</em> L.</td>
<td>Euphorbiaceae</td>
<td>Ambla</td>
<td>This plant is considered to be incarnation of Lord Vishnu. Its leaves are considered for appeasing “Ganesha”. It is believed that a garland of its twigs tied around the neck of cattle to cure leprosy.</td>
<td></td>
</tr>
<tr>
<td>09.</td>
<td><em>Santalum album</em> L.</td>
<td>Santalaceae</td>
<td>Chandan</td>
<td>This tree is sacred tree. Wood of this tree is used in the funeral pyre and it is believed that the soul of dead person find place in heaven if at least a piece of this wood is used in funeral pyre. Rubbing of piece of its wood on the stone with water is used for “Tilak” on forehead. It is believed that “Tilak” of the wood this tree on the forehead keeps the mind fresh and also protect from the bad evil eyes.</td>
<td></td>
</tr>
<tr>
<td>10.</td>
<td><em>Zizyphus mauritiana</em> Lam.</td>
<td>Rhamnaceae</td>
<td>Ber</td>
<td>Leaves of this plants are used in worship of Mangalgauri and Ghatta Mahalakshmi puja. It is believed that the branch of this plant is placed at the burial place so that evil spirit of deceased person would not cause harm to close relatives.</td>
<td></td>
</tr>
</tbody>
</table>
TABLE 2: A list of the plants associated with deities

<table>
<thead>
<tr>
<th>Deities</th>
<th>Associated Plants</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lord Ganesha</td>
<td>Cynodon dactylon, Dendrocalamus strictus, Ficus religiosa, Glorisa superba, Phyllanthus emblica</td>
</tr>
<tr>
<td>Lord Shiva</td>
<td>Aegle marmelos, Bauhinia tomentosa, Calotropis gigantea, Cannabis sativus, Cassia fistula, Cynodon dactylon, Datura fastuosa, Nerium indicum, Phyllanthus emblica, Santalum album</td>
</tr>
<tr>
<td>Lord Vishnu</td>
<td>Bauhinia variegata, Curcuma longa, Ficus bengalensis, Ficus religiosa, Jasminum sp, Musa paradisiaca, Seasmum orientale</td>
</tr>
<tr>
<td>Lord Indra</td>
<td>Hordeum vulgare</td>
</tr>
<tr>
<td>Lord Bhrama</td>
<td>Ficus bengalensis, Ficus religiosa</td>
</tr>
<tr>
<td>Lord Shani Dev</td>
<td>Ficus religiosa, Seasmum orientale</td>
</tr>
<tr>
<td>Lord Kamdeva</td>
<td>Mangifera indica, Saccharum officinarum, Saraca indica</td>
</tr>
<tr>
<td>Goddess Kali Durga</td>
<td>Hibiscus rosa-sinensis , Mangifera indica , Seasmum orientale</td>
</tr>
<tr>
<td>Goddess Laxami</td>
<td>Musa paradisiaca, Nyctanthes arboritristis</td>
</tr>
<tr>
<td>Goddess Sarswati</td>
<td>Butea monosperma</td>
</tr>
<tr>
<td>Goddess Durga</td>
<td>Curcuma longa, Cynodon dactylon, Musa paradisiacal</td>
</tr>
<tr>
<td>Goddess Gouri</td>
<td>Cynodon dactylon</td>
</tr>
<tr>
<td>Lord Buddha</td>
<td>Butea monosperma, Saraca indica</td>
</tr>
<tr>
<td>Goddess Sheetalata</td>
<td>Mangifera indica</td>
</tr>
<tr>
<td>Goddess Bhawani</td>
<td>Ficus bengalensis</td>
</tr>
<tr>
<td>Lord Brihsphati</td>
<td>Musa paradisiacal</td>
</tr>
</tbody>
</table>

Table 3: A list of plants associated with worshiping of Navgrahas

<table>
<thead>
<tr>
<th>Mars – Mangal Graha</th>
<th>Acacia catechu</th>
</tr>
</thead>
<tbody>
<tr>
<td>Venus – Shukra Graha</td>
<td>Ficus glomerata</td>
</tr>
<tr>
<td>Saturn-Shani Dev Graha</td>
<td>Aegle marmelos</td>
</tr>
<tr>
<td>Sun-Surya Graha</td>
<td>Calotropis gigantean</td>
</tr>
<tr>
<td>Moon Chandra Graha</td>
<td>Butea monosperma</td>
</tr>
<tr>
<td>Mercury- Buddha Graha</td>
<td>Acryanthus aspera</td>
</tr>
<tr>
<td>Jupiter- Brihsphati</td>
<td>Ficus religiosa</td>
</tr>
<tr>
<td>Ketu Graha</td>
<td>Desmodium bipinnata</td>
</tr>
<tr>
<td>Rahu Graha</td>
<td>Cynodon dactylon</td>
</tr>
</tbody>
</table>

Table 4: A list of plants which are conserved by indigenous or tribal people of H.P as sacred groove as *insitu* conservation of biodiversity

The sacred groove are the natural forests which are located in hilly region of north-west Himalaya of H.P. where the interference of all the kinds of human activities are prohibited in the sacred groove. Some forest patches of Himachal Pradesh known as sacred groove and commonly called as Dev Ban. The plants of these forest patches are protected from cutting and exploitation by rural and indigenous communities due to their association with deities and importance in religious rituals, festivals, cultural customs and ceremonies.
Some plants growing in the sacred grooves of H.P are in the table:

<table>
<thead>
<tr>
<th>S.No.</th>
<th>Name of plant</th>
<th>Families</th>
<th>Local name</th>
<th>Uses</th>
</tr>
</thead>
<tbody>
<tr>
<td>01</td>
<td>Aegle marmelos(L.)Corr.</td>
<td>Rutaceae</td>
<td>Bill patri</td>
<td>Medicinal, Religious</td>
</tr>
<tr>
<td>02</td>
<td>Butea monosperma (Lamk)Taub.</td>
<td>Fabaceae</td>
<td>Palah</td>
<td>Religious, Magico-religious</td>
</tr>
<tr>
<td>03</td>
<td>Beta utilisD.Don</td>
<td>Betulaceae</td>
<td>Bhojpatri</td>
<td>Religious</td>
</tr>
<tr>
<td>04</td>
<td>Ficus benghalensis L.</td>
<td>Moraceae</td>
<td>Bargadh</td>
<td>Magico-religious, medicinal ,fodder</td>
</tr>
<tr>
<td>05</td>
<td>Ficus religiosa L.</td>
<td>Moraceae</td>
<td>Peepal</td>
<td>Religious</td>
</tr>
<tr>
<td>06</td>
<td>Mangifera indica</td>
<td>Anacardiceae</td>
<td>Amb</td>
<td>Edible, religious</td>
</tr>
<tr>
<td>07</td>
<td>Phyllanthus emblica L.</td>
<td>Euphorbiaceae</td>
<td>Ambla</td>
<td>Medicinal, religious, edible</td>
</tr>
<tr>
<td>08</td>
<td>Santalum album L.</td>
<td>Santalaceae</td>
<td>Chandan</td>
<td>Medicinal, religious</td>
</tr>
<tr>
<td>09</td>
<td>Sesamum orientale L.</td>
<td>Pedaliaceae</td>
<td>Til</td>
<td>Edible, medicinal, religious</td>
</tr>
<tr>
<td>10</td>
<td>Zizyphus mauritiana Lam.</td>
<td>Rhamnaceae</td>
<td>Ber</td>
<td>Edible, religious</td>
</tr>
</tbody>
</table>
Photographs: The religious and magico-religious beliefs associated with some plants of study area in various ritual rites, customs, taboos, magic work and religious ceremonies

CONCLUSION:

Conservation of phytodiversity is an important step which is taken by the tribal people or indigenous of H.P. for the benefit of future generation to meet their daily life requirements. These basic requirements which is based on plants or their products such as for magico-religious, medicinal, edible, fuel, fodder and so many purposes. Conservation by phytodiversity through religious and Magico-religious mode is safest and spiritual method of conservation within the natural habitat. Mostly the in-situ type conservation is followed by tribal or indigenous people of study by conserving the plants in their natural habitat. But now due to advancement or urbanization in tribal areas, the ex-situ conservation of plant species is also followed by tribal or indigenous people. So conservation or proper use of resources of phytodiversity should properly utilize for future benefit.
References:


