India represents 8% of estimated biodiversity of the world, with about 45,000 species of angiosperms embracing nearly 12% plants having medicinal properties. Out of 17,500 flowering plant species found in India, over 1600 plants are used in traditional medicinal system.

Our nation has rich tradition in the studies of medicinal plants and is one among the twelve mega biodiversity centers and eighteen hot spots of the world including Eastern Himalayas and Western Ghats. This is due to a variety of climatic conditions prevailing different ecological habitats from tropical, sub-tropical, temperate and alpine to desert. It contains more than 2500 Algae, 23,000 Fungi, 2843 Bryophytes, 1250 Pteridophytes (Harbhajan Singh., 2003), 63 Gymnosperms, 17,000 Angiosperms and 1940 Lichens (Dhar., 2000) etc, in its varied habitats.

India is one of the richest ethnobotanical treasure in the world, which must be frilly documented, utilized and conserved. The forests are not only rich in species of plants but also provide a valuable pharmacopoeia and gene pool for improving domestic crops. The plant resources of mega diversity countries, especially hotspots are of critical importance, at least to their own survival and well being, and therefore worth of national and international attention.

All the states of our country have sizable tribal population. Its 53 million tribal people is perhaps the second largest country in the world, next to Africa, possessing a good treasure of accumulated tribal knowledge. Tribal people and aborigines all over the world use an
enormous range of wild plants for their basic needs. Plants have always been the sources of food, medicine and other necessities of life since ages.

Kala (2005) reported totally 427 tribal communities in India, namely Andh, Andamanesc, Chakma, Asur etc. Tamilnadu has 36 tribes namely Irular, Kammara, Kota, Palliayar, Toda, Kani (Kanikkar) etc., in Kanyakumari and Tirunelveli District. In India, tribal communities are mainly concentrated in four regions namely, Central and Eastern India (59%), North Eastern India (18%), Western India (29%) and Southern India (5.2%).

The origin and evolution of the Adivasi communities reflects their long association with indigenous flora for their basic needs and cultural activities. They have developed a unique understanding of the forest resources and have passed on their traditions from generation to generation in different parts of the world. The unique indigenous knowledge system, which the tribal obtained through age long trial and error method with their ambient vegetation and transmitted through oral traditions, is usually hidden from the outside world.

Tribal communities inhabiting large tracts in different parts of India have, by virtue of their distinct cultures, beliefs, taboos, totems, religious rituals, traditional habits of food and medicine, played major role in conserving biodiversity. They have, in the process, accumulated vast reservoirs of knowledge on plant species available in and around their habitats, which has helped them to acquire a sense of responsibility in judiciously utilizing the plant resources. Indigenous knowledge regarding traditional cultivation of primitive cultivars also helped them to
have a sense of responsibility about preservation of land areas and their wild relatives, economically important cultivated crop plants and other plant genetic resources.

Species of flowering plants in India are not yet properly understood in terms of their potential value and sustainable utilization. This is true with an estimated 3500 species distributed in the forests of the Western Ghats. Some of them in the easily accessible traits are prone to depletion and are under threat due to rapid industrialization, urbanization, population pressure etc. It is an urgent necessity to conserve these renewable natural resources for prosperity and utilize them judiciously for the benefit of the society especially in the rural sector. The most desirable step in this direction is to make an inventory of these forest plants and assess their utility value as food, medicine, oil, resins, gums etc. The tribal knowledge about plants and their uses can play a key role in fulfilling the task.

Large number of folk medicines has remained endemic to certain regions. Certain medical practices are kept as guarded secrets by tribals. Vast knowledge of still virgin information of plant properties and their uses are to be tapped and salvaged. The ancient medical knowledge of various tribes and folklore systems of medicine has provided a powerful and more effective strategy for the discovery of clinically useful compounds. The documentation of available folk knowledge therefore, is crucial to health care, industry and agriculture.

Chronicling of traditional practices and local biodiversity wealth will help to generate greater awareness of the importance of conserving biodiversity and using it sustainable and
equitable. At the same time such People's Biodiversity Registers will help to safeguard the IPRs of local communities.

Multimedia database development on the innovations, selections and genetic resources conserved by tribal and rural families will help them to get benefits as and when national and global biodiversity funds are established. Such registers and databases will also help to chronicle dying wisdom in matters relating to the conservation and use of biodiversity. It will also be appropriate to accord legal recognition to such local level Biodiversity Registers. Governments, NGOs and other stakeholders should promote social marketing of the need for benefit-sharing and access regulations. Public awareness and concern will be necessary to stimulate political action. Mass media can play a critical role in generating public opinion for both conservation and sustainable and equitable use. Media resource centers should be established for providing media credible information. Media representatives should be associated with all stakeholder groups (Swaminathan, 1996).

Conservation of biodiversity depends on rights of local communities that allow them to enjoy the fruits of their conservation efforts. Alienation of these rights leads to the erosion of biodiversity, which in turn threatens ecological survival and economic well-being. IPRs in the area of biodiversity and life forms is not merely a creation of new rights; they also involve a rewriting of traditional rights which enable local communities to be the keepers of biodiversity, with a stake in its replenishment and utilization. IPRs in seeds, plant material and indigenous knowledge systems alienate the rights of local communities and undermine the stake they have in the protection of biodiversity.
This is what happened to village forests in colonial India. When local communities lost their rights to their own forests, their responsibilities to protect the forest were simultaneously taken away. While the local people were denied their traditional rights to forest resources, and while the colonial forest policy became a policy for deforestation, the local people were often blamed for the devastation of forests.

Indigenous communities have been the original owners of biodiversity. Their traditional, customary rights need to be recognized and protected. However, since indigenous knowledge is based on collective innovation, such rights cannot be individual rights but need to be community rights. Further, these knowledge systems are part of a heritage. Their protection, therefore, needs to be based on criteria different from the criteria of novelty used in patents.

Principle 22 of The Rio Declaration on Environment and Development states that the indigenous people and their communities and other local communities have a vital role in environmental management and development because of their knowledge and traditional practices. States should recognize and duly support their identity, culture and interest and enable their effective participation in the achievement of sustainable development.

India has a rich tradition of biodiversity conservation. Traditional human relationships like beliefs, faith, taboos, customs and preferences played an important role in conservation of habitats and individual species. The cultural ethos of Indian people is amply demonstrated by such conservation efforts. In majority of Indian villages, trees have been planted and dedicated to different gods or have been declared as abode of spirits, making them sacred. Frequently, species
selected by the local people for social significance turn out to be also ecologically significant. Any biodiversity conservation programme, cannot succeed without the involvement of local people.

**Area of the study:**

The Agasthiayamalai Biosphere Reserve (Map) is located in Southern Kerala and Kani Southern part of Tamilnadu. The study area which is extended to the parts of Kanyakumari and Tirunelveli districts lying between 77° 5' and 77° 40'E longitudes and 8° 20' and 8° 50'N latitudes. South west monsoon from June to September, and north east monsoon in October and November bring rain to this region and annul rain fall varies at different places from 89cm to 625cm. The Government of Tamilnadu is considering for inclusion of areas adjoining the mountain peak 1868 mt (Agasthyakondam) in the reserve and its environs, comprising 1,701 Sq.Km, was designated as the 13\(^{th}\) biosphere reserve with the inclusion of areas of Tamilnadu, the total area will exceed 2,500 Sq.Km and have many endemic heritage and inhabited by various ethnic groups such as Kanikaran, Paliyars and Thodars etc. Kani tribals are one of the primitive people and settled in Agasthyamalai. There are totally 102 families and total population is approximately 350. They are settled in Servalar, Agasthia kanikudiyiruppu, Chinnamayilar, Periyamayilar and Ingikuzhi at Tirunelveli zones (Gopalan and Henry. 2000).
With this background the following objectives have been framed.

1. To study the environmental relationship of the Kani tribal and their utilization practices relating to plant resources.

2. To study and document the ethnobotanical practices of Kani tribals and to prepare an inventory of plant species used for food, fodder, fiber, human and veterinary medicine, manure and material culture.

3. To assess the benefits derived from plants both for subsistence and commercialization.

4. To study the Kani’s technological characteristics of the indigenous practices and apply to biodiversity conservation and community development.

5. To strengthen the *in situ* conservation activities of these tribal families.

6. To select rare germplasms and propagate two rare medicinal plants through tissue culture