

## Impact of Deforestation on Medicinal Plants in India

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### Abstract:

*Medicinal plants based medicines are playing key role in providing health care to large section of Indian population from ancient times. Medicinal plant based traditional health care system is part of Indian society. Forest based medicinal plants are different type of herbal products have their roots and well defined in Ayurvedic medicinal system. It was the first medical system to focus on plant based treatment system. But due to increasing Industrialization, Urbanization and Modernization over population deforestation becomes most pressing environmental issues that the world facing today. In India the total forest cover is not satisfactory and there are certain regions that have sought a gradually decrease in the forest cover due to far deforestation has impact the local and global climatic condition, soil erosion, water conservation and medicinal plants extinction.*

**Key words:** Deforestation, Medicinal Plants, Biodiversity Causes, Effects and solution of over explanation of resources

### Introduction:

According to the India State of forest report –2019. The forest cover is increasing across the country however northeast India and tribal districts which covers India's 60 % forest area is decreasing as well. At present 25 % of India's total land area is covered under forest and tree cover. In tribal area due to shifting cultivation, forest fires, natural falling of trees, natural calamities and uncontrolled cutting by locals and mainly due to different type of developmental cultivation in that area.

The deforestation in the north east and tribal areas and in other major parts of country marked remarkable decline and due to consistent deforestation result in extinction of medicinal plants from the forest.

It is well known fact the tribal or that people living in forest area are dependent on the forest sources like fuel fodder, small timber and different type of medicinal plants which they use as medicine and as nutritional recourse to maintain their health and to cure from diseases and health issues.

Indian forest are very rich in medicinal plants and plays important role for tribal for different purposes.

### Definition of Deforestation:

The conversion of forest to another land use or the long terms reduction of tree canopy cover below the 10 % threshold (FAO).

### Causes of Deforestation:

Increase Industrialization, Urbanization, over population and dependency on forest sources are the main causes for deforestation and ultimately extinction of medicinal plants from the forest. Along with this shifting and cultivation for agricultural purpose by locals or tribal continues fire in forest, cutting and uncontrolled use of specific trees particularly medicinal plant

for medicine making by medicinal plants based elements. Illegal and legal uncontrolled reserving mining area.

The total forest covered area in tribal district is about 37 percent of the geographical area of these districts in 27 different Indian states and UTs.

The depletion of forest covered area is also due to land used for big irrigation projects, dams and highways roadways and local roads.

Indian forests are having maximum species richness for trees and particularly medicinal plants.

In India due to Industrialization, Urbanization and over exploitation have resulted not only decline in required forest area but also in permanent loss of forest cover to an alarming rate which increase population extinction there is growing demand for food and land based resources. However it is necessary to prevent mass destruction of forest and preventing exploitation of important medicinal plants and it is an urgency to conserve the green area for the future generation.

The values and functions of forest for ecosystem and biodiversity are immense and diverse deforestation is the global problem and can be resulted in desertification creating number of problem for living being and whole ecosystem. It is also very interesting that climate change and deforestation issues is also correlated. Forest also play an important role in maintaining the conservation and water sheds. The main effect of deforestation i.e. the moisture holding capacity of soil that leads to erosion and other is by poor soil structure. There are number of severe long term effect of deforestation on land, soil, which may result in consistent flooding condition in these areas. The soil may loss fertile layer and permanent productivity.

According to FAO 33 million acre of land covered under forest are loss annually around the globe. Deforestation can have alarming effect on the air, water, climate, soil and biodiversity collectively on the environment. According to red data book 427 India medicinal plant species are decreased endangered of which 28 are extingted, 124 endangered, 81 rear of 34 insufficiently known.

The dependency and growing demand are also the important factor for deforestation. In tribal areas medicinal plants parts like leaves, bark, roots, fruits, reeds and even whole plant is rudely collected by locals and tribal without taking care of these valuable plant. Due to continuous usage and negligence for replantation many of the important medicinal plant species are on the way of extinction. Due to continuous harvesting and collecting the medicinal plants have become endangered in their ecological nature habitat.

#### **Importance steps for prevention of deforestation and conservation of medicinal plants:**

- 1) Plantation of trees through people participation NGO's of governmental agencies.
- 2) Adoption of Eco forest
- 3) Legislation for protection of the forest and medicinal plants.
- 4) Promoting use of renewable forest resources.
- 5) Implementation of recycling strategies.
- 6) Reduction designing for environmental issues.
- 7) Local people's participation.
- 8) Use of In-site conservation.
- 9) Exe-site conservation.

### Conclusion:

India is rich source of medicinal plants. Herbal wealth constitute 8000 species. Western Ghat is popular for medicinal plants diversity. Indian forest are the main source for medicinal plants. 95 % of the medicinal plants used for plant based medicines collected from the wild. 8000 plants species from Indian forest are used as medicine by different communities including tribal but due to over population, Industrialization, Urbanization and growing demand and use of plant based food, medicine, fragrance, flavor, dyes and woods for different purpose results in deforestation and extinction of important medicinal plants.

### References:

1. Laxman Chandra de (2016) Bio-diversity and conservation of medicinal and aromatics plants. *adv. plants. Agric res.* 2013,5(4):561-566,OOI; 10,15406/apar2016.05.00186.
2. Rima Kumari, Aryan Banarjee, Rahul Kumar, Amit Kumar (2019). Deforestation in India: consequence and sustainable solutions, forest degradation around the world. [www.intechopen.com/chapt/667](http://www.intechopen.com/chapt/667)
3. StrillinChen. (2016), conservation and sustainable use of medicinal plants: problem, progress and prospects.
4. Prof. Dr. Remanuel Boon, (2008), impact of deforestation on medicinal plants in Ghana <https://www.grin.com/document/405n>.
5. Exploitation of medicinal plants, report of times of India, Apr 6, 2019, [www.timesofindia.com](http://www.timesofindia.com)
6. Aggarwal mayank (2020), India is forest cover is resign but northern and tribal areas loss. [www.India.mangabay.com](http://www.India.mangabay.com).