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Conservation of Forest in India

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ABSTRACT:Forests play a vital role in preventing global warming and building sustainable societies. So the need to protect and develop them can never be stressed enough. Forests have a variety of functions, including land conservation, securing of water sources, control of climate change, and creation of natural environs essential to human existence. The adverse consequences have led to a number of environmental problems, such as global warming, deforestation and so on. Forest protection is therefore urgently needed. Recent studies prove, scientifically and economically, how important forests are. Of their various functions, those that can be measured in monetary value are worth Rs115 trillion, the report estimates. Reducing the burden on the environment and building a recycling-oriented society requires a well-defined policy focus on the utilization of domestic forests .The relationship between forest conservation and global warming deserves special attention, given forests' great role as an absorber of carbon dioxide helping reduce carbon footprint.

KEYWORDS: Afforestation, Conservation, Deforestation, Forest, India

I. INTRODUCTION

Ecological problems are an integral part of India's environmental challenge. Poor air quality, degradation of water and waste emissions-all of which impact habitats ' health and environmental sustainability. Indian vegetation types include. Tropical evergreens, tropical deciduous, swamps, mangroves, sub-tropical, montane, scrub, sub-alpine and alpine forests. These forests support a variety of ecosystems with diverse flora and fauna[1]–[6]. Figure 1 portrays the region covered with forest.



Fig.1: The Figure Portrays a Region Covered with Forest



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II. IMPORTANCE OF FORESTS

- The most important function of forests is that it produces mass amounts of oxygen as a by-product of photosynthesis. Oxygen is the main respiratory gas for all animals, it ensures our survival.
- Trees also absorb CO2 in the air. This is one of the main air pollutants. Forests therefore reduce air pollution as well.
- Forest also prevents soil erosion and controls soil pollution. In fact, deforestation causes large-scale soil erosion, as the top soil gets loose.
- Forest often play a key role in regulating our ecosystem's water cycle and moisture levels.
- Forests are the natural home and habitat for millions of species of animals, birds, and insects.

III. CONSERVATION OF THE FOREST

Controlled Deforestation:

While deforestation cannot be avoided completely, there must lookout to control it. Young and immature trees should not be felled as far as possible. Large-scale commercial deforestation need to be minimized. Adapting practices such as clear-cutting or selective cutting will be beneficial in the long run[7].

Protect against Forest Fires:

The most common and fatal cause of forest loss is forest fires. They may begin because of natural causes or in some cases they may be human accidents or even intentional. It is very hard to control when a fire spreads in a wood. For such accidents, steps must be provided. Creating fire roads, supplying fire control materials, burning dry leaves and plants, etc.[8].

Afforestation:

This is the process by which we plant more trees in the area. It is a process for increasing the forest cover by manual transplantation, or fresh plantation of trees. It aims to balance our ecosystem in order to minimize the impact of deforestation and all kinds of pollution[9].

Better Farming Practices:

Slashing and burning farming, livestock overgrazing, shifting agriculture are all agricultural practices which harm the environment and especially the forest. They have to maintain control of all these activities[10].

National Forest Policy:

In this policy Joint Forest management and local villages worked together to manage forest. For this local villages were credited with 25% of the income of that particular forest area.

Conservation of Reserve forest:

Reserve forests together with national parks and sanctuaries, are mostly in the Himalayans, East Ghats, and West Ghats. Commercial operation exploitation should be banned in all these regions.

Local People Involvement:

For the conservation of forests, common people can play a major role. However, the need is for people to be aware. In order to achieve the objective of forest production, public support must be generated. Chipko Movement (1972) was one of them. Figure 2 shows the forest types in India.



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Fig.2: Forest Types in India Illustrated in Indian Map

IV. PRESENT SCENARIO

The current forest situation in India is not very promising. It is well known, thanks to the excessive callousness demonstrated by Indian officials and politicians in this regard, that there is great scope for illegal denial of the forest. Several plant and animal populations have certainly been endangered. The relevant Indian officials still have to recognize the seriousness of the situation. The Table 1 Portrays the total area covered with forest in India.

Table.1: I	Forest	cover i	n this	decade	e in sq.	km	

Year	2019	2017	2015	2013	2011
Very dense forests (VDFs)	99,278	98,158	85,904	83,502	83,471
Moderately dense forests (MDFs)	308,472	308,318	315,374	318,745	320,736
Open forests (OFs)	304,499	301,797	300,395	295,651	287,820
Total	712,249	708,73	701,673	697,898	692,027



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V. CONCLUSION

Over the last 20 years, India has reversed the deforestation trend. Specialists of the United Nations report India's forest as well as woodland cover has increased. India rank amongst the 10 countries with the largest forest area coverage in the world. The Indian region is one of the most diverse biogeographic regions of the world, embracing a wide range of topography from perpetually snow covered high Himalayan ranges to plains at sea- level, low lying swamps and mangroves, inland systems, tropical evergreen rain forests, fertile alluvial plains, hot deserts and high altitude cold deserts. There are almost rainless areas, and the world's highest rainfall areas. Until recently, India lacked an objective way to determine the quantity of forests it had, and the quality of forests it had. But in recent years India had made strides in conserving its forest .Though still lot of efforts are required as there is continuous pressure applied on forest by rapid growth of population and its necessities.

REFERENCES

- [1] A. A. Ormsby and S. A. Bhagwat, "Sacred forests of India: A strong tradition of community-based natural resource management," *Environ. Conserv.*, 2010.
- [2] C. S. Reddy, C. S. Jha, P. G. Diwakar, and V. K. Dadhwal, "Nationwide classification of forest types of India using remote sensing and GIS," *Environ. Monit. Assess.*, 2015.
- [3] B. Macura *et al.*, "Local community attitudes toward forests outside protected areas in India. Impact of legal awareness, trust, and participation," *Ecol. Soc.*, 2011.
- [4] P. Davidar et al., "Assessing the extent and causes of forest degradation in India: Where do we stand?," Biol. Conserv., 2010.
- [5] S. A. Bhagwat, S. Nogué, and K. J. Willis, "Cultural drivers of reforestation in tropical forest groves of the Western Ghats of India," *For. Ecol. Manage.*, 2014.
- [6] M. P. Singh, P. P. Bhojvaid, W. de Jong, J. Ashraf, and S. R. Reddy, "Forest transition and socio-economic development in India and their implications for forest transition theory," *For. Policy Econ.*, 2017.
- [7] C. Agarwal Green, G., Grove, J.P., Evans, T., and Schweik, C. et al., "Drivers of Deforestation and Forest Degradation," Environ. Sci. Policy, 2013.
- [8] G. Certini, "Effects of fire on properties of forest soils: A review," Oecologia. 2005.
- [9] T. Knoke *et al.*, "Afforestation or intense pasturing improve the ecological and economic value of abandoned tropical farmlands," *Nat. Commun.*, 2014.
- [10] T. Gomiero, D. Pimentel, and M. G. Paoletti, "Environmental impact of different agricultural management practices: Conventional vs. Organic agriculture," *Critical Reviews in Plant Sciences*. 2011.