

Forest Conservation and Environmental Awareness: A Review

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Abstract:

For maintaining sustainability of future generation and benefits, the practice of planting and maintaining forested areas is done which is called forest conservation. The aim of conservation of forest is a shift in the composition of trees species and age distribution. Forest provides a diverse range of resources as they store carbon and act as carbon sink, it produce oxygen which is crucial for existence of life on earth due to which is called as earth lung, helps in regulating hydrological cycle, reduce global warming, absorbs toxic gases and reduces noise and pollution, conserve soil and mitigate natural hazards such as flood, landslide etc. therefore it is considered as the vital for the human lives. In this review, various strategies for the conservation of forest and awareness to people is discussed through which proper balance of environment can be maintained.

Keywords: Forest Conservation, Bio Diversity, Awareness, Sustainable Wilderness, Natural Resources

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Introduction

An area abundant with a high density of trees and referred to as wood or wood is called forest. Forest are classified according to their composition and varies significantly in size. Forest covers 9.4 percent of the total earth surface or approximately 50 percent of total land area. They provides shelter for the organisms and act as hydrologic flow modulators and soil conservers which is the most important aspects of the biosphere therefore the conservation of the forest is much needed. For maintaining sustainability of future generation and benefits, the practice of planting and maintaining forested areas is done which is called forest conservation. The aim of conservation of forest is a quick shift in the composition of trees species and age distribution. Because of the diverse range of natural resources and number of benefits, forests become central to all human and animal life.

Table: Forest covers the world from 1990-2010

Region	Total forest cover (in MHa)		
	1990	2000	2010
Africa	749	709	674
Asia	576	570	593
Europe	989	998	1005
North and Central America	708	705	705
Oceania	199	198	191
South America	946	904	864
World	4168	4085	4033

Importance of forests

A number of benefits can be obtained by the forests which are as follows:

- Forest releases the water vapor into the air hence decreases the air temperature.
- Trees cleans the air as it generate oxygen at day time and store carbon dioxide.
- Wild life are attracted by the forests because they gets food and shelter from forests.
- Forests shows the direction to the winds and speed, offer privacy, reduces light reflection and offers sound barriers.

- Artistic functions including creation of a background, framing a view, complementing architecture etc is done by the trees.
- Higher quality of water with less impurity can be obtained from the well managed forests other than obtained from other resources.
- Forest helps in controlling the level of floods but it is not true for all forest because some forest raise total water stream.
- Making of furniture, paper/pencil etc is done from the different kinds of wood obtained from the forest.
- Forest helps in keeping environment healthy and beautiful and also minimize noise pollution.
- They store carbon, aid in regulating the planetary climate, purify water and mitigate natural hazards such as floods and landslides.
- Forest contains approximately 90 percent of the world's terrestrial biodiversity.

Destruction of forests

Deforestation is the process of removal or destroying the large areas of forest which occurs due to many factors such as logging, agriculture, natural disasters, urbanization and mining. It is especially critical issue in the Amazon rainforests of Brazil although it occurs worldwide. There are many tropical forest, species of plants and animals which are disappearing at an alarming rate, for example there are more than 360 square miles of Amazon destruction in just one month is measured by the experts in December 2007. Effects of deforestation remains for long time and is distressing. There are lots of species of insects and animals which gets disappeared or extinct due to the loss of their shelter and foods as well as it may also cause disastrous flooding. Climate change and global warming is also caused due to the effect of deforestation which is noticed by the scientist is also observed that the exports of tropical hardwood has been decreased since 1980 due to the threatened condition of extinction of 3400 plant species of tropical forests. Philippines was the major exporter of the hard logs during the early 1980s which now seen a virtual cessation of log exports while Malaysia has seen 60 percent of decrease in log exportation. The reason behind both the cases are diminishing harvestable forest resources.

Steps that should be taken for conservation of forests

Forest departments and other departments must be maintained a perfect coordination between them with respect to the forest conservation because it is the national problem. We also must involve in this national task because it is of vital importance to participate in this task. Many ideas can be put forward to conserve the forests which are:

1. Tree cuttings must be prevented and completely stopped at all costs.
2. Special programmes like Van-Mahotsava and Afforestation should be launched on a large scale.
3. Tree plantation must be involved in the preceding of any festival celebrations.
4. Restrictions on timber cutting and other forest products should be done and Grasslands should be regenerated.
5. To prevent deforestation, strict implementation of Forest conservation Act 1980 should be done.

Methods to conserve forests

- A. Chipko Movement was held in 1973 by Sunderlal Bahuguna and other peoples to save the forest of Tehri Garhwal which is the symbol of people's action in preventing the destruction of environment which became famous worldwide. Chipko means 'to cling' or 'to hug tight'. This movement is remains one of the celebrated environmental movements of the world to save the forests.
- B. Local deity protects the conservation of forests through the fear of God and it could be just a few trees or a whole forest. No tree or plant is cut here, neither animal/birds is killed nor is any form of life harmed. In India the sacred groves are a unique traditional institution dedicated to the conservation of forests and biodiversity. Sacred grove contains native vegetation in natural state. For helping the local communities it has water sources, water is absorbed by the sacred grove during the monsoon and released slowly during dry period.
- C. The Forest conservation Act 1980 was implemented to help conserve the country's forests. It is strictly prohibited by this act to de-reserve the forest or to use forest land for non forest purposes without the permission of Central Government. Some of the salient features of this act are:
 - Restriction on the use of forests for non forest purpose

- Restriction of the destruction of reserve forests
- Regulation concerning the diversion of the forest lands by industries and individuals.
- Restriction of clear felling of trees.
- Constitution of an advisory committee to grant an approval for the conduction of any activity for which approval of Central Government is required.

Review of Literature

Singh and Kushwaha, (2008) worked on forest biodiversity and its conservation in India and observed that there is a need to set up a coordinated programme for systematic measurement biodiversity measurement and monitoring and developed conservation programmes on the landscape level is also needed for preventing suffering protected areas from the island syndrome. Education should be provided so that people may derive intangible as well as economic benefits from conservation efforts to improve their livelihoods.

Aravindakshan, (2011) makes an attempt to understand the evolution of forest management policies in India and through a case study on Kerala in India studied the emergence of Village Forest Council as rural institutions in forestry and suggested the requirement of the unflinching will and efforts of forest department, other government agencies and local participants to further nurture these unexperienced institutions and overwhelmed the inadequacy arising.

Parikh, (2013) worked on conservation in India and the role of Indian supreme court: A critical analysis. His paper deals with the issue of forest conservation in India with special role of the Supreme Court of India and suggested the need of conservation and utilizing these resources in a sustainable manner since they are very basic components of human development.

Adekola et al., (2015) established the relevancy of community education with protection of forest and their resources based on the environment to ensure the continuity of the advantages and services provided by these forests. It also examines the role of the community education which plays a crucial role in preserving and conserving forest and forest resources in Nigeria. They conclude that the community education is necessary for the protection and preservation of the forest whether they involve to the degradation of the forest ecosystem or not.

Babu and Nautiyal, (2015) discussed issues related to natural resource exists, management and erosion right from the ancient to modern era. During the initial period, the basic sources of survival for living organisms were the natural resources such as forests and forest products which gets decreased later due to the human activities. The key findings of the study point to major gaps existing such as between line departments and institutions in the promotion and management of forests, human welfare, agriculture, animal husbandry etc. Their study strongly suggested that attention should be given towards developing people friendly and environment friendly conservation strategies.

Pandey, Jain and Gupta, (2015) reviewed on the various working models and modern and tradition forest conservation practices relevant with the sustainable wilderness. For enhancing the green shades on the globe, model is designed to protect the wilderness of given region but retrieving and identifying these structures are the tough task. He concluded that there is need and probability to reshape and improve the methodology and new models suitable for the sustainable ecosystem although, the

global forest managers covered a right way in forest conservation program.

Barrios et al., (2017) worked on the contribution of trees to the conservation of biodiversity and ecosystem services in agricultural landscaped and said that it is biggest challenge to humanity to produce sufficient food for the increasing global population along with conserving natural capital. Soil macroporosity needed for shade trees like coffee agriculture is absent because of decrease 76% loss of native earthworm populations in the soil.

Conclusion: This review identified that individuals as well as governments should be done their part in protecting the forests of the world. There is need of the knowledge of importance of forest among the people so that the people get aware about the danger on the earth due to deforestation. The community education is necessary for the protection and preservation of the forest whether they involve to the degradation of the forest ecosystem or not. It is vital the involvement and participation of the people in the conservation of the forest therefore we also must be involved in this national task.

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