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Problem of Forest Resources and Necessity of Education for conserving forest resources In India

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Abstract: ***Education plays an important role for promoting environmental awareness especially conserving forest resources. Forest is necessary for our maintaining biodiversity, ecological balance and ratio of oxygen & carbon-di-oxide gases. Without forest man cannot live. So education is important to make people understand about necessity of good & pure environment and protecting trees for getting benefits which make human life more better & comfortable. Forest occupies an important place among the natural resources. Presently forests occupy an area of about 9 core hectors which is about 22 percent of the total amount area of forest. The distribution of forest in India is uneven. In the north-western part of the country nearly 14 percent of the area is under forests. In the central region about 45 percent land is covered with forests. The Himalayas and The tarai regions contain nearly 22 percent of the forests while over 75 percent of the forests are located in the Peninsular India. The Gangetic Plain has even less than 5 percent of the forests. resource such as forests and forest products were found as a basic source of survival for living organisms during the initial period. Later, the natural resources started degrading slowly and steadily due to increased human activities. In the beginning, natural resources were the primary assets for the growth of agriculture, industry, urbanization etc. Subsequently, increased anthropogenic activities started degrading the forest cover on a large scale through extending the agricultural land scape and other developmental activities in the country.***

Keywords: Forest, afforestation programmes sustainable development, social awareness programme, tree plantation programme etc.

I. INTRODUCTION

Environmental awareness is to understand the fragility of our environment and the importance of its protection. Promoting environmental awareness is an easy way to become an environmental steward and participate in creating a brighter future for our children. To awake environmental awareness we must understand the environmental movement. Environmentalism is an ideology that evokes the Necessity and responsibility of humans to respect, protect and preserve the natural world from its polluting environment which is mainly caused by humans. Including environmental factors, forest occupies a vital place. So forest preservation is necessary. For this , Afforestation programme and environmental science education including forestry are necessary which should be included as subject in school curriculum and also by organizing social awareness programmes for educating general people in rural areas, town & cities etc. Forest is most valuable natural resources in India. But in modern days, the areas under forest are decreasing day by day. Many reasons are responsible for lowering the land of forest area. Among them, environmental degradation & pollution specially man made action destroying these precious natural resources. Forest protects soil erosion and also helps for causing rain which is very important for growing agricultural crop. Due to lack of rain agriculture is not possible. Deep Forest is those areas where large number of trees is standing side by side and gathers in particular area. Different types of tree are available there. Man makes various types of furniture, houses from forest wood. Forest prevents desertification. They are also used as fuel in most of the village areas for cooking. We also get fruit, flower and many other things from forest. So without forest man cannot think life. Even though, agricultural land is increasing by clearing forest .Many forest lands are used for agriculture. In recent time many modern towns and cities are growing in the land of forest. Moreover, men are cutting down trees without thinking about future which causes loss of forest. All these reduce the forest area. The uneven distribution of forests in India is not satisfactory from ecological point of view and planned efforts are required to improve it by afforestation programme or by growing trees in regions poor in forests. If we compare the country as a whole then India's position looks pitiable. Per capita forest area in India has only 0.064 hectare area under forest as against the total world coverage forest area. Moreover the productivity of forests is far less than the world coverage. Since 1950-51 due to increase in population and consequent upon heavy pressure on forest land about 49 lakh hectares of forest land has been lost to agriculture, river valley projects, industrial estates and other uses. For maintaining ecological balance in India a minimum of 20 percent area in plains and 61 percent area in hills should be under forests. Over the past 60 years attempts have been made to bring more area under forests, but the pace of progress has been slow and the achievements are limited. In this situation it is very necessary to preserve the forest. For this tree plantation and social awareness

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programme should be arranged and the government should introduce strict law by punishing the persons cutting the forest trees. This chapter tries to pinpoint the Necessity of the Forest Resources &problem of reducing forests and also tries to find out the ways for solving the problem. Moreover, people tend to be more inclined towards the utilization of natural resources rather than conservation and from an observational and practical point of view, the natural resource has been declining rapidly in India. Therefore, this study strongly suggests that a due attention be directed towards developing people friendly environment friendly conservation strategies.

II. OBJECTIVES OF THE STUDY

The objectives of the study are

A. To study about benefits of the forests and the problems of clearing forests.
B. To analyze the nature of the problems and to suggest the measures for solving the forests resources reducing.
C. To know about the government's undertaken policy measures for removing forests declining and also the afforestation programmes for increasing the forests coverage.
D. To put forward an ideal model for affeastation programme and compare it with total forestation in India.
E. To put forward the recommendations for improving the condition.

III. METHODOLOGY OF THE STUDY

The paper is based on both primary and secondary data sources have been collected through extensive survey in different forests areas. Primary data have been collected mostly by direct contact method from the forest department, the different forest organizations, inhavitants in nearby towns & villages of the forest areas, people, living in the forest areas also. The questionnaires and interview schedules have been taken to carry out the whole investigation. Secondary information have been obtained from different literatures like magazines, newspapers, journels, books, reports published by Government authority, planning commission, websites, state & district wise forest and statistical office, forest controlling committee etc.Most popular forests are repeatedly visited and various information were documented time to time.

A. Benefits From Forestry And The Statement Of The Problem

The forestry is less important primary activity in India. Its contribution to net national product is around 1%.It provides direct employment to about one lakh persons. About 3 lakh persons are indirectly are dependent on it for their subsistence. Industrial and fuel wood is the main forest product. Its production is an important indicator of the forest development in the country. In India, the existing production of industrial wood required as raw material for pulp, panel products, matches and other wood-based industries falls very much short of the demand for timber and other industrial wood. Food wood still remains the main source of energy for consumption. With providing industrial wood for wood-based industries forests are also a source of number of minor products like bamboo, canes, resins, medical plants, gums, tanning materials, dyes, essential oils etc. The demand for many forest products exists in foreign markets, and by raising the output of raw materials for pulm, alone the country can cut down the a larger amount of imports of pulp, newsprint, paper board etc. Thus it can prove to be valuable foreign exchange earners. Indiect benefit: Forests also confer a variety of ecological benefits like moderating the climate of the region ,reducing the extremes of the temperature, increasing humidity in air and reducing the uncertainty element in rainfall, reducing the intensity of floods and preventing soil erosion etc. Moreover water flowing through forests carries with it highly fertile soil which raises the agricultural field's fertility. But Now-a days the coverage of forest is declining due to growing population, expansion of agriculture, river valley projects, industrial eatates, developing town & cities, making roads, hospitals & other high building, people are continuously clearing and cutting down the forest. So forest protection and preservation is necessary for future development of the country.

B. Sustainable Development

The concept of Sustainable Development' was used by the World Commission on Environment and Development in 1987, It defined the term Sustainable Development' as meeting the needs of the present generation without compromising the future generation Economic development must be sustainable development which means that it should keep going". The sustainable development is closely related to economic development. The World Development Report 1999-2000 emphasizes the creation of sustainable improvements in the quality of life for all people as the principal goals of development policy. According to this report, sustainable development has many objectives. Besides increasing economic growth and meeting basic needs, the aim of lifting living standards

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includes number of more specific goals These are--(i) bettering people's health and educational opportunities; (ii) giving everyone the chance to participate in public life, (iii) helping to ensure a clean environment (iv) promoting intergenerational equity, etc.
Sustainable development aims at maximizing the net benefits of an economic development. Sustainable development of an economy can keep natural resources assets (physical. human and natural) overtime. In this context, the concept of sustainable development is different to different economists. Normally two concepts can be mentioned. One is weak sustainability and another is strong sustainability. Weak sustainability requires that the total value of physical, human and natural capital stock should not decrease whereas, strong sustainability requires that only the value of natural capital stock should not decrease. Beside this, also Chipko movement was happened in Gurowal district in Uttar Pradesh in 1974 which became very famous and ideal example for forest movement in that time. Till now, recent people get interest and encouragement from this movement for protecting forest. Local resident people of those areas protested against cutting down forest and saved them from destroying. This movement is known as Chipko movement. 'A tree, A life' 'growing tree means saving life' should be the motto of the people in modern age if we want to live a better and save life.

C. Necessity Of Environmental Education For Conserving Forest Resources

Right and proper education can check environment degradation and forest destruction. So introduction of environment education for management of natural resources is a scientific approach for utilization and conservation of land, water bodies, soil systems, plants and animals to enable the people to fulfill the requirement so that along with the present generation the future generations would also be benefited. Therefore, the management of natural resources is combination of scientific and technical understanding of the same.
This study mainly focuses on conservation and management of forest resources in India. Considering that the indigenous communities happen to be the holders and carriers of traditional ecological knowledge and wisdom regarding the use and management of natural resources, their active participation in the various biodiversity programmes are absolutely essential to ensuring their sustainability and cost-effectiveness. In other words, it is important that their prior consultation, participation, and consent procedures (communication with each other) are ensured for implementing such programmes mainly due to the fact that the approach of indigenous communities towards assessing the value of natural resources (both in terms of conservation and utilization) is quite unique as compared to the present day conservation and economists. Environmental awareness is an integral part of the movement's success. By teaching our friends and family that the physical environment is valuable & indispensable We can begin to stop increasing environmental problems that threaten human life in future. Numerous resources are available to promote environmental awareness, group learning(both in class or outside),informal and inspirational seminars such as our Awakening the Dreamer Programme and environmental books and brochures are just a few of the tools that can get people involved in promoting the environment.
Traditional and Modern Ecological Knowledge (TMEK) regarding NRM was given a high importance. Apart from traditional & modern ecological knowledge, certain new interventions have been made for conservation of natural resources. However, TMEK has started losing its prime role in the management of natural resources across various regions. TMEK needs to be given a high priority for proper documentation.
For conservation and management of natural resources, the resources were used for fulfilling on a sustainable basis. Resource exploitation is high and as a result, resources are depleting very fast. Need to rethink from the perspective of growing population on the one hand, and the declining resources on the other. Dependence on natural resources Sustainable utilization for only meeting the basic requirements forest depletion and cutting down trees are increasing gradually for various needs without thinking needs of the future generation.
Depends on the availability of various ecological resources , people should understand the supply and demand for natural resources if an equilibrium balance have to maintain. Lesser chances of a sustainable ecological resource flow, if the current trend is continue. Various innovations in forest resource allocation have been made, but a majority of them are not being practiced.
There is a need for a proper evaluation of all the innovations made so far with appropriate strategies have to be devised for resource utilization and conservation for future generations. Role of institutions in resource management community participation institutions have been developed without a proper thought given to most of the cases have to play a major role within an integrated framework. So those institutions should give more importance and proper instructions & environment friendly education to the people. Policy inventions in resource utilization various traditional ecological methods introduced for resource utilization. The policy has become the main tool for resource utilization. Existing policies need to be revisited for proper implementation.

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IV. RECOMMENDATIONS

Government's policy and measures for protecting forest resources: Before Independence the government of India had no policy for the conservation and development of forests. The national forest policy resolution was introduced in the year of 1952 for forestry conservation & development.

The 1952 National Forest Policy had stressed on afforestation , large scale tree planting for preventing deserts in Rajasthan, controlling of soil erosion by flood waters etc respectively. Moreover the 1988 National Forest Policy Resolution also stressed the objectives of tropical climate, periodic monsoons, low forest productivity etc.In order to opertionalise the National Forest Policy of 1988 a National Forestry Action Programme was formulated and released in August 1999.For protection and preservation of the forests, the government has been adopted recently afforestation programme under man-made forestry. During the past three decades, tree planting work has been carried out various afforestation schemes of the state governments and about 34 lakh hectors of land been brought under man-made plantations.

The government of India has enacted the Forest (conservation) Act, 1980 to ensure that no forest land is used for non-forest purposes without the prior permission. An Advisory Committee has also been constituted to look into the diversion cases of the forests. For meeting the finance on development of forests 16 autonomous Forest Development corporations in various states and union territories have so far been established. Attension has also been given to forest resources survey and research in forestry and forest products.

The survey work is carried out to investigate the economic availability of raw materials of developing wood-based industries and research work facilities have been extended at the Forest Research Institute and college at Dehradun .In order to strengthen the institutional structure for forest development, the planning project formulation, resources appraisal and evaluation cell has been set up in forestry division. During the first three decades of economic planning afforestation programme was undertaken on modest scale. The sixth plan gave greater importance to afforestation work. During the seventh plan period this programme involved block plantations, strip plantations and farm forestry. A national wasteland development board was set up in June 1985 with the aim of reclaiming wastelands through a massive programme of afforestation with people's participation. The scheme of decentralized people's nurseries was initiated in 1986-87 for encouraging seeding production by farmers to cater to local needs of planting material.

Local people should need to participate in the management of local resources with global implications. Conservation management is created through a process of ecologically based planning and design, whereby planners assess the state of natural resources in the environmental context and use their knowledge for the loss of natural biodiversity has doubled with conservation becoming much more challenging. Along with science, local technologies and people's knowledge regarding ethno forestry have an important role to play in biodiversity conservation and sustainability. A balance between local and formal institutions can result in empowerment, security and opportunities for local people. Also equity of knowledge provides an opportunity for conservation to minimize the environmental impacts. Participatory resource management is often seen as an appropriate approach to reducing rural poverty and resource degradation. A long held perception is that common property resource appropriators can create local management institutions that can ensure an equitable access to the locally based natural resources. There is a need for promoting social and economic infrastructure development for realizing the potential benefits of the market economy through natural resource policies that incorporate the environment as well as local people's rights and local economies. Farmers in the developing countries possess a fairly sophisticated knowledge of agriculture and natural resource management which is recognized as being more eco-friendly and sustainable. Reforming and strengthening of forest governance and the forest industry sector is essential for ensuring a sustainable forest resource use and forest conservation through promoting the modernization of forest conservation. Social forestry projects which were initiated during the sixth plan were continued in the seventh plan. These projects received assistance from several external agencies including the World Bank, the United States agency for international development and overseas development agency of the United Kingdom. For developing quality seeds for afforestation programmes a centrally sponsored scheme was introduced by the National Wasteland Development Board in 1988-89.To ensure an area specific approach of fuel wood and fodder a centrally sponsored scheme was initiated in 1988-89.This scheme has covered the watersheds in the districts included under the National Watershed Development Programme of the Department of Agriculture. The eight plans identified some deficiencies of the various afforestation schemes. The schemes of the Ninth plan were Integrated Afforestation and Eco-development project, Fuel-wood and fodder project scheme, on-timber forest produce scheme etc. The planning commission set up working group to examine the prospects of leasing out of degraded forest lands to the private entrepreneurs/forest corporations. The National Afforestation and Eco-development Board was set up in August 1992 for promoting afforestation, tree planting. The Following measures should be adopted to preserve the forest resources.

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Those measures are as follows

a) To preserve forest the government should strictly apply rules and people should also stop of cutting down the forest for unregulated uses.
b) The people should also control of clearing forest for agriculture, building, industrial and other purposes.
c) Efficient utilization of forest product and resources and optimum substitution of wood should be done.
d) Afforestation and tree plantation programme should be adopted by the government where social participation should be needed.
e) The government should also arrange social awareness programme through camping in different villages and towns about the necessity for conserving forests.

The Government has been taken some important policy measures for tree
Plantation and Forest preserving which are as follows-

1) National Afforestation Programme.
2) *NAEB Scheme:* The major components of the scheme are i) Grant – in –aid for greening India.
a) Support to regional centers.
b) Monitoring and evaluation
3) Eco-development forest schemes.
4) *Integrated Forest Protection Scheme:* It was introduced for the tenth Five Year Plan which has following components. a) Infrastructure Development b) Working Plan Preparation/survey and Demarcation.
a) Strengthening of infrastructure for Forest Protection.
b) Forest Fire Control and Management. The Eleventh Plan aimed to increase the forest cover by 5 percent of the total geographical area. This required an additional 16 million hector FTC by 2012.Under the Twelfth Five Year Plan's targets includes technology –based monitoring of forest cover, biodiversity, establishing forestry seed banks etc.

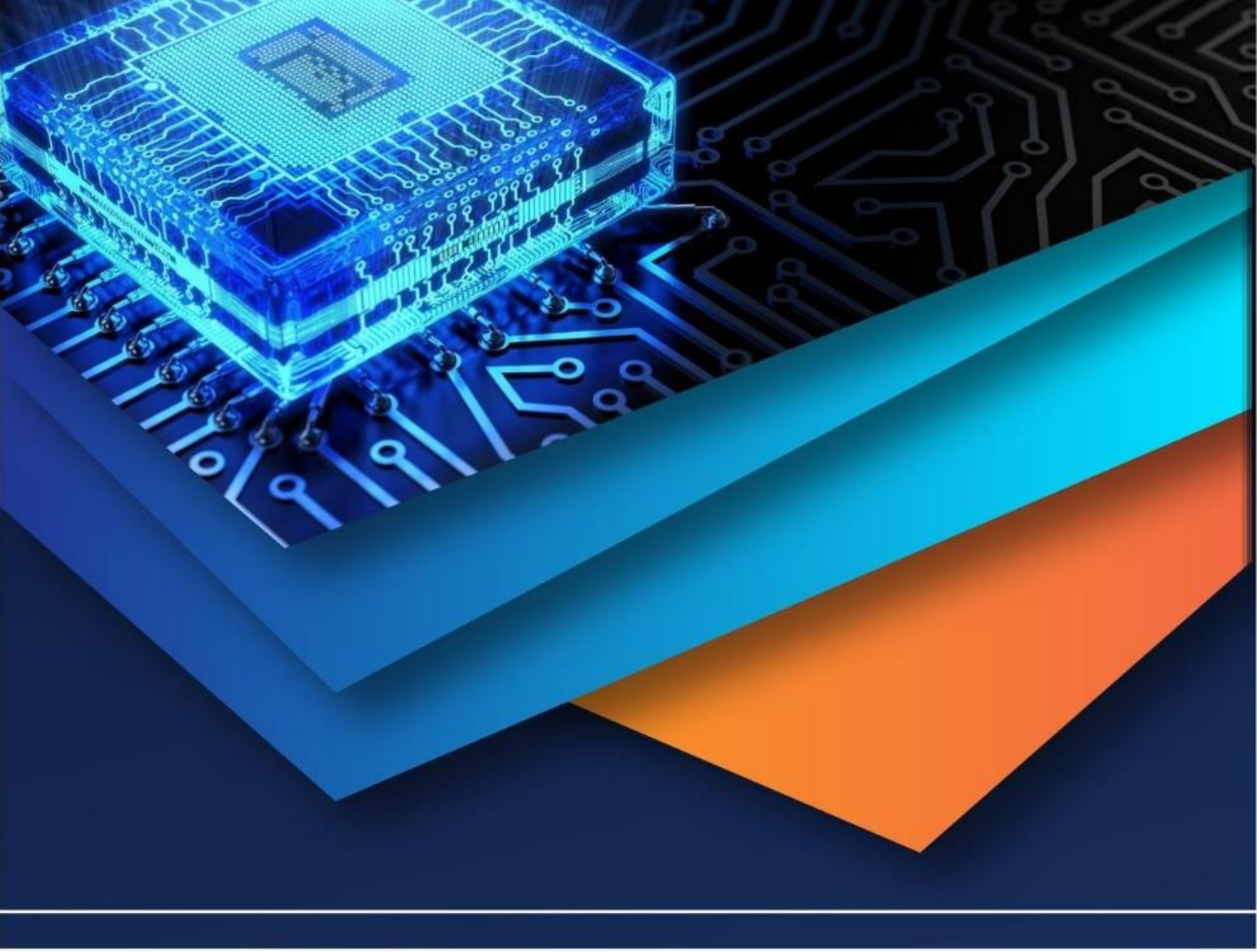
V. CONCLUSION

Forest is an essential asset of our country. It contributes an important role in the economy. To keep these assets safe, forest preservation is necessary. Forest provides industrial and fuel wood and are also a source of a number of minor products like bamboo, canes, grasses, tendu leaves, lac, resins, medicinal plants, gums, tanning materials dyes, essential oils etc. Moreover, it confer a variety of ecological benefits and maintenance of environmental stability. It prevents soil erosion and brings the possibility of rainfall. It also reduces the extremes of the temperature. Thus forests have an immense environment value. Their indiscriminate destruction in any country can disturb the ecological balance and hinders the economic life of the country. Therefore to fulfill the afforestation programme both government and social activation and participation are required.

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