

Deforestation in India: Snatching Away the Homes of Indigenous People

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(Received 14 February, 2021; Accepted 20 May, 2021)

ABSTRACT

India's total forest and tree cover is projected to be 80.73 million ha, which constitute 24.56 percent of the total geographical area of the country. Deforestation is a major threat that create ecological problems in every part of the world, which is mainly due to the conversion of forest area to non-forest area by the human interference. The deforestation makes a lot of negative impact on the earth. This may lead to the end of life in earth. Deforestation not only affects the environment and climate but also affects the life of indigenous people especially the tribals in our country whose life is closely linked with the nature. It is a fact that forests have played significant role in shaping the social, economic, religious, cultural, and political systems of tribal communities of the country. The indigenous people pay great respect to trees, animals, flowers, birds and everything in the nature. Deforestation is bringing about a lot of problems like lack of food, livelihood insecurity, out migration, displacement, isolation from the natural environment, social and economic imbalance among the tribal communities in the country. In this article the researcher deals with the structure, growth and composition of forest areas in India from 2011 to 2019. This article also analyses the deforestation rates and impacts of deforestation on indigenous people, especially the tribals in India.

Key words : Forest cover, Scheduled tribes, Deforestation, India, Chipko movement

Introduction

In India, there are 100 million forest dwellers and another 275 million people living in the forests. These people are described as indigenous people (tribals). India has the largest concentration of tribals (Adivasis) in Asia and it is the second largest in the world after Africa. The tribals constitutes 8.6% (about 10.4 million) of India's total population. They are spread over 15% of its geographical area. More than half the Tribal population is concentrated in the States of Madhya Pradesh, Orissa, Maharashtra, Rajasthan, Gujarat, Chhattisgarh and Jharkhand.

Tribals has very close relation with the forest.

Their life and sustenance is harmonized with existing forest resources. The forests play an important role in the daily requirements of these people. To them food, fodder, fuel and construction materials are almost completely delivered by the forests. Almost 80% of their food comes from the forests either directly or through shifting cultivation. They tend to have close cultural and economic links with the forests. The whole social and economic activities and livelihood of the indigenous people were entirely depending on the forests. The indigenous people (tribals) extracts varieties of Minor Forest Produce (MFP), which comprises fodder, grasses, raw materials like bamboo, leaves and canes, gums, dyes, waxes and resins and different forms of food prod-

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ucts like wild fruits, nuts and honey. Tribal people worship the trees, animals and bushes in the forest. They believe that their gods and ancestors spirits reside in it. Hence they never want to exploit and deplete it but conserve it through their traditional knowledge.

Deforestation refers to massive felling of trees and destruction of forest and its species. It is the conversion of forest to another land use such as agriculture, logging, road construction, mining and developmental projects. In recent years, rapid deforestation has seen in India, mainly due to its emphasis on economic progress. As per data based on government reports 14,000 sq. km of forests were cleared across India for 23716 industrial projects over the last thirty years. The key drivers of deforestation in India are shifting cultivation, expansion of settlements, mining, quarrying, illegal logging and dam construction. Deforestation is bringing about the threat to the sinking of oxygen and greenhouse effect. It is triggering the problem of livelihood as well as displacement among the tribal people. It is causing the isolation of the tribal communities from the natural environment and create social imbalance in the country.

Literature Review

The studies led by Vidyarthi (1963), Rai (1966) and Rath and Behera (1985) considerably give the understanding of the symbiotic relationship between the indigenous people especially the tribal communities and the natural resources of the nation. The ancient literature of the world and India on medicine reveals that the primitive people have the knowledge of various medicinal plants and have been using these plants against different diseases. The studies conducted by Rothermund (1978); Vyasulu (1984); Mahapatra (1992) and Mohanty (1997) in different areas of the country mentioned that the benefits of Minor Forest Produce (MFP) are mostly going to the hands of non tribal people and tribal communities are getting very less. Vyasulu (1984) has brilliantly mentioned the meager state of affairs as much as the rights of tribal people are concerned in their own products. He observes that in the case of salseeds, the tribals get only 5% of the total value of their produce.

Prakash (2005) has mentioned that among the tribal population of Andhra Pradesh, plants and trees designated as an integral part of sacred grove

are prohibited for usual human interferences because it is an abode of the spirits or deities. Ratha (2006) noted that in worshipping the aswathandbel trees, the Paudi Bhuyan (tribal community) of Orissa contributes to the immense customs and traditions of the nation. During Dasahara festival, the simli tree personifies Goddess Durga and worshipped it. Kusum tree is considered as the abode of Goddess Basari. The sal trees personify the presiding divinity of the villages. Huge saltree occupies in the central position of most of the villages that symbolizing man-plant coexistence in the nature. The delinquent condition of development is that almost half of the construction labours in the country are mainly the tribal people and the reason is so clear that the practice of displacement of these people and deforestation in the terms of developmental activities is behind this.

Chhibber (2008) noted that certain religious customs and beliefs and certain practices of the tribal communities help in the protection of environment and the conservation of the biodiversity. Verma (2009) suggested that the preservation of biological diversity along with cultural diversity is regarded as the lifeline of traditional tribal communities. Mitra (2010) has suggested that the conservation of nature and wildlife should not be against the rights of tribal communities. The human rights of indigenous people and forest dwellers cannot be ignored in the terms of conservation of nature. Singh (2007, 2013) mentioned that the tribal people are the best friends especially the guardians of forests and its resources with whom they have strong and symbiotic relationships. Sahai (2013) noted that the tribal people have emotional affection with their land and their surroundings.

Objectives

The discussions in this research paper is focused in realizing the following objectives

1. To understand the structure, growth and composition of forest areas in India
2. To find out the deforestation rates in India
3. To understand the impacts of deforestation on indigenous people

Materials and Methods

The descriptive method has been primarily applied for the study and is completely based on secondary data collected from the published works of various

authors, documents related to Government policies and programmes, reports of United Nation, reports of Ministry of Human Resource Development, Forest and Agricultural Organization, Census of India and data from Ministry of Environment and Forestry. In order to find out the impact of deforestation on indigenous people in India, the collected data was analyzed and depicted by means of tables and diagrammatic illustrations.

Results and Discussion

The indigenous peoples in India predominantly consist of large and diverse tribal people scattered across the country. Since time immemorial the tribal people are residing in forests. The tribal people give great respect to trees, animals, flowers, birds etc. They are considered as the worst hit by the large scale deforestation and exploitation of the forest and natural resources.

The trends in Scheduled Tribes (STs) population since 1951 Census are illustrated in Table 1 and Fig 1. From 19.1 million in 1951, the Scheduled Tribes population in India has increased to 104.3 million in 2011. The data highlights the percentage of Sched-

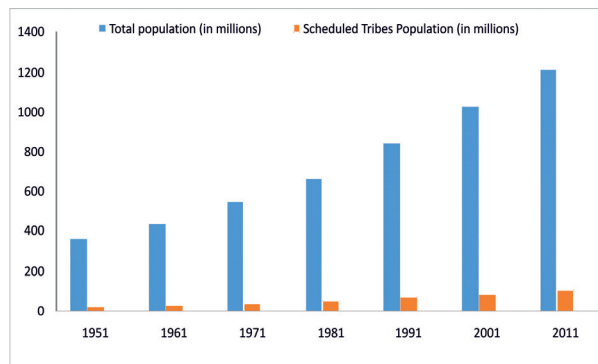


Fig. 1. Trend in Scheduled Tribe Population

Table 1. Trends in Proportion of Scheduled Tribe Population

Census Year	Total Population (in millions)	Scheduled Tribes Population (in millions)	Proportion of STs population
1951	361.0	19.1	5.2
1961	439.2	30.1	6.8
1971	547.9	38.0	6.9
1981	665.3	51.6	7.6
1991	838.6	67.8	8.1
2001	1028.6	84.3	8.2
2011	1210.8	104.3	8.6

Source: Census Data

uled Tribes to total population of India was increased from 5.2 percent in 1951 Census to 8.6 percent in 2011 Census.

Forest cover of the country is the complete geographical area stated as forest by the Government. It is measured by the Forest Survey of India for Government of India in every two years after 1987 and continues till now. India now ranks 10th in the world in terms of most forest nations and 8th in terms of annual forest improvement.

As per 2019, the total forest cover of the country is 7,12,249 sq. km (71.22 million hectares). It is accounted for 21.67 percent of the total geographical region. The total tree cover in India is estimated as 93,815 sq. km (2.85 percent). Therefore, the total forest and tree cover of the country is accounted for 8,07,276 sq. km (80.73 million hectares), that is 24.56

Table 2. Forest Cover of India

Forest Report Year	Total Forest Area (Sq.km)	% of Forest Area
2011	692027	21.05
2013	697898	21.23
2015	701673	21.34
2017	708273	21.54
2019	712249	21.67

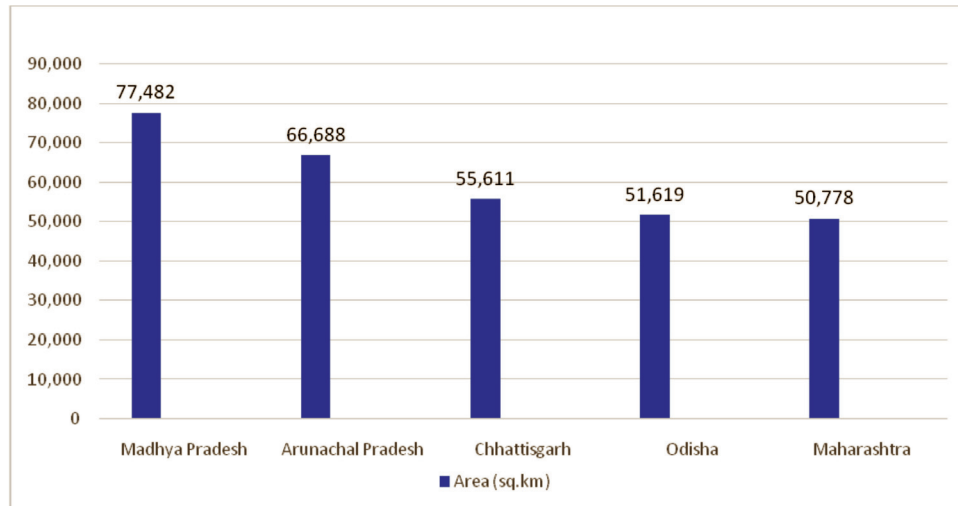
Source: Various issues of State of the Forest Report, Forest Survey of India

percent of the entire geographical region.

The forest Census data published in 2019 by the Government of India depicts the five states with largest portion under forest cover are Madhya Pradesh, Arunachal Pradesh, Chhattisgarh, Odisha and Maharashtra. As of 2019, Madhya Pradesh had largest forest cover in the country.

India lost 11.7kha (Kha –areas are provided in thousands of hectares) of humid primary forest in

Fig. 2. Top Five State with largest forest cover in India



Source: State of the Forest Report, 2019, Forest Survey of India

2002. The total areas of humid primary forest of the country are decreased by 17.3 kha during the year 2019.

India lost 53 kha of tree cover in 2002. It was increased to 121kha of total tree cover in 2019 where the leading drivers of this loss caused by deforestation.

Assam, Mizoram, Nagaland, Arunachal Pradesh and Meghalaya was the top five states in India, which were responsible for 60 percent of all tree cover loss in the country between 2001 and 2019. Assam had the largest tree cover loss in the country at 250 kha as compared to an average tree cover loss of 51.3kha.

Impacts of Deforestation on Indigenous People

Table 3. Primary Forest Losses in India

Year	Primary Forest Extent Remaining (%)	Primary Forest Loss (kha)
2002	99.9	11.7
2004	99.6	19.2
2006	99.3	15.1
2008	98.9	20.7
2010	98.6	11.4
2012	98.3	18.8
2014	97.9	21.9
2016	97.4	30.9
2018	96.9	19.3
2019	96.8	17.3

Source: Various issues of State of the Forest Report, Forest Survey of India

Displacement: Deforestation is resulting social disturbance and massive displacement of tribal population from their natural surroundings. It is expected that around 50 million peoples have been displaced on account of several development projects since 1950, of which 40 percent are tribal peoples.

Increase in Food Insecurity: The food insecurity of the tribal population living in and around the forest has turned into worse due to the degradation of forest. Most of the tribal villages were demolished due to excessive deforestation. Large number of indigenous people were expatriate from their ancestral land.

Forest Gives Relief: Tribal people living close to the

Table 4. Tree Cover Loss in India

Year	Tree Cover Loss (kha)	Percentage of Tree Cover Loss
2002	53.0	0.14
2004	74.1	0.19
2006	67.4	0.17
2008	86.0	0.22
2010	51.3	0.13
2012	95.1	0.24
2014	139	0.36
2016	175	0.45
2018	132	0.34
2019	121	0.31

Source: Various issues of State of the Forest Report, Forest Survey of India

forest and go to the forest for relief from their own sorrows, distresses and worry. Massive deforestation has destroyed the tribal areas of the country to a great extent.

Growing Distresses: Social, economic and cultural distresses among the tribal population are cumulative due to absence of occupation triggered by deforestation.

Migration to Urban Areas: Forest and rivers were the sources of livelihood for the tribals. It provides food security to the tribal population of the country. The tribals collect forest products like roots, seeds, fruits, leafy vegetables, mushrooms and fuel wood for self-consumption and for the sale of this products in the local market for money. But now, due to excessive deforestation, unpredictable rainfall and population growth, these forest produces are not sufficient for their existence. So, the tribal people migrate to urban areas in search of food and money by exchanging their labour.

Loss of culture, traditional beliefs and knowledge: The tribal culture, social, historical and spiritual importance is disturbed as a result of excessive deforestation. They lose their traditional customs and beliefs and sustenance patterns that permitted the tribals to live within the rainforest in harmony. Their valuable knowledge of the forest and forest resources and their awareness about medicinal plant species in the forest is also lost.

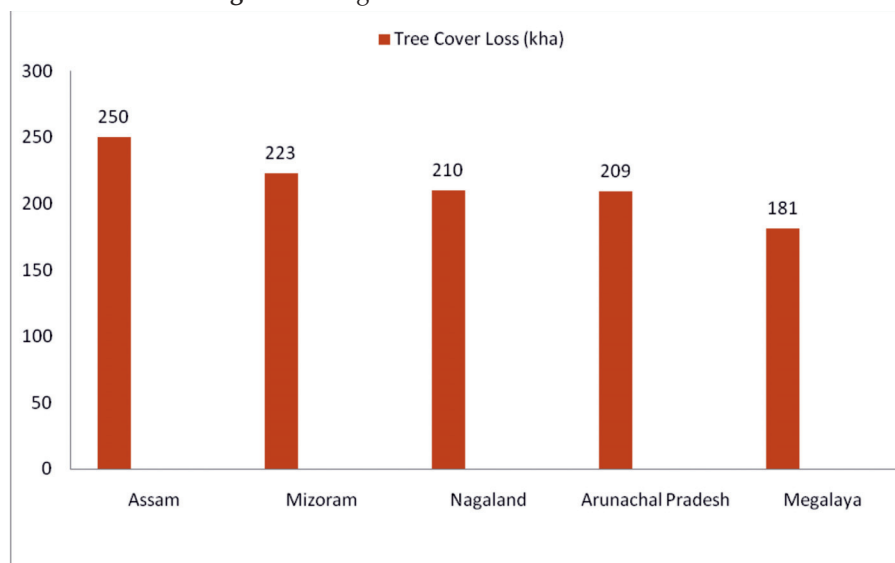
Initiatives against Deforestation

The Chipko movement in India was an impulsive response to the persistent practice of deforestation in the hilly parts of Uttar Pradesh. This movement inspires the people to struggles against the various causes of deforestation in different parts of the country. There is also a strong plea to include tribal people, who have close bound to forest and for several centuries they have been living in forests and depends on forest and forest produce, in protecting the forest areas of our country. The Scheduled Tribes and Other Traditional Forest Dwellers (Recognition of Forest Rights) Act, 2006 was framed with the aim to vest and recognize the forest rights and livelihood in forest land of the forest dwelling scheduled tribes and all other traditional forest dwellers. They have been living in such forests for different generations but their rights could not be recorded anywhere. This give emphasis to the conservation of forest and preservation of ecological balance. It is also guaranteeing the livelihood and food security of the forest dwellings scheduled tribes and other traditional forest dwellers living in the forest.

Conclusion

The tribal community is primarily facing a serious threat of clearing forests. As a result of deforestation they are forced to leave their own homes and

Fig. 3. Ranking of States Based on Tree Cover Loss



Source: State of the Forest Report, Forest Survey of India

face severe displacement from their land in the name of development. Human beings damage the environment by pampering in activities like deforestation. The protection of forests is more important to the tribal communities for their sustenance and livelihood and also for the existence of their social, cultural and political systems. Though, the situation is that they neither can recognize the dilemmas they are facing as of deforestation and environmental degradation nor identify their gloomy future which is lying behind the deforestation and its effects. They must be made conscious of the inevitable unjustified issues that is going to appear if forests are vanished. Besides, the tribal communities leading an isolated life from the mainstream life of the society can no longer be preferred. The quality of life of the tribal people should be enhanced by developing their social and economic conditions. There is an urgent need to change their outlook regarding their life. By providing adequate educational facilities to the tribal people, they must be ready as capable of moving together with the mainstream life of the country. The government should allocate funds for progressing the life of tribal people and take necessary steps to reduce deforestation in the country.

References

- Chhibber, B. 2008. *Indian cultural heritage and environmental conservation through traditional knowledge*, Mainstream, vol. XLVI, No 25, viewed September 12th, 2020, <http://www.mainstreamweekly.net/article746.html>
- Forest Survey of India, India State of Forest Report. Ministry of Environment and Forests (MoEF), Government of India (GoI). Available from <https://fsi.nic.in/forest-report>.
- India Deforestation Rates and Statistics. Available from <https://www.globalforestwatch.org/dashboards/country/IND>
- Mahapatra, L.K. 1992. *Customary Rights in Law, Forest and the State, Continuity and Change in Tribal Society*. Simla: Indian Institute of Advanced Study.
- Mohanty, B. B. 1997. State and Tribal Relationship in Orissa. *Indian Anthropologist*. 27(1): 1-17.
- Prakash, P.V. 2005. Sacred Structures and their Ethnoarchaeological and Ethnohistorical Significance. *The Eastern Anthropologist*. 58 (1) : 61-78.
- Rai, B.K. 1966. *Nature and man: A study of interaction between man and forest in Chotanagpur* (Unpublished PhD Thesis). Ranchi University, Jharkhand, India.
- Ratha, S.N. 2006. Forest-forest dwellers interface: Understanding man-nature relationship. *The Eastern Anthropologist*. 59(1) : 1-13.
- Ratha, S.N. and Behera, D. K. 1985. Man nature relationship: Life in a Kissan Hamlet of Western Orissa. *Man and Life* / 11: 3-4.
- Rothermund, D. 1978. *The Coalfield: An Enclave in a Backward Region*. New Delhi: Manohar Publications.
- Sahai, S. 2013. Indigenous knowledge and its protection in India. Available from <https://www.oreilly.com/library/view/trading-in>
- Singh, B.P. 2007. Dynamics of Health Culture among the Tharus. *Madhya Bharati*. 58 : 177-185.
- Singh, B.P. 2013. Tribe, Forest and Law: The Development Debate. *The Oriental Anthropologist*. 13(2) : 459-472.
- Singh, U. S. 2018. Deforestation in India and Climate Change. *Journal of Biological Innovation*. 7(4) : 631-659.
- Verma, S.K. 2009. Protecting Traditional Knowledge in the SAARC region and India's efforts. In Antons, C. (Ed), *Traditional Knowledge, Traditional Cultural Expressions and Intellectual Property Law in the Asia-Pacific Region*. The Netherlands: Kluwer Law International BV.
- Vidyarthi, L. P. 1963. *The Maler: A Study in Nature-Man-spirit Complex of a Hill Tribe in Bihar*. Calcutta: Book Land.
- Vyasulu, V. 1984. Under-developing Koraput. *South-Asian Anthropologist*. 6(1) : 63-71.