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Original Research Article

A geohistorical analysis of India's human-forest interaction

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ABSTRACT
In terms of the history of the forests, India has experienced a long tale of the joys and sufferings of its reliant people. One of the valuable resources that the Indians received with the advent of civilization is forests. Both those who lived close to forests and those who were well off were aware of the abundance of flora and fauna and had been using these resources for a practical and comfortable means of subsistence for centuries. The ethos of beauty that men formed with the forests was rudely shocked by occasionally lustful and self-centered human involvement. Thinkers today, both in India and around the world, are concerned about the loss of greenery and the harm to the ecosystem. The restoration of equilibrium in the stock of greenery in the Indian scene is the high job of today for social thinkers and geographers.

1. Introduction

In addition to increasing the biodiversity of the Indian subcontinent, India's vast forest lands have long provided for the fundamental requirements of its forest-fringe populations, feeding millions of Indians. The majority of this century's biomass, along with herbs, cattle, and other livestock, is made up of trees and other forest species like bushes. There are no limits to the significance of this kind of life on earth. Our entire biosphere depends on the metabolism, extinction, and regeneration of plants and trees.Due to religious taboos, several forest species have gained the respect of the general populace. Amazingly, even Fergusson [1] noted that the ancient people regarded trees as the "choicest gifts of the Gods to men." The relationship between man and the forest thus evolved as early Indian civilisation did.

2. Pre-historic phase

When compared to what it was during the prehistoric era and what it is now, human history demonstrates cataclysmic transformations. In some ways, human nature was just as erratic as it is today. One of the distinguishing qualities of humans was their capacity to adapt to their environment, unlike animals that do so systematically but more slowly than men.

On the Indian subcontinent, human civilization has a long history. This country has been gifted with natural wonders like forests, ice, rivers, and the clear sky above them. Men had a relationship with the forest during the Paleolithic and Neolithic periods of prehistory, but their attitudes were noticeably different from those that prevailed a few millennia later.

In India, palaeolithic man often lived in caves or on the edges of lakes or rivers while subsisting on a diet of fruits, nuts, roots, and the meat of wild animals. During this time, people used axes, hammer stones, arrowheads, spears, circle stones, digging tools, knives, hurling choppers, scrapers, and other equipment of various kinds. With reinforcing made from strips of hide or plant fibre, these tools were stored in the clefts of the bamboo. Some of these weapons had thick butt ends that were used for digging up edible roots or for hand-to-hand combat. Additionally, hardwood-made tools were used. Paintings from this era have been preserved in some caverns in Singapur, a village adjacent to Raigarh in Madhya Pradesh.

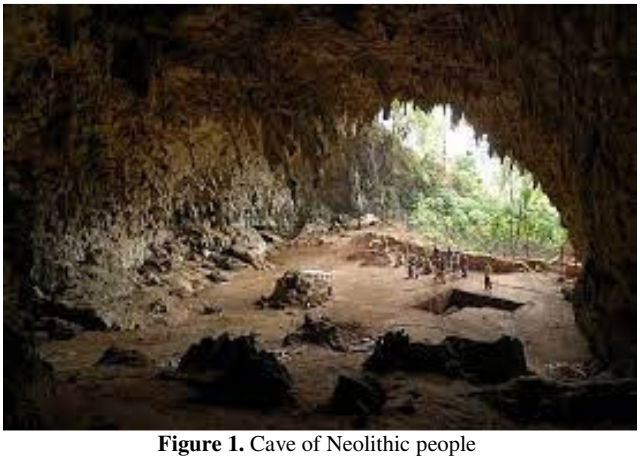

Figure 1. Cave of Neolithic people

The Neolithic people built their towns out of granite rocks. They were naturally shielded from the rain and the sun by these boulders, which they could also easily adapt for habitation. Most likely, they used thatch and twigs to build their homes. Fruits,milk, animal flesh, roots, wild pulses, vegetables, nuts, fish, and cereals made up the people's diet. Initially, people utilised animal skin and tree bark to cover their bodies; later, cotton and wool clothing (made from sheep skin) served the same purpose. Their primary sources of income were from hunting and fishing. Animals were first domesticated by humans. Agriculture started to take the stage

as the Neolithic Period came to a conclusion. A few superstitions were also passed down from Neolithic people. A phallus made of stone and wood, as well as evidence of their devotion and offerings to the spirits, date back to the Neolithic Era. Men started acting aggressively toward the environment around 6000 B.C. They acquired skills in weaving clothes, taming wild animals, making pots, and growing food crops. They cleared forests and felled the precious trees for their own gain in order to achieve these goals. The subsequent centuries saw a significant increase in the use of forest products due to people's more egotistical desires.

According to ancient sources, the weather in north-western India was similar to what it is today; Alexander of Macedonia may have encountered slightly more moisture at the time he crossed the Indus River. Around 3000 B.C., much of Baluchistan and the coastal region to the west of the Indus, nowadays known as the "Makran," were already arid and desolate, but the river valleys were productive and heavily forested. Baluchistan was maintained properly moist by the existence of perennial rivers, despite being now largely a desert devoid of water. The entire Indus valley was heavily forested, providing both food and fuel for the burning of bricks. The inhabitants resided in roomy mud-brick houses.

The Harappan era saw a continuation of the tendency of exploitation of forests for personal convenience. There is proof that the Harappans used wood from woods to build their homes and furniture, consumed fruits, and created toys for kids like wheeled carts and chairs, among other things. They tamed elephants, camels, and humped bulls and employed them to plough the crops. The common people's everyday lives must have been heavily influenced by agriculture, as other crops including wheat, barley, and cotton were raised on a big scale. Ships were employed to conduct marine trade with far-off nations like Sumer, Egypt, and Crete. Most of the animals depicted on the seals are wild and forest-dwelling creatures, such as unicorns, bulls, elephants, tigers, rhinoceroses, gharials, antelopes, etc. The fact that some plants, like the pippal tree, and animals, like the unicorn, were revered as sacred creatures shows how closely connected the inhabitants of this time were to the forest. The study of Vastu Shastra demonstrates how the products of the forest were employed while creating a particularly special technique for building these homes. According to Mackay [2], who studied the buildings at Kalibangan, Lothal, Mohenjodaro, Harappa, and Chanhudaro, the bricks of Mohenjodaro are of excellent quality, thoroughly burned, essentially unbreakable, and can be reused repeatedly.

The prehistoric tendency thus demonstrates that the interaction between human civilization and the forests has existed since its inception. Humans had developed an innate dependence on woods to meet their many requirements, and the forests occasionally gave them access to food, shelter, tools, weapons, and other necessities of existence.

3. Ancient phase

The Aryans who came to India and eventually settled among the darker natives had a distinct tribal distinction. The purity of their blood determined their place in the social hierarchy. The priests granted the trees holy status during the Aryan era. Due to the intricate sacrificial practises used by these priests, who demanded maximal privileges, more forest products were needed. The priestly class evolved into the exclusive depiction of God through the glorification of sacrifices, an essential component of religious practises. The Aryans were essentially a wild, turbulent race who still practise some Indian tribes' taboos today. They were dependent on the soma and sura drinks, which they drank at rites and occasions when they made offerings to the god. These were potent alcoholic beverages prepared from corn, barley, and tree extracts.

The Aryans stopped living in mobile tents and started residing in permanent structures. These were constructed of wood and bamboo and did not significantly differ from those found in Indian communities today. We've also heard of detachable wooden houses that could be disassembled and moved to various locations. The cattle were a crucial component of the Aryans' mixed pastoral and agricultural economy. By praying for more cattle as loot and rewarding the sacrifice priest with cattle for his service, the Aryan people demonstrated the value of cattle wealth. There was agriculture. In the Vedic text, ploughing and reaping are mentioned. Of course, wood, stone, and other elements from the forest were used to make the agricultural equipment and implements. The Aryans knew how to use irrigation and manuring, and they grew a wide variety of crops, including rice.

Figure 2. Building materials and construction techniques of Ancient India

In the Aryan group, reliance on forest products rose. According to the list of jobs that the Aryans held, both men and women worked as weavers of cotton and wool, as dyers and embroiderers, and as tanners of leather. The carpenter had a significant role in society by building homes and providing furniture and other household goods. Many of them were adept woodcarvers who created delicate works of art. The curative properties of the plants were used by the doctors to treat patients and treat illnesses. The doctors also used "Black Magic," which could only be used in woodlands, to drive evil spirits away. In their prayers, the Vedic authors express their belief in the holiness of forests and their value: "Whatever I dig of you, O Earth! I hope that quickly grows on you. May my blow never reach your sensitive areas (Atharva Veda). Vedic prayers exhibit a great sense of optimism about life, especially in a welcoming setting. The term "Rita" clearly refers to a cosmic equilibrium law, whose breach is destructive to all aspects of nature, as evidenced by a number of meanings. M.

Vanucei asserts that the ancient Indians followed "Rita," or natural law, and coexisted with nature.

According to history, the birth and enlightenment of the Buddha were connected to trees, and his lay supporters presented him with a number of gardens and groves as a representation. The prior tradition passed on to Buddhism the cult of tree worship. In reality, both Buddhism and Jainism emphasised responsible resource use, the sanctity of life, and the preservation of various natural characteristics, such as forests, groves, and gardens. The foundation of this ethic of life preservation is pragmatic concerns.

The Ganga plain served as the primary centre of activity throughout India's second urbanisation era, which began in the sixth century B.C.Due to the region's suitability for rice cultivation, the mid-Ganga basin's agricultural development was mostly a rice phenomenon. A clear association between rice-growing areas and higher rates of fertility, according to Ling [3], suggests that this land may have contributed to population growth. However, a noticeable increase in the number of communities and the dispersion of those settlements suggests an increase in population.Many stories in early Buddhist literature mention overcrowded cities and the growth of settlements, which are indicators of population growth. Some academics contend that the development of iron technology was crucial to the clearance of large tracts of forest, the development of agriculture, and the settlement of humans.

The Maurya State made a more concerted attempt to deliberately colonise the hill regions and river valleys that bordered the Magadhan Empire. The primary driving force appears to have been the availability of raw resources, though control over trade routes and commercial hubs was equally important. The Mauryas' initiative to open up additional areas to trade and cultivation significantly aided the growth of urbanisation [4]. Large-scale forest clearing facilitated easy access to lumber, which explains why wood served as the primary building material at the time and why Kautilya recommended a number of anti-fire and fire-fighting precautions.

Kautilya's desire for the state to manage woods and wildlife is a clear indication of his concern for them [5].He classified forests into four groups in his "Arthasastra": producing forest, forest for elephants, forest for royal recreation and game that is accessible to everybody, and abhayaranya, or wild-life sanctuary.He divided the products of the forest into ten groups, including (i) timber, (ii) bamboo, (iii) creepers, (iv) fibrous plants, (v) plants that can be used to make rope, (vi) plants that can be used to make writing materials, (vii) plants that can be used to make dyes, (viii) medicinal herbs, (ix) plants that can be used to make poisonous drugs, and (x) fruit trees. Each area includes a flora catalogue as well. Minerals from animal production, charcoals, menageries of animals, firewood, and feed are also listed. The importance of trees for the "benefit" of mankind was well emphasised by Kautilya; the word "benefit" has two different meanings. A broader definition entails the preservation of wildlife, the safeguarding of natural resources, and the conservation of soil. In its narrowest form, it refers to the maximisation of the output of instantly marketable goods.

According to Majumdar [2], Nearchus noted that Indians wore highly finished, white leather shoes with colourful soles that gave the impression that the wearer was much taller. The Vinaya literature mentions a variety of shoes, including ones covered in antelope, lion,cat, panther, tiger, otter,squirrel, and owl skins, according to Bhattacharya [6]. The footwear worn by the less fortunate included wooden shoes (kharam), as well as sandals made of palmyra, dates, and other plant leaves.

Daily bathing was not popular practise in eastern India, according to the Vinaya literature, and great significance was placed on bathing at specific locations (such as Avanti, Southern country, etc.). In these places, people used to take baths by rubbing their bodies, arms, thighs, and backs against wooden pillars or walls. Using a wooden implement in the form of a hand or string of beads, chunam was applied to the body. Certain plant parts were used as "ruptan" to promote healthy skin. The women used forest products heavily to maintain healthy, bright skin, bodies, and faces. Sandalwood powder was used by women to maintain a smooth and radiant complexion. Additional bathing pools or tanks are mentioned. They had walls and steps made of the same material, as well as floors made of brick, stone, or wood.

After the Mauryas were overthrown, no other great political force—aside from the Kushans and Satabahanas—emerged in India for a period.Trade flourished and new forest regions were encroached upon during the Gupta era. The Guptas recruited a special officer named "Gaulmika" to take care of the forts and woods. India and Western nations conducted trade in precious stones, fragrances, pharmaceuticals, plant extracts, fruits, and elephants. The success of trade has significantly increased Indian shipping activity and oceanic power.

The steady emergence of magnificent architectural accomplishments, which were mostly linked to religion, can be seen starting in the post-Gupta era. Buddhism served as the primary source of inspiration for such artistic endeavours, and the remodelled cave temples at Ajanta, Bagh, and Badami are evidence of this. Kanchipuram and other South Indian cities' coastal and rock-cut temples exhibit the remarkable craftsmanship of the period's craftsmen, who were able to make their sculptures eternal with the help of enough wooded resources. The size of the archaeological evidence attests to the splendour of urbanisation and the extensive clearing of the well-preserved forestlands.

Throughout ancient time, the conventional pattern of forest policy was maintained with few changes. For humans, forests have always been the most beneficial place to be. The Aryans, Satavahanas, Mauryas,Kushans, Guptas, Palas, and other North Indian and South Indian rulers all sought to gain the greatest advantage in an effort to occasionally stabilise the economic position. The idea of using forest resources to satisfy human needs dates back to the dark ages of Indian history. The echoes of green reflected the feeling for the fight for human survival. In the next centuries, the exact style of conflict and the various modes of forest defence persisted.

4. Medieval phase

The Muslim dynasty emerged in India with the foundation of the slave monarch Qutubuddin Aibak's dominion, bringing with it a distinct culture and set of regulations. The country, which at the time was not united, was mostly governed by Islamic law during the mediaeval era. Aristocrats, Sultans, and

peasants all had very different lifestyles, which were made clear by the vibrant trade and way of life they pursued. According to Chopra [7], the differences we observe at various times are ones of detail rather than a fundamental difference, and Indian culture has stayed fundamentally the same throughout history.

As a result, the forest was not covered by any policies. The woodlands were utilised the same manner they had been in the past. People are growing more and more dependent on the forests, as evidenced by their social and economic situations.

The various historical sources from this time period support the idea that wealthy people lavishly spent money on their clothing. Depending on the environment, they dressed in long jackets, salwars, and shawls made of wool, cotton, or silk. Of course, only the forests were used to harvest fibres like wool, silk, cotton, and other materials. Eleven different coat kinds are described in "Ain-I-Akbari." The lowest classes and labourers wore cotton langota. Hindu ladies wore "saris," whereas Muslim women wore salwars, shirts made of cotton or silk and brocaded with gold or silver. They were aware that expensive perfumes, herbal extracts for treating baldness, and hair colours were obviously goods utilised by wealthy women. The women crushed sandalwood, and used ghasul, rnyrobalans, and opatanah. The lengthy list of smells and their pricing is provided in "Ain-I-Akbari." Women frequently used henna leaves in their designs. Collyrium was used for the eyes. Upper-class women frequently used missia to darken their teeth. The females adorned themselves with Karnaphul, Pipal, and Patti. Khichari was the most well-liked dish among the Comrnon. The majority of the commonly consumed items, such as rice, curd, pulses, wheat, flour, vegetables, butter, and oil, were derived from forests.

During festivals, a variety of intoxicants were used, including wine, bhang, tobacco, betel, tea, etc. The Mahua, Neem, and other trees were used to make wine. Opium use was widespread. Soon after the Portuguese introduced tobacco to India in 1605, it quickly became very popular among the general populace. All of these goods were obtained from the forest. They decorated their homes with an excessive amount of forest wood. During the Mughal era, massive palaces and other structures were built. Hammams, Diwani-Ams, Diwani-khas, stables, and numerous other structures made up the palaces. Due of its ability to insulate against the harsh winters, wood was used for the construction of these homes in Kashmir. These teak wood buildings were just two stories high and were common in Malabar. There are some homes made of brick, burned tiles, and lime. Poor people lived in thatched-roofed homes without basements or windows. The homes' floors were made of pounded soil that had been covered in cow manure.

Beautiful chairs, stools, beds, and other furniture could be found in the nobles' homes. Sometimes the chairs' legs were chiselled off, and wooden planks linked the feet to the body. There were also cane stools in use. Reed mundas and pidis, or seats made of the appropriate wood, are also described in contemporary literature.

Not just in furniture and building design, but also in the religious rituals and practises of the time, forest traces can be seen. There were sixteen important ceremonies practised by Hindus. The six important funeral ceremonies were the Jatakarma (birth ritual), Namakarana, Chuda Karma, Upanayana (initiation), Vivaha, and a few others.The house was celebrated by suspending a cord composed of "Durba" (narrow-bladed grass) from the front entrance and entwined with mango leaves. The Hindus gave the funeral rites considerably more importance. Numerous different burial techniques were developed when the need for forest products arose.

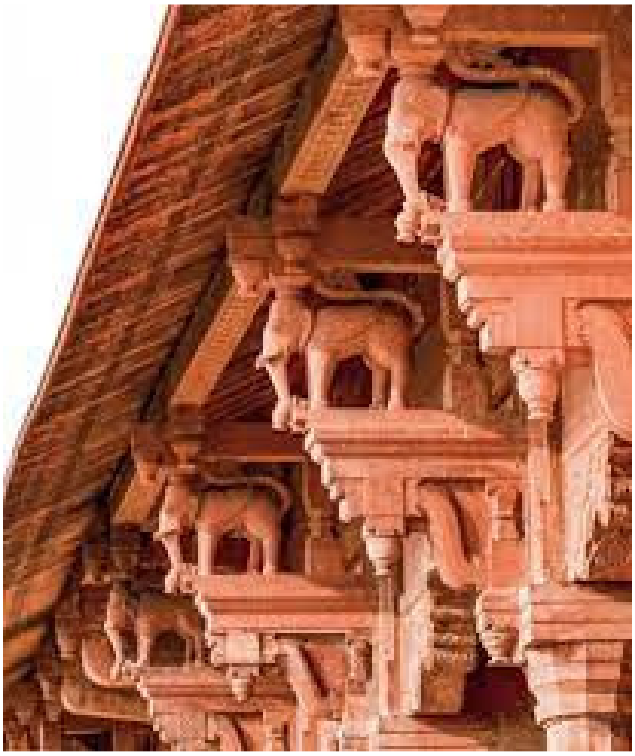

Figure 3. Mughal wooden architecture

Another area with high demand for these forest products was conveyance and transport. Back then, only human carriers were permitted as modes of transportation. In the coastal regions, animals and wheeled commerce as well as boats and tiny sailing ships on rivers became common. They travelled by ox, the impoverished. For riding purposes, people employed horses, ponies, mules, and even donkeys. At that time, the traditional bullock-drawn cart, or "bailgari," was used considerably more frequently. The wealthy typically employed lavishly designed chariots that were draped in silk blankets for their mattresses and had windows embellished with gliding leather or silk hangings. Akbar preferred to ride in a two-house carriage and sit on a couch wrapped in scarlet rugs [8]. Additionally, howdahs were employed on the elephants that transported the royal populace. Both the horses and the elephants were well-cared for and maintained in stables. However, the wealthy and aristocracy liked to ride in palanquins that were wrapped in cloth. The wealthy folk of Bengal utilised Sukhasan or Sukhpal, a crescent-shaped litter draped in scarlet or crimson fabric. On all four of its sides, aromatic khas grass screens known as khas tatties were installed during the summer. The main modes of water transportation were ships and boats. There were various boat types for transportation, battle, and quick sailing. Elephants may be transported in larger vessels. The royal population used

extremely creative vessels. Logs and other forest products were required for all of these transportation methods.

During this time, agriculture dominated the economy. More than 75% of the populace resided in villages where they worked in agriculture. The nation was divided into communities, each surrounded by arable land. The irrigation and farming practices were carried out according to custom. No canal existed, as Babur discovered. His description of how people irrigated their lands is fascinating. According to what he says, "They set up a wooden fork with a roller and tied the other end to the bucket at the well's edge." [9, 10].

The agricultural output included fibres made from grains, indigo, sugarcane, poppies, etc. The main fibre crops were jute, hemp, silk, and cotton. The regional industries required jute and hemp. Large portions of the land were covered in forests during Babur's era. Babur claimed that the country was covered in a thorny bush. The Parganas locals who relied on these forests found sanctuary there since the bush was so thick. Every time they rebelled against the government by skipping out on paying taxes, they concealed themselves in these woods. There was a lot of forest in the North Western Frontier Province, Punjab, Bihar, Uttar Pradesh, Orissa, Bengal, contemporary Madhya Pradesh, Rajasthan, Gujarat, and Southern India.These jungles were teeming with trees and vicious creatures like tigers and even lions in some areas. The tourists noticed that Bengal's woodlands were overrun with tigers and other wild animals. Abul Fazal writes [11] that travelling along the southern bank of Gharghara required passing through a dense forest. Between Jaunpur and Allahabad, William Finch [2] discovered a deep, continuous, and dense forest.

During the Mughal Empire, the forests provided employment for a large number of labourers who cut wood and cleared the land, including sawyers, carters, carriers, artisans, and other workers. The forests provide a wide variety of wood for manufacturing boats, furniture, residential homes, and transportation. Teak, seasarne, babul, and mango trees supply the majority of the wood. The wealthy favoured expensive furniture manufactured from expensive woods like sandalwood.

According to historian Moreland [12], the country's abundant forest wealth is used to a great extent by all social classes. Akbar eliminated taxes on Dhak tree leaves and Babul tree bark that were transported out of the wild for commercial purposes. Additionally, the taxes on fuel wood and grass were eliminated. The products of the forests, such as lumber, leaves, fuel, bamboo,fibres, grass,sandalwood, gum, and other fragrant woods and medicines, served as the principal raw materials.

5. British phase

The first people to travel to India for trade were the Portuguese.The people who followed them from other countries were the Dutch, French, and then the British.The British were responsible for completely altering India's administrative system. On all fronts, they had an impact on Indian society. Massive deforestation was brought on by colonial control. But it was under this regulation that the idea of good forest management really started to take hold.

The most significant and long-lasting effects of British rule in India were the changes in people's political, social, religious, and economic outlooks that resulted from their intellectual development in a completely different direction. The consequences of British rule were initially observed in Bengal, where they were more pervasive than in other regions of India. After the Battle of Plassey in 1757, the British effectively took control of Bengal, but at first, the reason for this was unclear to the public. The people didn't fully comprehend the true nature of the rulers for a number of years. Indians had faith in the benevolence and morality of British authority, as seen by the early years of the Indian National Congress. These erroneous presumptions about the British only served to support their exploitative actions. This strategy applied to economic activity as well as to the forestry sector. They shattered the long-standing bond between the people and the forest. They destroyed the villages' old-style economies. Although they were most directly touched, the common man and even the middle class paid little heed to this political transformation. Although the people suffered severely and the economic impacts were obviously disastrous, there was no organised resistance to the foreign overlords until the second half of the 18th century.

Figure 4. Deforestation in India during British rule

In terms of material exploitation, the British reign was also oppressive. The British arrived in India to conduct business and create a monopoly over trade between India and the West. At first, they made an effort to win the rulers' cooperation by offering them their services rather than using force. These concessions were made by the Mughal emperors as firmans. The firman of Faruqshiyar in 1717 was the first of its kind. However, they did not halt the immoral practise of depriving the Bengal Nawab of his due share of revenue. The English were frequently required to pay customs duties during the later Mughals' control. At all costs, they tried to avoid paying taxes. So, in order to further their own narrow objectives, they enlisted the aid of these orders. They decided to take advantage of the situation after realising how badly the Mughal rule was going. They quickly understood that extorting as much money as they could was necessary if they wanted to benefit from the trade. They quickly realised that the land was the best asset for generating income.Therefore, anytime they could seize land after winning a war, they sought the Diwani of areas. The British received the Diwani of Bengal, Bihar, and Orissa in

1765 as a result of their victory at Plassey. Exploitation and greed subsequently became the norm. The country's natural resources are under extreme strain as a result of the negative effects of the new revenue system. At each subsequent settlement, the heavy pitch of assessment was further raised until it reached the cultivator's maximum payoff capacity. The agricultural classes were essentially crushed and rendered poor by the land revenues.The peasant was practically made into a serf by the oppressive assessment, which occasionally amounted to the seizure of private property (inland). Many people were forced to give up their lands due to problems with the land-revenue system. Thus, the government was not given the actually expected land revenue.They subsequently started using strategies to make up for the loss. Resources from the forest have grown to be a very useful asset for generating income.

The British turned a blind eye to the richness of the forests for a number of other reasons. The devastation of India's traditional economy and the disruption of small-scale industry were further causes. Before the British arrived, the Indian villages could support themselves.The grounds generated enough food grains for the population's subsistence during regular monsoon seasons. Fewer people had other needs, which were satisfied by the craftspeople in the community. After paying the government, the peasants had little left over to spend on commodities because the agricultural excess went to the Zamindar as land revenue.

The disruption of the traditional economy increased the number of unemployed persons. The demise of royal dynasties, the English need for raw materials, and the discouragement of the production of finished goods were the key factors that contributed to the unemployment of the artisans. As these artists were now forced to work as landless labourers, agricultural pressure rose. This led to an increase in poverty, which drove many people to join the anti-social group.The traditional economy's disruption caused a rise in the number of unemployed people. The main causes of the artisans' unemployment were the end of royal dynasties, the English need for raw materials, and the discouragement of the manufacture of finished items.

Further accelerating the deforestation process were modern industries that came to India as a result of British rule. Contemporary practises had been used up until the 1860s, either by the East India Company or individual British merchants. They had produced nothing, but they had accelerated India's commercial revolution. A few specialised businesses were being developed in place of importing British-made machines and manufactured items, which devastated Indian producers in the process. Since they were all export-focused and established with financial gain as their ultimate purpose, Indian industries were fortunate to attract international investment. Indian businesses received full funding from British finance. At that time, firms that produced indigo, coffee, sugar, cotton, tea, steel, coal,jute, and other goods were profitable. The major problem was that all of these firms were financed with British currency. Britishers requested investment cash from Britain, for which interest in the millions of rupees had to be paid.The British had to pay for housing charges, interest returns, and the wages of those working in India, which led to an increase in government spending. They used Indian money to fund all of this. As they continued to harvest money from the forests, they transformed them into money-making banks.

Another area where they poured money from Britain and opened up new opportunities for forest exploitation was the railroad project India had a long history of official endeavours to promote public works before the East India Company has established its political dominance.For economic and other purposes, transportation by land and sea connected various regions of the nation. Around the middle of the 19th century, there was a need for better and external communication due to significant political shifts in both the West and India. The earliest plans for railroad building in India date back to 1843–1844. The overall length opened was not very long in 1855. However, after 1858, the majority of other railway firms began operating. Railway building facilitated the export of industrial goods, food grains, and raw materials. The most severe effect was that it brought the British to India's interior, where they discovered uncharted regions that contained precious natural resources like forest wood. The trains helped the deforestation policy take off. The harvested forest materials were transported to the ports before being shipped to Great Britain. Large amounts of wood were needed to build railways in order to build cars and tracks. For the spread of railway tracks, extensive tracts of forest were removed.

India had completely lost its forests by the time the British began to govern. To supply their timber demands, particularly for shipbuilding, the rulers also came to attach great value to the forests of India. The Royal Navy and the developing railway network in the early British period required enormous amounts of teak. Teak and timber, both of which were exported in enormous amounts, were also necessary for construction.

6. Modern phase

Since the British had a high demand for some trees, their techniques resulted in their depletion. As a result, the government had to adopt new forest policies. A number of forests were designated as "protected forests" and "reserved forests." They were off-limits to the indigenous people and village groups who had long ties to the forest. However, we discover that during the pre-colonial era, the indigenous people themselves were aware of the uses of forest products in several regions of the nation. Until the government took control, the policy of deforestation was in place. The common man as well as nature was affected by the irresponsible usage of forest resources. Only British businesses profited from the destruction of the forests. Brandis was chosen to be the first Inspector General of Forests in 1855 [13]. To make the restrictions on how locals may use the forests lawful, the first Indian Forest Act was written in 1865. Dr Brandis was the one who first articulated the basic ideas of continuous yield fixing. In 1865, the first Act was established that put the regulations for the management and preservation of forests into effect. A law from 1878 divided forests into three categories: village forests, protected forests, and reserved forests. Trespassing and the pasturing of livestock were prohibited in the designated forests.The local governments were given the power to designate any forest or land as a protected forest after establishing the nature and extent of the government's and private residents' rights over the forestland or wasteland. The

British government announced its Forest Policy in 1894, emphasising the utilisation of the forests for commercial purposes. 97% of India's forestland is now under foreign control as a result of colonial regulations.These Forest Acts were not at all meant for the conservation of forests, despite being the initial steps that later led the government to alter them and lay a greater emphasis on it. The general forest policy of the Indian government had evolved over time. In 1894, the Department was actually established. The Indian government issued a resolution, which was strengthened in 1904.

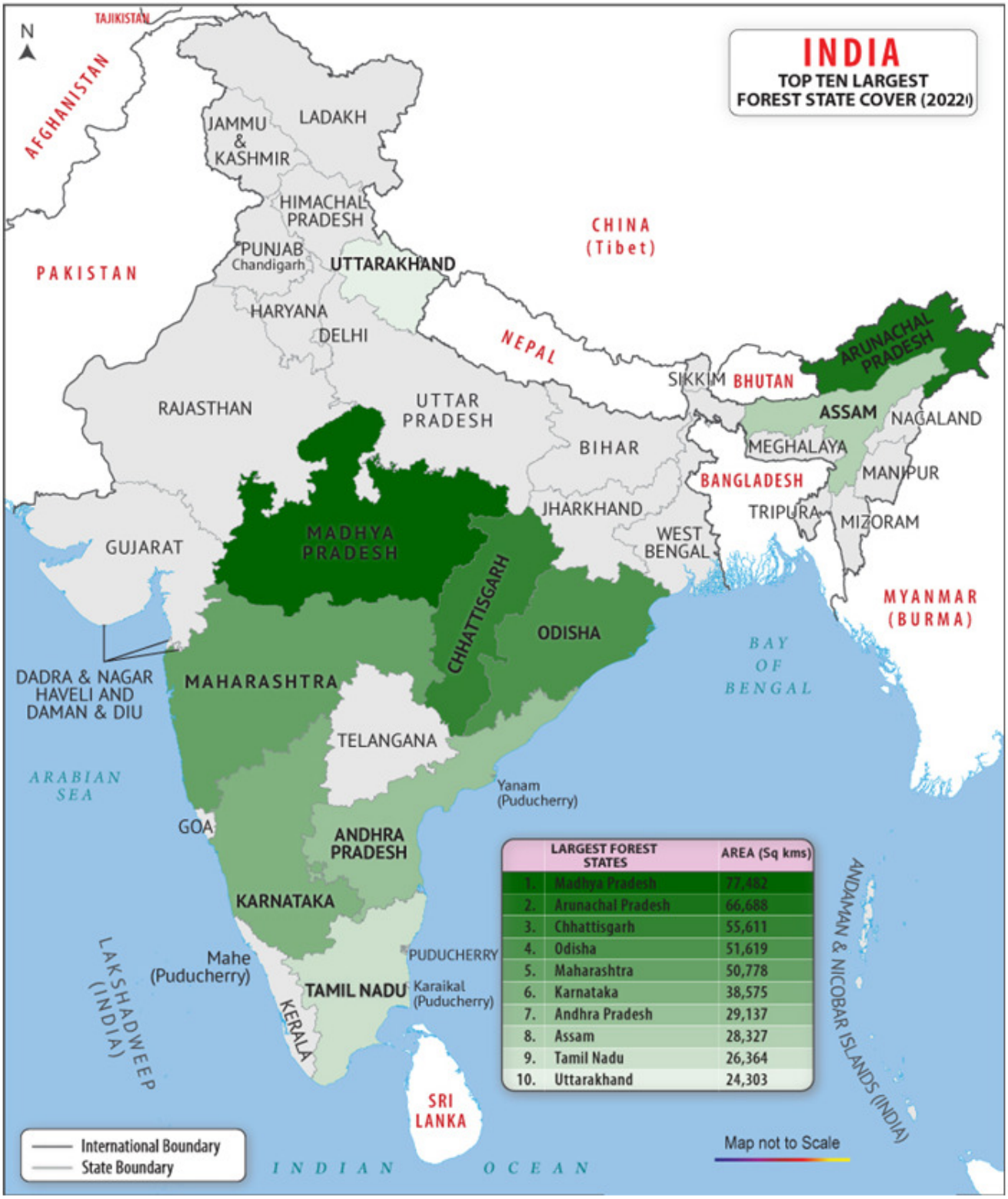

Figure 5. States having largest forest cover in India.

According to the Resolution, the following regions are under Forest Department control:

(i) Forests, whose preservation is crucial for environmental and safety reasons.
(ii) Forests are retained as exclusive reserves for the production of usable timber, for trade, and for general building.
(iii) Minor woods would generate a meagre amount of fodder wood,, and other local goods, particularly in agricultural settlements. To a limited extent, this was also intended for grazing reasons.
(iv) Grazing areas or pastoral land under the management of the Forest Department.

In 1947, the British left India, but they left behind some enduring traces on Indian land. Among other horrifying gifts, overexploited woods were one that Independent India received. Due to limits placed on the freedoms enjoyed for centuries as well as the cruel and even irrational implementation of the forest rules, she also inherited a climate of hatred between foresters and forest residents. She also took over an administration that was callous and inattentive to the needs of the populace. Since the country's independence, several trends have been adopted by the policy-makers and have left their mark on the nation's forestry operations. According to decades, they can be enumerated as follows:

- The state received ownership of all private forests in the 1950s. the same for state woods that are protected and unclassified.
- The introduction of exotic fast-growing plants, particularly eucalyptus, in the 1960s.
- More commercial and industrial species were planted, and the State Forest Corporation was founded in the 1970s to draw institutional finance and speed the elimination of indigenous forests.
- Through Social Forests, forestry activities were expanded outside the forests in the 1980s.
- Participatory management of forests in the 1990s.

The rural and forest-fringe populations were somewhat confused by the Independence as well. They were unable to comprehend the government's planned policies.

Since Indian independence, the Indian government has developed and, for a while, implemented forest regulations. Forests were only allowed to be used for timber production between 1952 and 1975. The continuation of wood production and the development of social forestry were the key objectives of management policies from 1976 to 1987. Outside of forestlands, more money was given to social and agricultural forestry. An innovative project known as the "Joint Forest Management Project" was started in 1988. In comparison to the preceding two plans, the 1988 New Forest Policy is very different. The history of forest management is currently in an epoch-making phase. By protecting the surviving natural forests, the forest policy aimed to protect the nation's natural heritage. Because they preserved the ecological balance, forests were able to provide the local population with the subsistence they needed. The goal and priority were modified. The environmental stability was given more weight in the forest policy than the financial gains. It supported polyculture and favoured mixed forests. The ecological balance was the key concern. By meeting the needs of the community, it also attempted to improve the tribal economy. It was emphasised to use non-timber forest products (NTFP).

The manufacturing and processing of these items aided in the growth of the rural economy by generating jobs and income. The need of involving people in preserving forests was acknowledged. This forest policy promoted community members' involvement in the effort to preserve the forest. It granted the safeguarding communities ownership rights over the forest products in an effort to improve the link between humans and forests. In order to function as a bridge between the populace and the government, non-governmental organisations (NGOs) were drawn to the area and invited to participate. It was strictly forbidden for anyone who lived in the forest to intrude on forestland or utilise it for anything other than forestry. No of their gender, the locals were urged to join. The women were urged to take the lead in reviving the forests. To boost forestry output, advancements in science and technology were promoted. To properly implement the new forest policy approach the government has adopted, there must be a strong political will. Economic benefits accrue to the project's forest periphery participants. As part of this programme, the NGOs act as a point of contact between the government and the foresters. The JFM's future trend will reveal the success or failure of the government's and the Forest Department's plans for a forest policy.

7. Conclusions

The link between people and forests throughout Indian history has been examined, and it has been discovered that the geographical environment significantly influenced the country's historical tendencies. Geographical conditions shaped the development of human civilizations, and India's forests played a particularly significant influence in determining the course of human history. The interaction between humans and forests had an artistic beauty that was gradually lost as a result of people's faster pursuit of their own selfish goals in the quest for survival and a higher quality of life.The British settlers in the middle of the 18th century brought about a basic alteration in the nature of reliance on trees. The aliens' avaricious meddling completely destroyed the colour green. Beginning in the middle of the 19th century, India saw extensive deforestation, which significantly upset the physical and biological balance across the whole Indian subcontinent. The idea of reviving the vegetation in order to restore the eco-balance is currently popular. Additional consideration has been paid to modernising the economic conditions of forest-dependent populations. Now, let's wait for this century and the one after it to see if the historical and geographical circumstances will align to restore the once-prominent balance between man and the forest.

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