



## Guardians of the Green: Tribals

This editorial is based on [“To preserve forests, it’s important to listen to tribal communities”](#) which was published in The Indian Express on 23/05/2024. The article talks about the Indian President’s recent emphasis on the vital role of tribal knowledge in forest conservation and climate change mitigation, urging Indian Forest Service officers to integrate traditional wisdom with modern practices.

**For Prelims:** [Tribes in India](#), [Forests](#), Bhotias of Central Himalayas, Kadars tribes of South India, Wancho and Nocte tribes of Arunachal, [IUCN Red List](#), Scheduled Tribes and Other Traditional Forest Dwellers (Recognition of Forest Rights) Act, 2006, [Lantana camara](#).

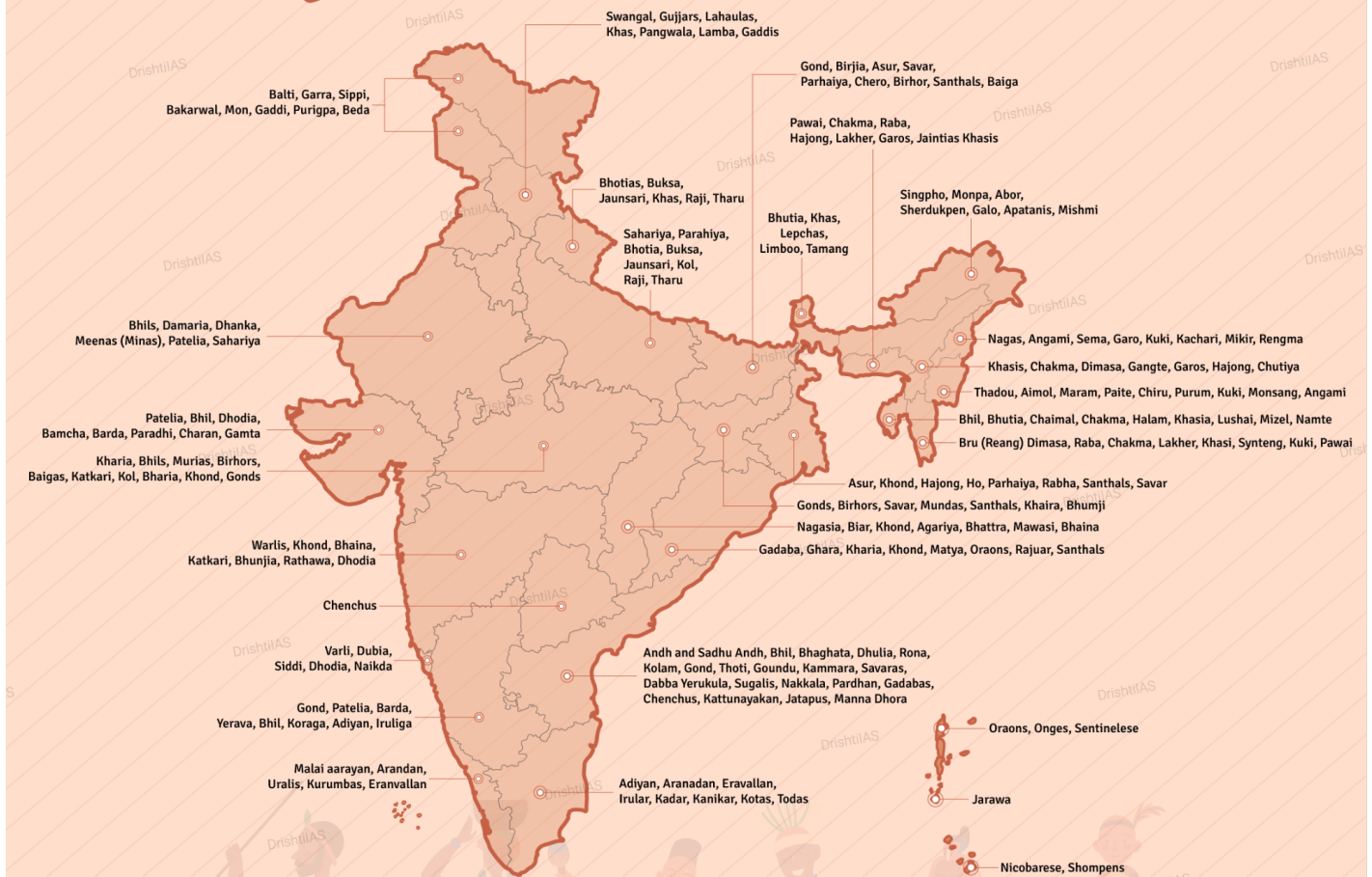
**For Mains:** Key Challenges Encountered by Tribals in India, Major Challenges Related to Forests in India, Integration of Tribal Empowerment with Forest Conservation.

For centuries, [tribal communities](#) have lived in harmony with nature, preserving the **delicate balance of forests and their rich biodiversity**. [Forests](#) are the lungs of our planet, providing essential ecosystem services and sustaining life on Earth. However, the relentless pursuit of development and industrialization has often come at the cost of environmental degradation, leading to the rapid depletion of forest resources.

As we confront the pressing challenges of climate change and environmental degradation, it is imperative that we embrace the **wisdom of tribal communities and integrate their traditional ecological knowledge into modern conservation efforts along with their empowerment**. By learning from their sustainable practices and involving them in decision-making processes, we can forge a path towards a more sustainable future.

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# Major Tribes in India



- STs constitute **8.6% of the population of India** (Census 2011). Draft National Tribal Policy, 2006 records **698 STs** in India.
- **Particularly Vulnerable Tribal Groups (PVTGs)** are more vulnerable among the tribal groups. Among the 75 listed PVTGs, the highest number is found in Odisha.
- **Bhil is the largest tribal group** (38% of the total scheduled tribal population of India) followed by the Gonds.
- **Madhya Pradesh has the highest tribal population** in India (Census 2011).
- The **Santhal** are the oldest tribes in India. The Santhal system of governance, known as **Manjhi-Paragana**, can be compared to local self-governance.
- According to the Scheduled Castes and Scheduled Tribes list (modification orders), 1956, the inhabitants of **Lakshadweep** who and both of whose parents were born in these islands are treated as STs.
- **Article 342** of the Constitution prescribes procedure to be followed for specification of STs.
- **Article 275** provides for the **grant of special funds** by the Union Government to the State Government for promoting the welfare of Scheduled Tribes and providing them with a better administration.

## What Roles Tribal Population Play in Forest Conservation?

- **Sustainable Resource Utilization:** Tribal communities have developed sustainable methods of **resource extraction from forests**.
  - Every resource collection practice done by **Kadars tribes of South India**, whether honey, firewood, resin, or herbs, is designed to allow for regeneration.
  - The **Bhotias of Central Himalayas** inspect the maturity of leaves before harvesting medicinal plants to prevent overharvesting.
- **Preservation of Sacred Groves:** Many tribes consider certain forest areas as sacred groves dedicated to folk deities.
  - The **Garasia tribes in Sirohi district, Rajasthan** have preserved patches of forests termed sacred groves, protecting threatened plant species listed in the [IUCN Red List](#).
- **Rotational Farming and Grazing:** Tribes like the **Gond, Pradhan, and Baiga of Madhya**

**Pradesh** practice **Utera farming**, where the next crop is sown before harvesting the primary one, utilizing existing soil moisture.

- They also follow the **Badi cropping system**, planting fruit trees along the periphery to prevent soil erosion.
- **Sustainable Fishing Practices:** Unlike harmful methods like **dynamiting**, tribes employ sustainable **fishing** techniques.
  - The **Wancho and Nocte tribes** of Tirap district, Arunachal Pradesh create obstructions in streams using bamboo and stones to trap fish, distributing the catch among the community (**Bheta method**).
- **Wildlife Protection through Beliefs and Totems:** Tribal beliefs and totems restrict the culling of certain animals and plants.
  - For the **Adi tribes of Arunachal Pradesh**, tigers, sparrows, and pangolins are well-wishers of humankind and are not hunted.
- **Community-based Conservation Efforts:** Some tribes have declared parts of their forest land as "**Community Conserved Areas**" governed by locals.
  - The **Idu Mishmis** have taken this step, while the **Bishnoi Tiger Force**, an environmental campaign group, actively fights against poaching and rescues injured animals in Rajasthan.

## What are the Key Challenges Encountered by Tribals in India?

- **Land Alienation and Displacement:** Tribal communities have faced widespread displacement due to various development projects, such as **mining, dams, and infrastructure projects**, leading to the loss of their traditional lands and disruption of their way of life.
  - For instance, the **Dongria Kondh tribes persons** of Odisha allege they have been unfairly targeted for resisting **bauxite mining plans in Niyamgiri Hills**.
- **Lack of Implementation of Forest Rights Act:** The **Scheduled Tribes and Other Traditional Forest Dwellers (Recognition of Forest Rights) Act, 2006**, aimed to recognize the rights of forest-dwelling communities over land and resources.
  - However, its implementation has been **slow and ineffective**, with many tribes facing delays, harassment, and illegal evictions.
  - For example, in **2019**, the Supreme Court ordered the eviction of **over 1 million forest-dwelling families**, including tribal communities.
- **Threats to Traditional Livelihood Practices:** Traditional livelihood practices of tribal communities, such as shifting cultivation, hunting, and gathering, are increasingly under threat due to conservation policies and restrictions imposed by forest departments.
  - The **Van Gujjars**, a semi-nomadic pastoral community in the **Himalayas**, have faced attempts by forest departments to restrict their entry into forests, which is essential for their transhumance practices.
- **Loss of Traditional Knowledge and Cultural Erosion:** With the younger generation of tribals migrating to urban areas in search of better opportunities, there is a risk of losing the traditional knowledge and practices passed down through generations.
  - This **erosion of cultural identity and knowledge systems** poses a significant challenge to the conservation of forests and biodiversity.
- **Impact of Climate Change:** Tribal communities, heavily dependent on natural resources, are among the most vulnerable to the impacts of climate change.
  - For instance, the **Khasi tribe in Meghalaya** has witnessed a decline in their traditional agricultural practices due to changing rainfall patterns and temperature increases.

## What are the Major Challenges Related to Forests in India?

- **Deforestation and Habitat Loss:** India has witnessed a massive surge in deforestation, ranking **second only after Brazil** between 2015 and 2020, according to a report by **Utility Bidder**.
  - The primary reasons for deforestation include expanding human settlements, infrastructure development, and conversion of forest land for agriculture and mining activities.
  - For example, the construction of the **Mumbai-Ahmedabad High-Speed Rail project** is expected to result in the cutting of over **21,000 mangrove trees** in Maharashtra.
- **Illegal logging and Timber Trade:** **Illegal logging** and the associated timber trade continue to pose a significant threat to India's forests.
  - The northeastern states, particularly **Arunachal Pradesh**, have witnessed rampant illegal

- logging activities, leading to the degradation of precious forest resources.
- In January 2024, a timber-loaded truck was seized in **Arunachal Pradesh**.
- **Human-Wildlife Conflicts:** As human settlements encroach upon forest areas, the instances of human-wildlife conflicts have increased.
  - **Elephants, tigers, and other animals** frequently stray into human habitations, leading to loss of life and property on both sides.
  - For instance, 3938 human lives lost to wild elephant attacks between **2014-2022**, while several elephants were also killed in retaliation.
- **Invasive Species:** The introduction of invasive alien species poses a significant threat to the native flora and fauna of Indian forests.
  - **Lantana camara**, a notorious invasive shrub, has invaded vast areas of forests, particularly in southern India, outcompeting native species and altering the ecosystem.
  - The **Nilgiri Biosphere Reserve in the Western Ghats** is one of the largest impacted invasion hotspot areas, dominated by Lantana camara.
- **Forest Fires:** Forest fires, both natural and human-caused, have become a significant concern in India.
  - Based on the forest inventory records, **54.40%** of forests in India are exposed to occasional fires.
  - These fires not only destroy valuable forest resources but also contribute to air **pollution and greenhouse gas emissions**.
- **Climate Change:** Climate change is emerging as a significant threat to Indian forests, with rising temperatures, erratic rainfall patterns, and extreme weather events all contributing to the stress on forest ecosystems.
  - For example, the **Western Ghats**, a biodiversity hotspot, is predicted to experience significant shifts in vegetation patterns due to climate change, with the **potential loss of several endemic species**.

## What Measures can be Adopted to Integrate Tribal Empowerment with Forest Conservation?

- **Eco-tourism Initiatives:** Promoting eco-tourism initiatives led by tribal communities can provide them with alternative livelihood opportunities while preserving their cultural heritage and traditional knowledge.
  - The **Khonoma village in Nagaland, managed by the Angami tribe**, is a successful example of community-based eco-tourism, where the tribe has preserved their traditional practices and forests while generating income from tourism.
- **Tribal Forest Guardians Program:** Implementing a "Tribal Forest Guardians" program, where members of tribal communities are trained and employed as forest guards or eco-guides.
  - This approach can **leverage their intimate knowledge** of the local ecosystems, promote ownership, and provide sustainable livelihoods.
- **Tribal Knowledge Banks:** Documenting and integrating traditional ecological knowledge of tribal communities into modern conservation strategies.
  - For instance, the sustainable agricultural practices of the **Apatani tribe in Arunachal Pradesh**, such as their **rice-fish cultivation system**, can be studied and adapted in other regions.
  - It can also provide valuable insights into identifying and conserving rare and medicinal plant species.
- **Forest Product Value Addition and Marketing:** Establishing value-addition and marketing initiatives for forest products collected by tribal communities.
  - This could involve setting up **processing units for products like medicinal plants, honey, and handicrafts**, as well as creating direct market linkages for these value-added products.
  - This approach can provide sustainable livelihoods while incentivizing the conservation of forest resources by the tribes.
  - **Hakki Pikki tribe's Adiwasi Herbal Hair Oil** can be an excellent role model.
- **Participatory Forest Management:** Promoting participatory forest management models, where

tribal communities are actively involved in decision-making processes related to forest conservation and management.

- The **Joint Forest Management (JFM) program** in India can be strengthened by ensuring greater representation and decision-making powers for tribal communities, recognizing their traditional knowledge and practices.

**Drishti Mains Question:**

Discuss the role of tribal communities in forest conservation and the sustainable management of natural resources. Provide examples to support your answer.

**UPSC Civil Services Examination, Previous Year Question (PYQ)**

**Prelims:**

**Q.1 Consider the following pairs: (2013)**

	<b>Tribe</b>	<b>State</b>
1.	Limboo (Limbu)	Sikkim
2.	Karbi	Himachal Pradesh
3.	Dongaria Kondh	Odisha
4.	Bonda	Tamil Nadu

**Which of the above pairs are correctly matched?**

- (a) 1 and 3 only
- (b) 2 and 4 only
- (c) 1, 3 and 4 only
- (d) 1, 2, 3 and 4

**Ans: (a)**

**Q.2 Consider the following statements about Particularly Vulnerable Tribal Groups (PVTGs) in India: (2019)**

1. PVTGs reside in 18 States and one Union Territory.
2. A stagnant or declining population is one of the criteria for determining PVTG status.
3. There are 95 PVTGs officially notified in the country so far.
4. Irular and Konda Reddi tribes are included in the list of PVTGs.

**Which of the statements given above are correct?**

- (a) 1, 2 and 3
- (b) 2, 3 and 4
- (c) 1, 2 and 4
- (d) 1, 3 and 4

**Ans: (c)**

**Q. 3 Under the Scheduled Tribes and Other Traditional Forest Dwellers (Recognition of Forest Rights) Act, 2006, who shall be the authority to initiate the process for determining the nature**

**and extent of individual or community forest rights or both? (2013)**

**(a)** State Forest Department

**(b)** District Collector/Deputy Commissioner

**(c)** Tahsildar/Block Development Officer/Mandal Revenue Officer

**(d)** Gram Sabha

**Ans: (d)**

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