

The Legal Landscape of AI Inclusion: Safeguarding the Interests of Tribal Gen Z

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Abstract:

Though its benefits are not evenly distributed and frequently avoid underserved communities like tribal populations, artificial intelligence (AI) is revolutionising education, healthcare, governance, and employment. With an emphasis on tribal Gen Z—those born between 1997 and 2012—who face difficulties like low digital literacy, infrastructure deficiencies, socioeconomic disadvantages, and cultural barriers, this paper explores the legal and policy environment of AI inclusion in India. To determine their applicability to tribal youth, the study examines current laws and policies, such as the Indian Constitution, the IT Act of 2000, the Digital Personal Data Protection Act of 2023, the Digital India initiative, the National Strategy for Artificial Intelligence (NITI Aayog, 2020), the National Education Policy of 2020, and PM-WANI. The potential of AI and the obstacles to access are demonstrated by case studies from Maharashtra. The study outlines specific policy interventions, inclusive AI design, and skill development initiatives to empower tribal Gen Z and guarantee fair participation in AI-driven ecosystems. These strategies address issues like algorithmic bias, a lack of legal knowledge, and exclusion from digital opportunities.

Keywords: Artificial Intelligence (AI), Gen Z, Tribal youth, Digital inclusion

Introduction:

Globally, artificial intelligence (AI) is changing society by impacting employment, healthcare, education, and governance. Even though AI has a lot of potential, its advantages are not equally shared and frequently avoid underserved groups, such as tribal communities. Gen Z,

commonly referred to as those born between 1997 and 2012, is a generation that was raised in an era where technology was a constant in daily life. The youth of India's indigenous communities, known as Tribal Gen Z, face difficulties that limit their access to AI-driven tools and services, including low levels of digital literacy, limited infrastructure, and socioeconomic disadvantages. These communities are also at risk for issues like algorithmic bias, data privacy violations, and exclusion from digital opportunities because current legal and policy frameworks frequently ignore their unique needs. To close the digital divide and empower underprivileged youth, ensuring AI inclusion for tribal Gen Z necessitates a sophisticated grasp of the legal and technological environments.

Objectives:

1. Examine laws and policies for AI inclusion of tribal Gen Z.
2. Identify challenges tribal youth face in accessing AI.
3. Suggest ways to ensure fair and safe AI access for tribal Gen Z.

Hypothesis:

1. Weak laws limit tribal Gen Z's access to AI.
2. Low digital skills and poor infrastructure block AI use.
3. Targeted policies and training improve AI participation.

Methodology:

This study uses a **qualitative-descriptive approach**, analyzing legal frameworks, policy documents, and scholarly literature on AI inclusion and tribal youth. Case studies from Maharashtra provide contextual evidence. Data analysis focuses on identifying challenges,

gaps, and potential interventions, combining theoretical insights with practical examples to recommend inclusive AI policies for tribal Gen Z.

Theoretical Framework:

The expanding corpus of research emphasises AI's transformative potential as well as the obstacles marginalised communities face in gaining access to it. The adoption of AI is hampered by tribal populations' frequent lags in technological literacy, infrastructure access, and awareness of digital rights, according to studies on digital inclusion (UNESCO, 2021). Research on Gen Z shows that this generation, being digitally native, is highly dependent on technology for education, employment, and social engagement; however, socio-economic and cultural barriers hinder tribal youth from fully participating in AI-driven systems (Dimock, 2019). Legal scholarship identifies shortcomings in India's AI governance, such as inadequate protections for marginalised groups and a lack of frameworks that address data privacy, algorithmic bias, and fair access (NITI Aayog, 2020).

According to international studies, ethical, legal, and policy interventions are essential to preventing the marginalisation of indigenous youth, highlighting the significance of rights-based approaches to AI inclusion. The necessity of specialised legislative actions to empower tribal Gen Z in AI ecosystems is highlighted by this review.

Legal and Policy Framework:

A strong legal and policy framework that considers both the technological and social aspects is necessary for the integration of tribal Gen Z into AI-driven systems. The protection of indigenous communities' rights to access technology, information, and education is emphasised globally in the United Nations Declaration on the Rights of Indigenous Peoples (UNDRIP, 2007). Fairness, transparency, and non-discrimination are also emphasised in UNESCO and OECD AI ethics guidelines as being crucial in preventing algorithmic bias against under-represented groups.

Scheduled Tribes in India are granted special rights and protections under the Constitution, such as employment, education, and political participation. However, the National Strategy for Artificial Intelligence (NITI Aayog, 2020) and the Digital India initiative primarily ignore the unique needs of tribal youth, leaving gaps in privacy protections, consent, and inclusion. Current legislation, like the Information Technology Act of 2000, offers a broad framework for cybersecurity and data protection, but it makes no mention of artificial intelligence or how it affects vulnerable groups. Scholars of law emphasise the necessity of specific legislation that guarantees AI systems are accountable, inclusive, and sensitive to cultural differences. This entails controlling algorithmic transparency, protecting private information, encouraging AI education in tribal communities, and offering easily accessible grievance procedures. By closing these gaps, tribal Gen Z will be able to take advantage of AI-driven opportunities fairly while preserving their cultural heritage and rights.

Laws and Policies in India Relevant to AI Inclusion and Tribal Youth –

1. Constitution of India – Articles 15, 46, and 338

Provides special protection to Scheduled Tribes in education, employment, and social development.

Ensures the state promotes the welfare of tribal communities and reduces inequalities.

2. Information Technology Act, 2000

Governs digital transactions, data privacy, and cybersecurity.

Offers a general framework for online protection but lacks AI-specific provisions.

3. Digital India Initiative (2015)

Focuses on expanding digital infrastructure, literacy, and e-governance.

Supports programs for marginalized communities but needs targeted AI inclusion measures.

4. National Strategy for Artificial Intelligence (NITI Aayog, 2020)

Outlines India's roadmap for AI development with an emphasis on inclusive growth, education, and skill-building.

Recommends leveraging AI for healthcare, agriculture, education, and social services, including for disadvantaged communities.

5. Digital Personal Data Protection Act, 2023

Establishes guidelines for data collection, consent, and usage.

Protects individuals, including tribal youth, from misuse of personal data in AI applications.

6. National Education Policy (NEP), 2020

Encourages digital learning, AI literacy, and skill development in schools, including tribal regions.

Promotes equitable access to technology-enabled education.

7. Pradhan Mantri Wi-Fi Access Network Interface (PM-WANI)

Provides public Wi-Fi infrastructure in rural and remote areas.

Facilitates digital connectivity for tribal youth, enabling access to AI-based learning and services.

Challenges Faced by Tribal Gen Z in AI Inclusion:

Tribal Gen Z in India faces a distinct set of obstacles that prevent fair access and participation, even in the face of artificial intelligence's (AI) expanding impact across industries. One of the main obstacles is still digital literacy. Due to insufficient educational resources and ignorance of AI-powered tools, many tribal communities have little access to technology. Youth are unable to effectively use AI in education, employment, or entrepreneurship due to a lack of training and guidance, even in situations where digital devices are readily available.

Exclusion is made worse by **socioeconomic limitations**. Tribal families frequently live in poverty, which restricts their access to computers, smartphones, and reliable internet connectivity—all of which are necessary for AI interaction. Tribal Gen Z is unable to engage in digital marketplaces, AI-based skill development initiatives, or online learning platforms without these resources.

Cultural and linguistic barriers also play a significant role. Indigenous languages, regional

dialects, and cultural contexts are not taken into account by many AI systems because they are created in mainstream languages. This causes alienation and limits tribal youth's ability to use AI tools. Another urgent issue is algorithmic bias; AI systems trained on data from the majority population frequently reinforce stereotypes and discriminate against under-represented groups, resulting in unfair outcomes in domains such as credit availability, employment, and education.

Data privacy and consent issues present additional risks. Due to their frequent ignorance of their rights regarding personal data, tribal youth are at risk of being exploited or misused in AI-driven applications. Additionally, there is still a lack of legal knowledge and access to justice. These communities frequently lack access to current data protection and AI governance laws, and bureaucratic obstacles and a lack of knowledge lead to underutilisation of grievance redressal procedures.

Finally, the **digital divide** between urban and tribal regions reinforces systemic exclusion. Even government initiatives such as Digital India and AI literacy programs struggle to reach remote areas, limiting the potential impact of AI on tribal Gen Z.

A multifaceted strategy is needed to address these issues, including improving digital infrastructure, encouraging AI education specific to tribal contexts, making sure AI design is linguistically and culturally inclusive, and fortifying legal protections. Policymakers and technologists can build an equitable AI ecosystem that empowers tribal Gen Z instead of further marginalising them by addressing these obstacles.

Case Studies:

1. AI-Driven Nutrition Assessment at Todsa Ashram School, Etapalli (Gadchiroli)

In 2023, Todsa Ashram School in Etapalli, Gadchiroli, implemented an AI-based system to evaluate the nutritional quality of meals provided to tribal students. The system captures images of students' plates and assesses meal quality, quantity, and potential malnutrition indicators. This initiative aims to enhance the

health and well-being of tribal youth, ensuring they receive adequate nutrition for their growth and development.

2. AI and Web Development Training for Tribal Youth in Gadchiroli:

In 2025, the Gadchiroli Police initiated a program to train tribal youth in AI, coding, and web development. The program focuses on equipping students with digital problem-solving skills, enabling them to tackle real-life challenges and prepare for future employment opportunities. This initiative empowers tribal Gen Z by providing them with the tools and knowledge to thrive in the digital age.

3. Digital Literacy and E-Learning in Pathardi Village

In Pathardi, Maharashtra, a community centre installed Wi-Fi and e-learning tools under the PM-WANI initiative. This effort aims to bridge the digital divide by providing tribal youth with access to online education and digital resources. By enhancing digital literacy, the initiative empowers tribal Gen Z to pursue educational and professional opportunities that were previously inaccessible.

4. AI Training Program for Tribal Youth in Palghar

In 2025, Maharashtra Chief Minister Devendra Fadnavis launched a program in Palghar to provide tribal youth with modern skills, including AI training. The initiative involves partnerships with 57 companies and focuses on industry-relevant training to prepare youth for emerging employment opportunities, particularly at the upcoming Vadhvan port. This program aims to equip tribal Gen Z with the skills necessary to succeed in the evolving job market.

Legal and Ethical Implications

There are serious ethical and legal issues with AI's inclusion for tribal Gen Z. Tribal youth are left vulnerable to algorithmic bias, privacy violations, and unequal opportunities because current legal frameworks in India, such as the IT Act and Digital India policies, offer broad guidelines on data protection and digital access

but lack specific provisions for AI. In terms of ethics, AI systems frequently mirror societal prejudices, and when they are trained primarily on data from the general population, they may marginalise tribal viewpoints, thereby perpetuating inequality. Due to their lack of legal knowledge, Tribal Gen Z members may unintentionally divulge personal information, leaving them vulnerable to abuse.

Ensuring algorithmic fairness, transparency, and accountability is essential to prevent discriminatory outcomes. Furthermore, integrating tribal voices in AI design and decision-making aligns with a rights-based approach, respecting cultural identity and community norms. Bridging these gaps requires legal safeguards, ethical AI policies, and awareness programs to empower tribal youth while protecting their rights in an increasingly AI-driven society.

Policy Interventions and Recommendations

To ensure equitable AI inclusion for tribal Gen Z, targeted policy interventions are essential. **Digital literacy programs** should be expanded in tribal regions, focusing on AI education, ethical usage, and data privacy awareness. **Infrastructure development**, including reliable internet access and provision of devices, is crucial to bridge the digital divide. AI systems must be **culturally and linguistically inclusive**, accommodating indigenous languages and local contexts to enhance usability. **Legal safeguards** should explicitly protect tribal youth from algorithmic bias, data misuse, and discrimination in AI applications. **Community participation** in AI policymaking and design can ensure that tribal perspectives are represented, aligning technology with local needs. Finally, **monitoring and grievance redressal mechanisms** should be established to address AI-related harms effectively. By implementing these measures, policymakers can empower tribal Gen Z, enabling them to benefit fully from AI-driven opportunities while safeguarding their rights and cultural identity.

Conclusion:

The study demonstrates that tribal Gen Z's access to AI is severely constrained by inadequate infrastructure, low digital literacy, and weak legal frameworks. Tribal youth are frequently unable to fully benefit from AI technologies due to socioeconomic limitations, linguistic and cultural barriers, and algorithmic biases. However, the evidence from Maharashtra case studies shows that how community-driven projects, skill development programs, and targeted policies can increase participation. A multifaceted strategy is needed to close these gaps, including enhancing legal protections for data and anti-discrimination, growing digital literacy and AI education initiatives, supplying the required devices and infrastructure, and creating AI systems that are inclusive of all cultures. Participatory inclusion is ensured by involving tribal communities in AI policymaking and monitoring. These steps will empower tribal Gen Z and allow them to have equal access to AI-driven social, economic, and educational opportunities while preserving their cultural identity and rights.

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