

वैज्ञानिक तथा औद्योगिक अनुसंधान परिषद
Council of Scientific and Industrial Research
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Anusandhan Bhawan, 2, Rafi Marg, New Delhi-110001

No. : 5-1(17)/2008-PD

दिनांक/Dated : 30.09.2025

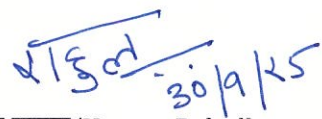
कार्यालय ज्ञापन / OFFICE MEMORANDUM

विषय : आदि वाणी - दुनिया का पहला एआई-संचालित आदिवासी भाषा सेतु उपकरण - के संबंध में ।

Sub : Adi Vaani – the world's first AI-powered tribal language bridge tool - reg.

अधोहस्ताक्षरी को यह कहने का निदेश हुआ है कि सक्षम प्राधिकारी ने सचिव, जनजातीय कार्य मंत्रालय, भारत सरकार द्वारा उपरोक्त विषय पर जारी अर्धशासकीय पत्र संख्या 9/AKA/2025-MoTA दिनांक 18 सितम्बर, 2025 को सभी सीएसआईआर प्रयोगशालाओं/संस्थानों/इकाइयों को सूचना, मार्गदर्शन और अनुपालन के लिए अग्रेषित करने की स्वीकृति प्रदान की है।

The undersigned is directed to state that the Competent Authority has accorded approval to forward the D.O letter No. 9/AKA/2025-MoTA dated 18th September, 2025 on the above subject issued by Secretary, Ministry of Tribal Affairs, Government of India to all CSIR Labs./Instts./Units for information, guidance and compliance.



(कुमार राहुल/Kumar Rahul)

उप सचिव (नीति प्रभाग)/Deputy Secretary (PD)

संलग्न/Encl. : यथोपरि/As above

प्रतिलिपि/Copy to:

- 1) सी.एस.आई.आर. की सभी राष्ट्रीय प्रयोगशालाओं/संस्थानों/मुख्यालय/एककों के निदेशक/प्रधान
The Directors/Heads of all CSIR National Labs./Instts./Hqrs./Units
- 2) सी.एस.आई.आर. वेबसाइट/ CSIR Website
- 3) कार्यालय प्रति/Office copy



विभु नायर, आई.ए.एस.
सचिव

Vibhu Nayar, I.A.S
Secretary

पीएम जनमन
प्रधान मंत्री जनजाति आदिवासी
न्याय महा अभियान

भारत सरकार
जनजातीय कार्य मंत्रालय
नई दिल्ली
Government of India
Ministry of Tribal Affairs
New Delhi

DO.No.9/AKA/2025-MoTA

Date:18.09.2025

Dear Colleagues,

As you are aware, the Hon'ble Prime Minister launched the *Adi Karmayogi Abhiyan* and *Adi Sewa Parv* on 17th September in Madhya Pradesh. The *Adi Sewa Parv* (17th September – 2nd October 2025) is being observed as part of the *Adi Karmayogi Abhiyan* under *Janjatiya Gaurav Varsh*.

The Ministry of Tribal Affairs is pleased to announce the launch of the Beta version of *Adi Vaani* — the world's first AI-powered tribal language bridge tool (mobile app and web portal). Developed indigenously at one-tenth of the global cost, this innovation marks a historic step towards inclusive technology.

Adi Vaani can be effectively utilized during *Adi Sewa Parv* to reduce the communication gap between officers and tribal communities arising out of language barriers. In its first phase, **Santali, Mundari, Bhili, and Gondi** have been developed, with **Garo and Kui** currently under progress. The mobile application is **available for download on the Google Play Store** for immediate use.

Key Features

- Real-time translation (text, speech, OCR) in tribal languages
- Speech-to-Speech and Speech-to-Text for service delivery in schools, health centres, and panchayats
- OCR of prescriptions, textbooks, and notices (85–96% accuracy)
- Text-to-Speech (male & female voices) for Santali, Bhili, Mundari, and Gondi

Potential Use Cases Across Ministries/Departments

1. Education & Literacy

- Bilingual teaching in Schools, Colleges in Tribal dominated areas → reduces dropout rates (aligned with NEP 2020)
- Digital primers, e-learning apps, and gamified tools in tribal mother tongues
- Teacher training in local tribal languages → improved comprehension in early grades
- Integration of *Adi Vaani* into DIKSHA and SWAYAM → wider accessibility for learners

2. Healthcare & Social Welfare

- Telemedicine consultations in Santali, Bhili, Gondi → bridges doctor–patient communication gaps
- Health awareness campaigns (e.g., sickle cell anaemia) in tribal languages → wider reach
- AI-generated support for midwives, ANMs, and ASHAs
- Delivery of health advisories (vaccination, maternal health, hygiene) in native dialects

3. Welfare & Service Delivery

- Explaining welfare schemes in tribal languages → improved enrolment and reduced leakages
- AI-powered village information kiosks at *Adi Seva Kendras* → access to entitlements and grievance redressal
- Training frontline workers (panchayat staff, Revenue, Health anganwadi workers) in tribal languages
- Real-time translation during *Jan Bhagidari* campaigns → stronger citizen participation
- Application under *Tribal Village Vision 2030* → bridges official–community language gaps
- Patient Interactions, Health Messaging, Behaviour Change Communication

4. Cultural Preservation & Revival

- Digitization of folklore, songs, rituals, and oral histories into the *Adi Vaani* repository
- Virtual museums and digital libraries in tribal dialects
- AI-driven cultural archives and research corpus
- Youth-led content creation (short films, podcasts, animation)
- Access to Tribal literature, songs and folk lore.

5. Economic Inclusion & Entrepreneurship

- Tourism guides in Santali, Gondi, Mundari and Bhili → promotes eco-tourism
- Voice-enabled e-commerce for tribal crafts → expands market access
- AI-powered financial literacy for SHGs and entrepreneurs
- Content creation training for tribal youth → new livelihood avenues


This initiative, aligned with the **UNESCO International Decade of Indigenous Languages (2022–2032)**, has already been piloted in Santali, Bhili, Gondi, and Mundari, with more tribal languages under development.

I encourage your Ministry/Department to **identify schemes and service-delivery platforms where *Adi Vaani* can be integrated** to enhance outreach, inclusivity, and effectiveness. The Ministry of Tribal Affairs will be glad to work with your teams in customizing sector-specific solutions. As a first step, please spread the message so that more and more officials in the states make use of *Adi Vaani* and provide feedback.

Together, let us ensure that **no voice goes unheard and no culture is left behind.**

Warm regards,

Yours sincerely,

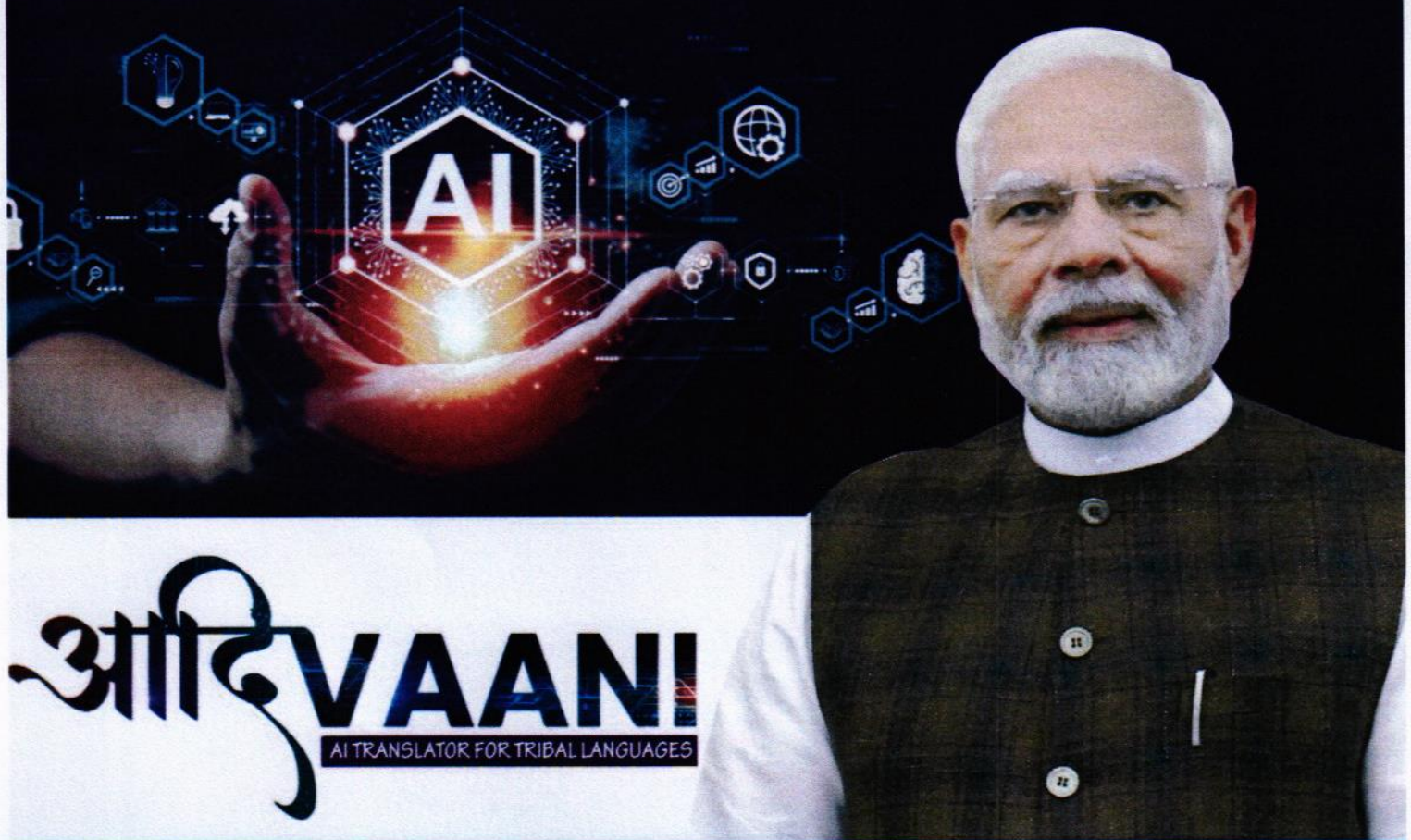

(Vibhu Nayar)

All Secretaries Government of India

Enclosures:

1. *Adi Vaani Report*
2. *Infographics*

BRIEF REPORT



आदिVAANI

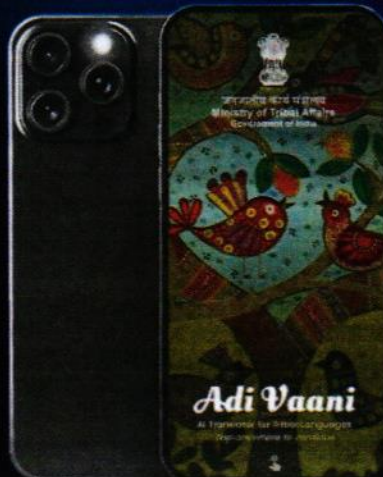
AI TRANSLATOR FOR TRIBAL LANGUAGES

World's First AI-Powered Tribal Language Bridge Tool



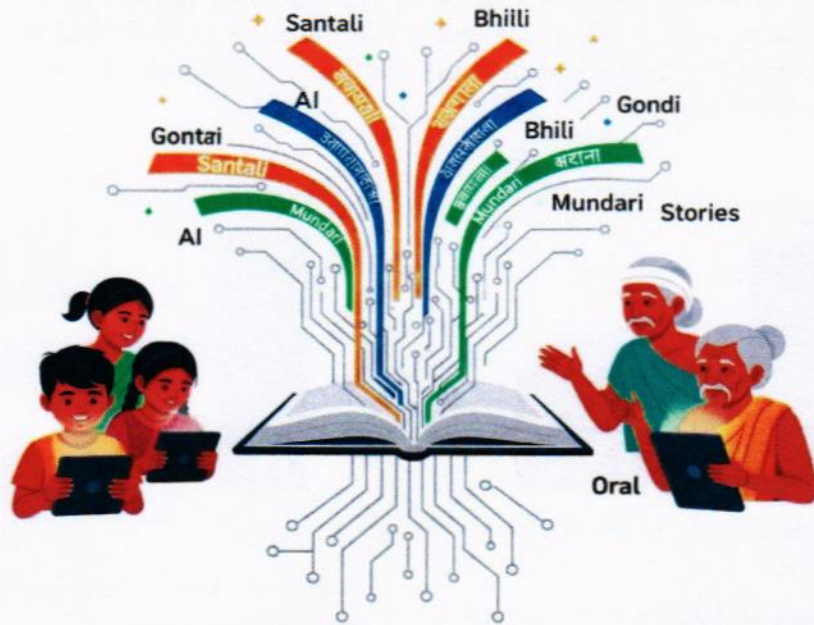
Languages in the Beta Launch

Santali | Mundari | Bhili | Gondri | Garo | Kui



Adi Vaani

Translating Words, Transforming World



Adi Vaani

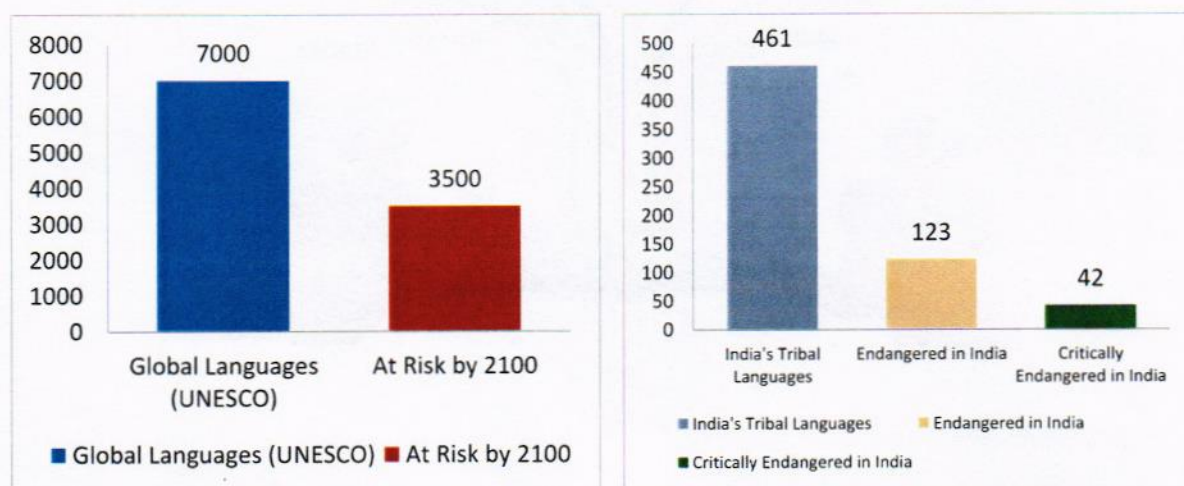
World's First AI-Powered Tribal Language Bridge Tool

• Safeguarding Voices • Strengthening Inclusion • Leading Global Innovation

Executive Summary

Languages are not merely tools of communication—they are living repositories of history, identity, and knowledge. Yet, the world faces a linguistic extinction emergency. UNESCO estimates that by 2100, nearly **half of the world's 7,000 languages may vanish**, erasing oral traditions, indigenous jurisprudence, ecological knowledge, and cultural heritage.

India, home to **461 tribal languages and 71 mother tongues spoken by over 100 million citizens**, is at the heart of this global challenge. But the crisis is stark: **123 tribal languages are endangered and 42 critically endangered**—with *Great Andamanese*, for instance, having fewer than 50 speakers left.



India's Response: Adi Vaani – The World's First Tribal AI Language Bridge

Under the visionary leadership of the Hon'ble Prime Minister, the Ministry of Tribal Affairs has conceptualized Adi Vaani during 100 days agenda (2024), Ministry of tribal affairs has launched beta version of **Adi Vaani**, the world's first **AI-powered tribal language bridge tool** (app and web portal). Developed indigenously at **one-tenth of global cost**, Adi Vaani currently supports **Santali, Mundari, Gondi, and Bhili**, with **Kui and Garo** to follow shortly.

Adi Vaani is more than a technological innovation; it operationalizes India's ethos of **Sabka Saath, Sabka Vikas, Sabka Vishwas, Sabka Prayas**—ensuring that no voice is left unheard, and no culture left behind.

More than Translation – A National and Global Mission

Adi Vaani is designed as:

- **A digital bridge for heritage** – safeguarding endangered languages for future generations.
- **A policy enabler** – ensuring inclusive governance through mother-tongue accessibility.
- **An empowerment tool** – bridging gaps in education, health, and livelihoods.

- **A global innovation** – positioning India as a pioneer in leveraging AI for cultural preservation and social good.

“Crucially, Adi Vaani creates a two-way bridge: it gives tribal communities global visibility, while opening the door for the world to access and engage with India’s vibrant tribal languages and literature—and vice versa.”

Built in India, for the World

Envisioned in the spirit of **Make in India**, Adi Vaani exemplifies **frugal innovation with global relevance**.

- **MoTA and Network of TRIs** for large-scale data curation and language authentication.
- **India’s AI** consortium of IIT Delhi, BITS Pilani, IIIT Hyderabad, and IIIT Naya Raipur for technical development.

What emerged is not just a technology platform but a **movement of capacity-building**. The project engaged professors undergraduate, postgraduate, and doctoral researchers, transforming Adi Vaani into a **living classroom** that built the next generation of AI leaders, while simultaneously empowering tribal youth as digital ambassadors of their culture.

Why it is transformative:

- **First of its kind globally** – No comparable model exists at this scale for endangered tribal languages.
- **Exceeds global benchmarks** – Adi Vaani achieves **BLEU scores up to 70 and ChrF2 up to 81**, outperforming models like **Meta’s NLLB and AI4Bharat IndicTrans**.
- **High OCR accuracy (85–96%)** for low-resource tribal scripts, surpassing international baselines (70–90%).
- **Inclusive Text-to-Speech** in male and female voices for Santali, Bhili, Mundari, and Gondi – rare in global systems.

India’s Global Contribution

Adi Vaani embodies India’s leadership in inclusive AI—**frugal yet powerful, locally rooted yet globally relevant**. By uniting knowledge systems, community wisdom, and cutting-edge AI, it ensures that the voices of the most marginalized will not only survive but also resonate across the globe.

Adi Vaani is the **world’s first AI-powered tribal language bridge**. It combines **frugality, talent, and vision** to build a national movement in AI that is rooted in India but designed for the world. More than technology, it is a **capacity-building ecosystem**, nurturing AI innovators from IITs and empowering social leaders from tribal areas.

1. WHY ADI VAANI

The Challenge	The Solution – Adi Vaani
Preservation of endangered languages – 123 tribal languages are endangered and risk extinction, erasing centuries of wisdom and identity.	AI-driven digital database and translation pipeline to document, preserve, and revitalize languages, making them accessible globally.
Education – Tribal children face high dropout rates when taught only in dominant state/official languages.	World’s first AI-powered tribal language Bridge Tool enabling mother-tongue-based learning, improving retention and foundational literacy.
Healthcare – Medical prescriptions, advisories, and awareness campaigns are inaccessible in native tongues, weakening service delivery.	Real-time AI translation (text, speech, OCR) ensures last-mile access to healthcare services and life-saving communication.
Governance – Welfare schemes and entitlements remain poorly understood due to language barriers.	Instant translation, feedback, and grievance redressal in local languages, making governance more participatory and inclusive.
Culture – Songs, folklore, rituals, and oral traditions risk vanishing without systematic documentation.	Corpus-based repository safeguarding dictionaries, primers, folklore, and oral heritage for future generations.
Market Access & Entrepreneurship – Tribal artisans and producers struggle to access wider markets due to language barriers.	Language bridge for e-commerce and entrepreneurship, enabling artisans to connect with buyers and scale livelihoods.
Cultural Pride & Heritage – Without recognition, tribal identity risks dilution in the face of globalization.	Promotion of Janjatiya Gaurav – blending heritage with modern innovation to instill pride and visibility at national and global levels.

2. Design of Adi Vaani

Adi Vaani was conceived as part of the Ministry of Tribal Affairs’ **100-Day Agenda (2024)**, under the visionary leadership of the Hon’ble Prime Minister. It reflects the **Make in India ethos**—a frugal, self-sustaining, and future-ready ecosystem that not only preserves tribal languages but also strengthens India’s national AI capacity.

Development & Consortium: Ministry-led Consortium:

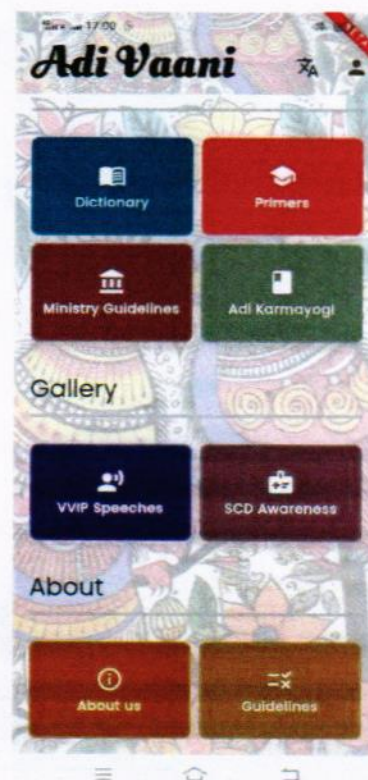
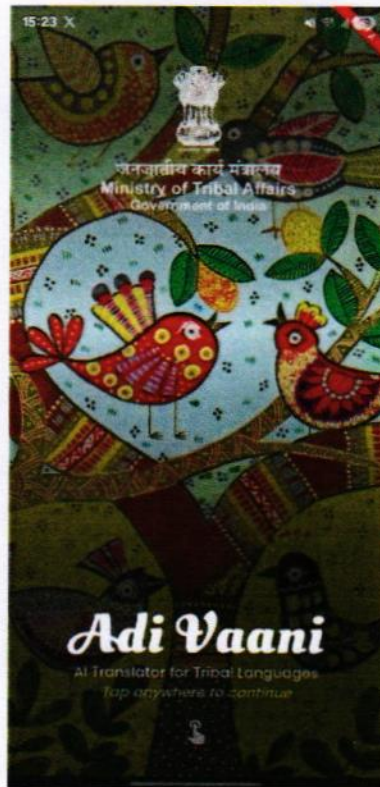
- **MoTA** – Policy guidance, vision, and techno-social oversight
- **Technical Institutes** – IIT Delhi, IIIT Hyderabad, IIIT Naya Raipur, BITS Pilani
- **Tribal Research Institutes (TRIs)** – Jharkhand, Odisha, Madhya Pradesh, Chhattisgarh (corpus creation, validation, and community workshops)

Development Methodology

1. **Language Mapping** – Identification and documentation of endangered tribal languages.
2. **Corpus Collection** – TRIs and tribal linguistic experts built a scientific corpus of **6.7 lakh bilingual sentences**.
3. **AI Model Development** – Optimization of **IndicTrans2** and **NLLB** for low-resource tribal languages.
4. **Human-in-the-Loop Validation** – Continuous review by tribal experts ensured both linguistic precision and cultural authenticity.

5. **Pilot Deployment** – Beta launch in Santali, Bhili, Gondi, and Mundari.
6. **Global Integration** – Two-way access enabling researchers and international institutions to collaborate.

Through this process, **Adi Vaani evolved into a living classroom**—training the next generation of AI leaders while empowering tribal youth as digital and social leaders within their communities.



3. Adi Vaani Features – App & Website

One Platform, Many Possibilities.

Adi Vaani brings cutting-edge AI tools together with cultural authenticity to ensure accessibility, inclusivity, and preservation.

Feature	What It Does	Impact / Utility
Speech-to-Text	Converts real-time voice input into translated text.	Enables accessibility and inclusion for non-literate users; supports education and governance.
Speech-to-Speech	Provides instant spoken translations for conversations.	Facilitates service delivery, governance outreach, and community interaction.
Optical Character Recognition (OCR)	Translates signs, prescriptions, textbooks, and official documents using camera input.	Enhances healthcare access, literacy, and civic participation.
Learning & Preservation Tools	Offers bilingual dictionaries, primers, and curated repositories of tribal knowledge.	Safeguards linguistic heritage, promotes learning, and supports intergenerational transfer.
Health, Civic & Education Repository	Provides translated subtitles for VVIP speeches, awareness campaigns, and scheme guidelines.	Strengthens inclusivity, policy outreach, and citizen awareness.
Community Validation (Human-in-the-Loop AI)	Translation outputs validated by native speakers, educators, and TRIs.	Ensures cultural authenticity, accuracy, and community trust.
Scalability & Access	Available as mobile app, web portal	Ensures last-mile reach, nationwide adoption, and global replication.

Hindi

↔

Bhili

Translate from Hindi

Clear

🎤

Translate to Bhili

Copy

हमारे आज के निर्णय और कार्यकलाप, 21वीं सदी के भारत का स्वरूप निर्धारित करेंगे।

80/500

हमारे आज नी होस अने कामू 21 वीं सदी ना भारत नो सरूप नक् की करहु।

Translate

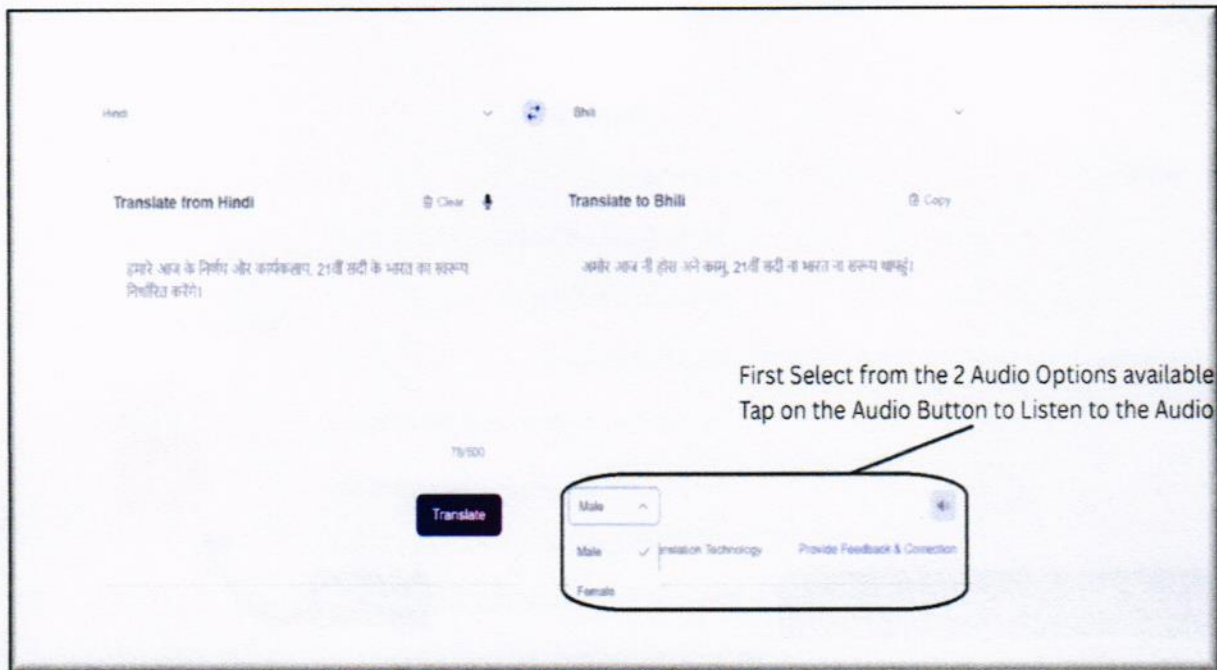
Male

🔊

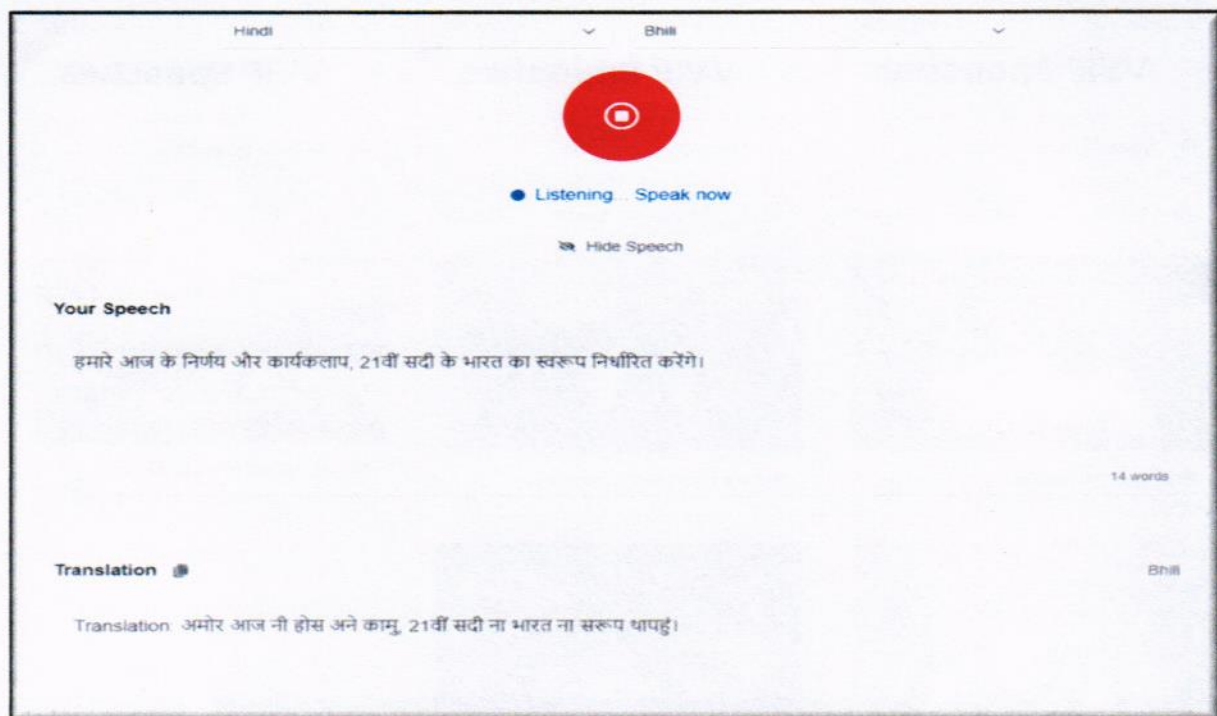
Powered by AI Translation Technology

Provide Feedback & Correction

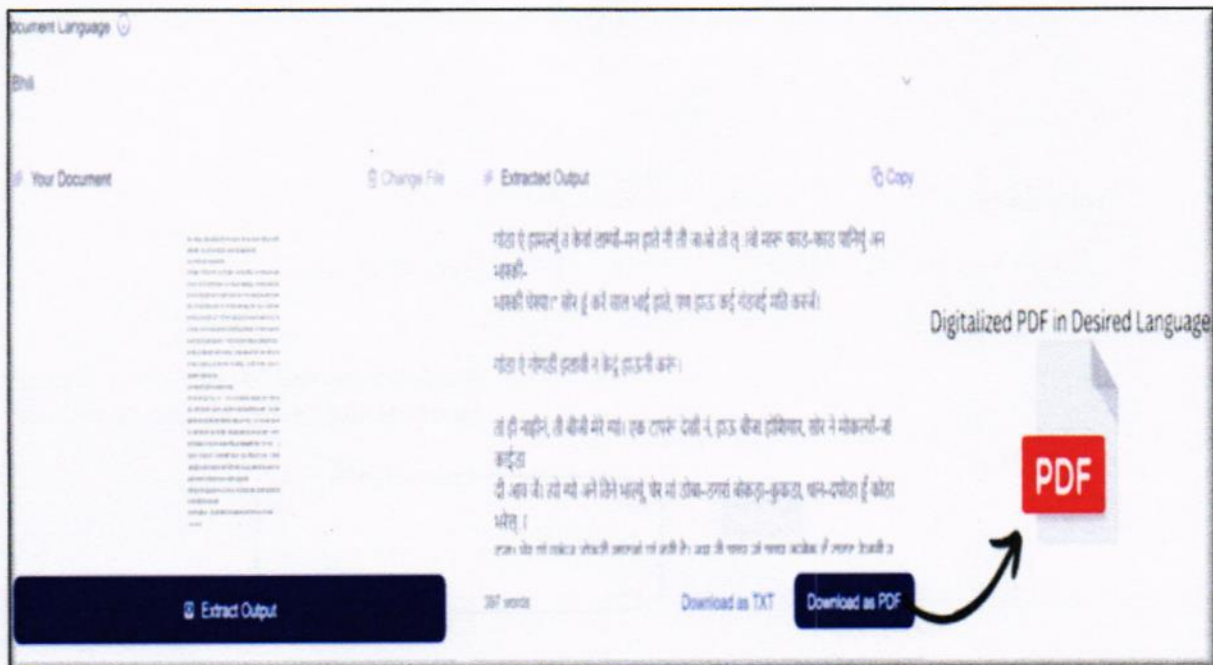
Text to Text



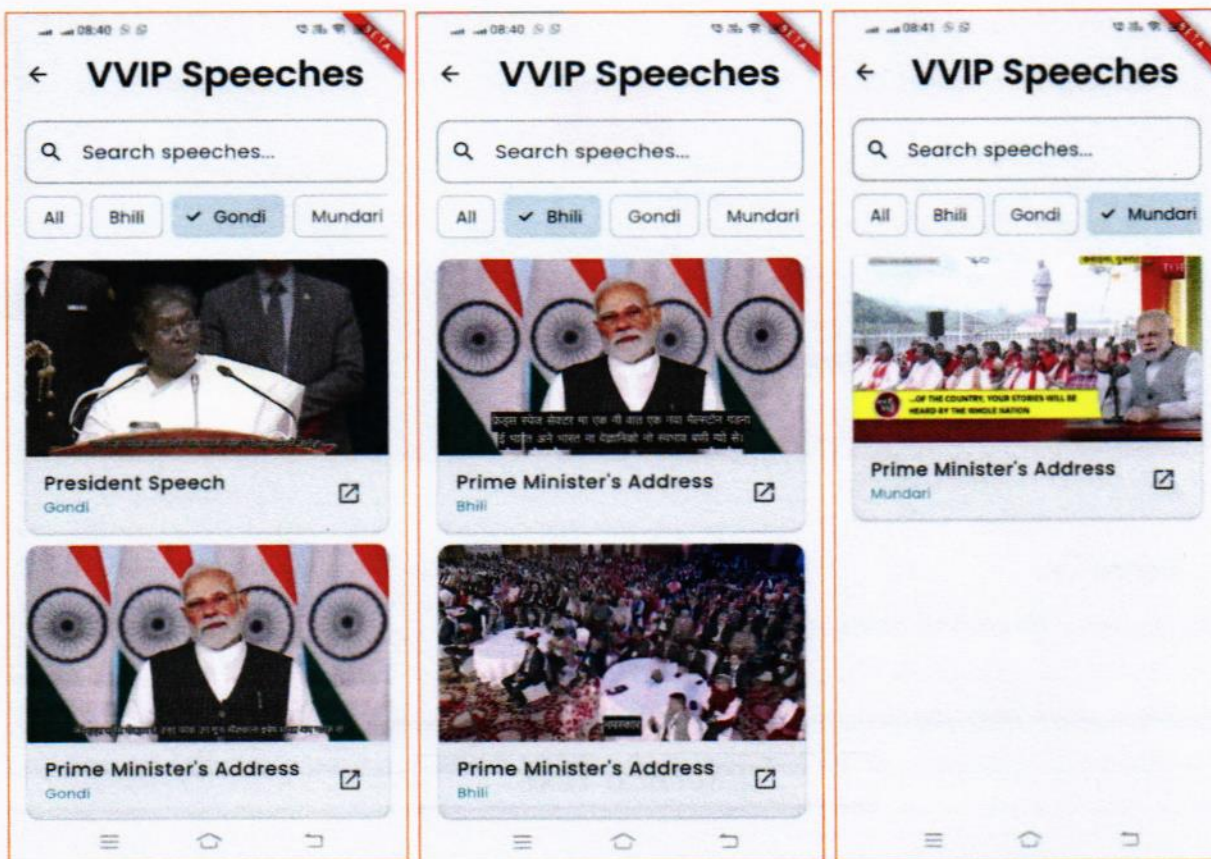
Text to Speech



Speech to Text



OCR

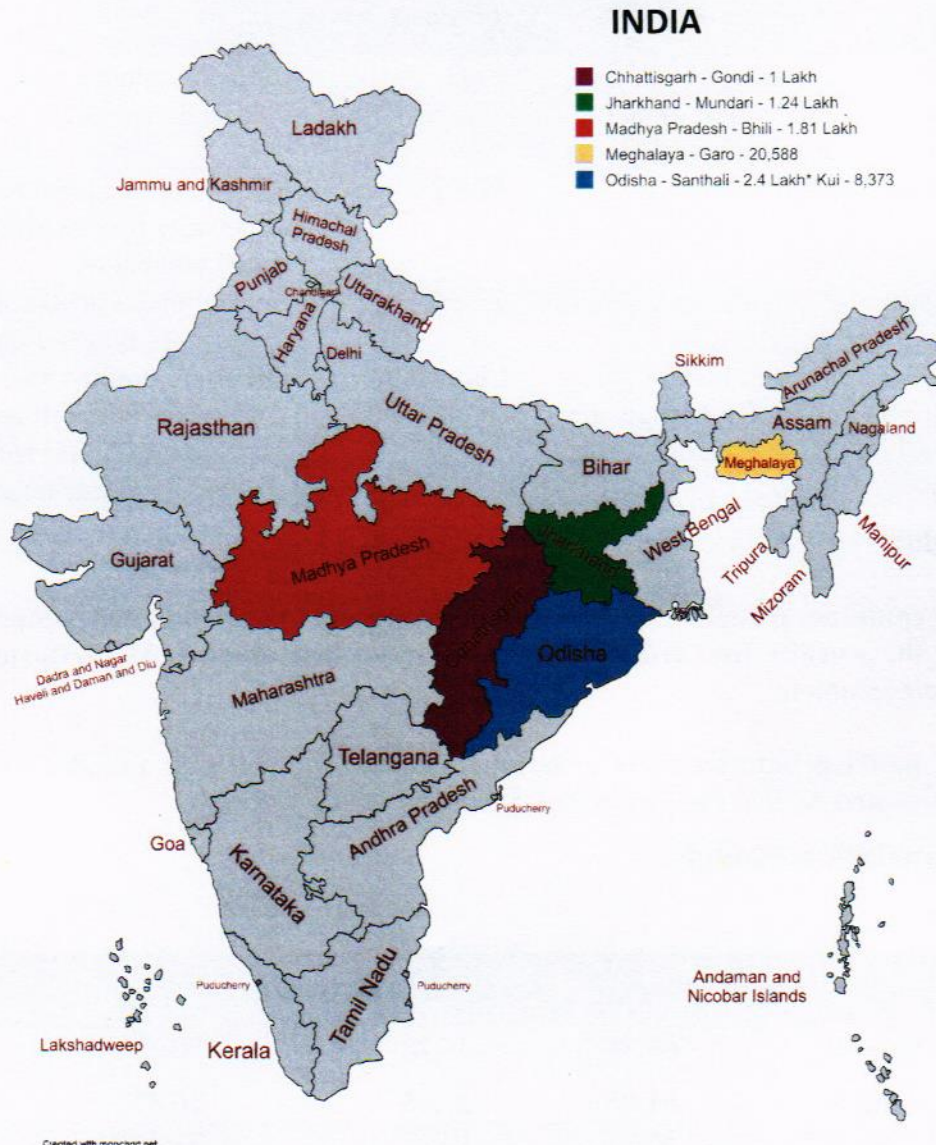


Speeches of Hon'ble President & Hon'ble Prime Minister

Mann Ki Baat in Tribal Languages


4. Corpus & Technology

Corpus (As of Aug 2025 – 6.7 lakh bilingual sentences in Bhili, Mundari, Gondi and Santali)



Technology Stack

- **AI Models:** IndicTrans2, NLLB (optimized for low-resource languages).
- **Speech Recognition & TTS:** Santali, Gondi, Bhili, Mundari operational.
- **OCR:** Scans textbooks, prescriptions, govt notices; 96% accuracy on low-resource scripts.
- **Corpus:** 6.7 lakh bilingual sentences in Phase I.
- **Human-in-the-loop AI:** Native speaker validation.
- **Consortium:** MoTA + IIT Delhi + IIITs + BITS + TRIs → **1/10th global cost.**
- **Performance:** BLEU scores up to **70** and ChrF2 up to **81** — surpassing global baselines.
- **Deployment:** Hybrid cloud + offline, ensuring accessibility and resilience.

 **OCR Accuracy:** Gondi (96.16%), Bhili (95.25%), Mundari (90.65%), Santali (85.84).

5. Model Performance – Benchmarking with the Best Model Performance

5A. Global Comparison

Parameter	Adi Vaani	Global Benchmark	Advantage
Cost per Language	Extremely low (~1/10th of global alternatives)	High	Frugal, scalable, cost-effective innovation
BLEU Score	9–70	12–22	Outperforms global models, especially for low-resource tribal languages
ChrF2 Score	25–81	25–35	Exceptional translation fidelity, capturing linguistic nuances
Text-to-Speech (TTS)	Male & female voices ready for 4 languages	Limited or single-voice	Inclusive, multi-voice experience supporting diversity
OCR Accuracy	85–96% across scripts	70–90%	High reliability for tribal scripts and low-resource languages

Key Insight:

Adi Vaani combines frugal innovation, high-performance AI, and global competitiveness, making it the world's first truly scalable, low-cost, high-fidelity AI platform for tribal language preservation.

It not only matches but exceeds international benchmarks, offering a model for inclusive, culturally rooted AI that can be replicated globally.

5B.1 Translation Models

Santhali

Translation Direction	ChrF2 (Normal)	BLEU (Normal)	ChrF2 (FLORES-200)	BLEU (FLORES-200)
Hindi → Santali	68.31	18.78	50.63	19.27
Santali → Hindi	61.05	21.45	66.57	43.66
English → Santali	31.05	15.42	34.54	7.22
Santali → English	25.89	16.78	49.00	22.80

Bhili

Translation Direction	ChrF2 (Normal)	BLEU (Normal)	ChrF2 (FLORES-200)	BLEU (FLORES-200)
Hindi → Bhili	57.71	32.47	50.63	19.27
Bhili → Hindi	72.44	55.69	66.57	43.66
English → Bhili	49.14	25.53	34.54	7.22
Bhili → English	65.58	47.99	49.00	22.80

Mundari

Translation Direction	ChrF2 (Normal)	BLEU (Normal)	ChrF2 (FLORES-200)	BLEU (FLORES-200)
Hindi → Mundari	68.31	18.78	50.63	19.27
Mundari → Hindi	61.05	21.45	66.57	43.66
English → Mundari	31.05	15.42	34.54	7.22
Mundari → English	25.89	16.78	49.00	22.80

Gondi

Translation Direction	ChrF2 (Normal)	BLEU (Normal)	ChrF2 (FLORES-200)	BLEU (FLORES-200)
Hindi → Gondi	45.36	15.00	50.63	19.27
Gondi → Hindi	41.28	14.20	66.57	43.66
English → Gondi	30.50	10.03	34.54	7.22
Gondi → English	29.50	9.80	49.00	22.80

5B.2 Text-to-Speech (TTS) Models

Language	Male TTS	Female TTS	Status
Santali	✓ Ready	✓ Ready	Completed
Bhili	✓ Ready	✓ Ready	Completed
Mundari	✓ Ready	🔄 In Progress	Under Development
Gondi	🎙️ Recording	🎙️ Recording	Ongoing

- Developed by **IIIT Hyderabad** with TRIs support.
- Covers **Santali, Mundari, Bhili, and Gondi**.
- Speech corpus creation underway for sustainability.

5B.3 Optical Character Recognition (OCR)

Language (Script)	CER (%)	WER (%)	Accuracy (100-CER)
Santali (Ol Chiki)	14.16	16.15	85.84%
Mundari (Devanagari)	9.35	13.94	90.65%
Bhili (Devanagari)	4.75	6.72	95.25%
Gondi (Devanagari)	3.84	5.91	96.16%

- Developed by **BITS Pilani** with TRIs.
- Enables translation of images containing tribal language text into editable formats.

5B.4 Benchmarking Against Existing Models

Model/System	BLEU (Range)	ChrF2 (Range)
AI4Bharat IndicTrans (2022)	12 – 22	25 – 35
Adi Vaani (Our Models)	9 – 70	25 – 81

Insight: *Adi Vaani* significantly outperforms baseline models (BLEU up to **70**, ChrF2 up to **81**) – especially for low-resource tribal languages.



6. Impact Pathways

Direct Reach (Phase 1 – 22 Million Citizens)

- **Bhili:** 10.4M speakers
- **Santali:** 7.6M speakers
- **Gondi:** 2.7M speakers
- **Mundari:** 1.1M speakers

Key Achievements to Date

- **Beta Launch:** 1 Sept 2025 – 4 languages live (Santali, Bhili, Gondi, Mundari).
- **High-level Visibility:** Subtitles in **Santali, Mundari, Bhili and Gondi** integrated in Hon'ble PM's speeches.
- **Community Engagement:** 250+ native speakers, elders, and educators trained through workshops.

Expected Use Case

Domain	Use Cases & Practical Applications
Education & Literacy	<ul style="list-style-type: none"> - Bilingual teaching in EMRS and Ashram Schools → reduces dropout rates (aligned with NEP 2020) - Digital primers, e-learning apps, and gamified tools in tribal mother tongues - Teacher training in local languages → improved comprehension and learning outcomes in early grades - Integration of Adi Vaani into DIKSHA and SWAYAM → wider accessibility for tribal learners
Healthcare & Social Welfare	<ul style="list-style-type: none"> - Telemedicine consultations in Santali, Bhili, Gondi → bridges doctor–patient communication gaps - Health awareness campaigns (e.g., sickle cell anemia) in tribal languages → wider reach and higher impact - Support for midwives, ANMs, and ASHAs via AI-generated instructions - Health advisories (vaccination, maternal health, hygiene) delivered in native dialects → ensures last-mile service delivery
Governance & Service Delivery	<ul style="list-style-type: none"> - Welfare schemes explained in tribal languages → improved enrolment, reduced leakages - AI-powered village info kiosks (Adi Seva Kendras) → guide citizens on entitlements & grievance redressal - Training frontline workers (panchayat staff, anganwadi workers) in native languages - Real-time translation during Jan Bhagidari campaigns → better citizen participation - Use in Adi Karmayogi Abhiyan – Tribal Village Vision 2030 → <i>reduces language barriers between officials and tribal communities</i>
Cultural Preservation & Revival	<ul style="list-style-type: none"> - Digitization of folklore, songs, rituals, and oral histories into the Adi Vaani repository - Virtual museums and digital libraries accessible in tribal dialects - Language corpus feeding AI-powered cultural archives and research - Youth-led content creation (short films, podcasts, animation) → preserves and promotes cultural heritage
Economic Inclusion & Entrepreneurship	<ul style="list-style-type: none"> - Tourism guides in Gondi, Santali, Bhili → promotes eco-tourism - Voice-enabled e-commerce for tribal crafts → expands market access - AI-driven financial literacy modules for SHGs and tribal entrepreneurs - Training tribal youth in content creation (YouTube, podcasts, gaming) → creates new livelihood opportunities

Global Leadership	<ul style="list-style-type: none"> - South–South AI model showcased as low-cost, scalable, and replicable - Collaboration with UNESCO, World Bank, and Global South partners → adoption and knowledge sharing - India positioned as a global hub for AI-driven linguistic preservation - Export of Adi Vaani as a digital public good → strengthens India’s AI diplomacy and soft power
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7. Roadmap

2025–27 (Short Term)

- **Add 10 new tribal languages** (Ho, Khasi, Bodo, Mizo, etc.).
- **Translate 100+ government schemes** into tribal languages for wider reach.
- **Deploy Adi Vaani in 450+ EMRS/Ashram Schools** to support bilingual education.
- **Launch Folklore & Oral History Archives** for cultural preservation.

2027–30 (Medium Term)

- **Expand to 30+ tribal languages** covering all major tribal linguistic families.
- **Develop India’s first Tribal Large Language Model (LLM).**
- **Integrate Adi Vaani with the Digital India stack** (DigiLocker, UMANG, Aarogya Setu, etc.).
- **Establish the National Tribal Language Data Centre (NTLDC)** as a hub for research, corpus creation, and AI innovation.

2030–40 (Long Term)

- **Create a Global Endangered Languages AI Repository** with India as the knowledge hub.
- **Export the Adi Vaani model** to Africa, Latin America, and Southeast Asia.
- **Position India as the UNESCO hub for AI & heritage preservation.**

8. Impact Metrics (Target 2030)

- **50+ Endangered tribal languages digitized** and safeguarded.
- **20% reduction in dropout rates** in tribal schools.
- **10 crore+ citizens benefit from healthcare translations** in native tongues.
- **30+ tribal languages integrated into all major government schemes.**
- **Global recognition:** India becomes the **world leader in AI for linguistic inclusion.**

9. National & Global Significance

- **Policy Alignment:** Supports NEP 2020, Digital India, and the UNESCO International Decade of Indigenous Languages (2022–2032).
- **Cultural Economy:** Boosts tribal livelihoods through heritage tourism and digital platforms.
- **Soft Power Diplomacy:** India exports low-cost, frugal AI innovation to the Global South.
- **Adi Vaani can be Global Best Practices in the world of AI for Culture /Indigenous language.**

10. Consultation Ongoing

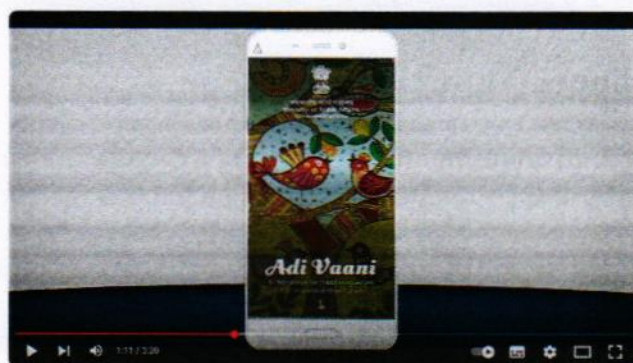
1. **Establish a National Tribal Language Mission** under the Ministry of Tribal Affairs.
2. **Position Adi Vaani as a flagship Digital India project.**
3. **Forge global partnerships with UNESCO, World Bank, and leading tech institutions.**
4. **Launch an India-led Global Fund for Endangered Languages (GFEL)** to pool resources for linguistic preservation.
5. **Host a Global Tribal Language & AI Summit (2026) in India** to showcase leadership.

Adi Vaani is **not just an app, not just AI, but India's gift to humanity.**

- A **technological breakthrough** in low-resource AI.
- A **cultural mission** safeguarding endangered voices.
- A **policy tool** enabling inclusive development.

It proves that **India can lead the world in inclusive, frugal, and future-ready AI innovation**—where no tribal voice is silenced, no culture erased, and no language left behind.

In the *Janjatiya Gaurav Varsh*, India has shown the world how **Sabka Saath, Sabka Vikas, Sabka Vishwas, Sabka Prayas** translates into *Sabka Bhasha, Sabka Gaurav*.



<https://youtu.be/xI0n6oiRatg>

11. Global Background:

The Global Context

- **7,000+ languages worldwide**, with nearly **half at risk of extinction** (UNESCO).
- **Every 14 days**, a language disappears—taking with it unique cultural memory, oral traditions, and indigenous wisdom.
- The **UNESCO Decade of Indigenous Languages (2022–2032)** underscores the urgency of preservation as a global priority.

India's Central Role

- **Census 2011** recorded **19,569 raw mother tongues**, consolidated into **1,369 rationalized languages**.
- In India **461 tribal languages** – the world's largest concentration of endangered tongues.
- 71 major tribal mother tongues are explicitly listed in the Census.
- **India = world leader in endangered languages** – **197** listed in UNESCO's Atlas (highest globally).
- **197 endangered languages**, including **123 tribal languages**.
- **Breakdown:**
 - Vulnerable: 81
 - Definitely Endangered: 63
 - Severely Endangered: 6
 - Critically Endangered: 42
 - Extinct: 5
- **42 critically endangered languages** (e.g., Nihali, Toto, Great Andamanese, each with <1,000 speakers).
- **Tribal subset:** ~123 of these endangered languages are tribal.

Critically Endangered Tribal Languages

- **Andaman & Nicobar:** Jarawa (~250), Onge (~100), Shompen (~250), Great Andamanese (~50).
- **Mainland tribal:** Juang, Birhor, Asur, Lodha, Toto, Chakpa, Chaimal, among others. *These languages risk vanishing within 1–2 generations unless urgent action is taken.*

Factors Driving Decline (UNESCO)

- **Urban migration & displacement** → weakening intergenerational transmission.
- **Globalization & job-linked language shift** → preference for English/Hindi/regional majors.
- **Lack of institutional support** → little presence in schools, official recognition, or media.
- **Environmental & developmental displacement** → erosion of cultural-linguistic habitats.

Geographic Concentration

- **Northeast India** (Nagaland, Manipur, Mizoram, Assam, Meghalaya) – maximum diversity, many vulnerable/endangered.
- **Central-Eastern belt** (Odisha, Jharkhand, Chhattisgarh, Madhya Pradesh)
- **Andaman & Nicobar Islands** – smallest, most critically endangered groups.

Comparative Quantitative Picture

Metric	Census 2011	UNESCO
Total raw entries	19,569	N/A
Rationalized languages	1,369	N/A
Major tribal tongues	71	N/A
Estimated tribal dialects	~427	N/A
Endangered languages	N/A	197
Endangered tribal	N/A	~123
Critically endangered	N/A	42
Bilingualism	~26%	N/A

Strategic Insights

1. **Census gives breadth** – lists & counts major tribal tongues, but **no endangerment lens**.
2. **UNESCO adds depth** – endangerment classification, highlighting risk levels.
3. **Speaker range is extreme** – from **1 crore+** to **<100**, showing uneven vitality.
4. **Language loss accelerating** – **~108 tribal languages (<10,000 speakers) have dropped out of Census reporting since 1971.**
5. **Policy implication** – urgent need for **documentation, AI tools (like Adi Vaani), curricular inclusion, and digital preservation** during UNESCO's **International Decade of Indigenous Languages (2022–32).**

India has the world's richest but most endangered linguistic heritage—427 tribal tongues spoken by over 10 crore people, but 123 of them are already classified as endangered. Without swift documentation and revitalization, many could vanish within decades.

India is not only a moral custodian of linguistic diversity but also emerging as a global leader in safeguarding endangered languages through innovation and policy action.

Social Media

IIT Delhi @iitdelhi · 1d
Ministry of Tribal Affairs, Government of India, launches Beta Version of **Adi Vaani** – India's 1st AI-Powered Translator for Tribal Languages Developed in Collaboration with #IITDelhi

Read more: shorturl.at/e0ObX



Ministry of Tribal Affairs, Govt. of India

All India Radio News @airn... · 4d
The government is set to launch the Beta Version of **#AdiVaani**, which is India's first **#AI**-powered translator for tribal languages.

The Ministry of Tribal Affairs (@TribalAffairsIn) said that this translation tool will be a step toward inclusive **#tribal** empowerment and [Show more](#)



Ministry of Tribal Affairs, Govt. of India
Press Information Bureau

Adi VAANI
A TRANSLATOR FOR TRIBAL LANGUAGES

Ministry of Tribal Affairs to Launch the Beta Version of "Adi Vaani"
India's First AI-Powered Translator for Tribal Languages

Samrastra Hall, Dr. Ambedkar International Centre, New Delhi
1st September 2025 | 2:30 PM

MyGovIndia @mygovindia · 19h
Replying to @mygovindia
Adi Vaani-India's First AI-Powered Tribal Language Translator

#NewIndia
#IndiaRising
#ViksitBharat
#NewIndiaScrapbook



Adi VAANI-INDIA'S FIRST
AI-POWERED
TRIBAL
LANGUAGE
TRANSLATOR

Adi Vaani will bridge communication gaps for tribal communities in remote areas.

0:05 will empower tribal youth digitally

MyGovIndia @mygovindia
What is the name of India's first AI-powered translation platform for tribal languages?

#NewIndiaTrivia
#MyGovQuiz

Vani Mitra	23%
Adi Vaani	39%
Tribal Translator	5%
Bhasha Setu	33%

243 votes • Final results

17:56 · 02 Sept 25 · 8,636 Views

Storyboard18 @Storyboard... · 3d
The ministry emphasized that this is a "national mission" to protect tribal identity, promote inclusive governance, and position India as a global leader in the AI-driven preservation of endangered languages.

storyboard18.com/how-it-works/t...


#AI #ArtificialIntelligence



storyboard18.com
Tribal Affairs Ministry to launch AI-powered translator "Adi Vaani" to pres...

Ministry of Tribal Affairs, Go... · 3d
Get ready for **Adi Vaani** Beta launch Today at 2:30 PM | Samrastra Hall, Dr. Ambedkar International Centre (DAIC)

#AdiVaani #JanjatiyaGauravVarsh #Birs...



Launching
BETA VERSION

Adi VAANI
A TRANSLATOR FOR TRIBAL LANGUAGES

Translations Available

- HINDI / ENGLISH
- SANTHALI
- GONDI

UNREGISTERED / KYC / GANES

KEY FEATURES:

- Multilingual interface
- 24x7 availability and instant response
- Real-Time AI Translation (Text, Speech, QR)
- Ready-to-use for Smartphones, Tablets, Kiosks, Smart and more devices

1 SEP

Print Media

Aiming to support translation for over 400 tribal languages, the government has launched **Adi Vaani**, an AI-powered platform for tribal language preservation.

● Live TV

 Share

Keywords: child sexual abuse; disclosure; social support

2025 Global Threat Report

[DOWNLOAD](#)

Aiming to support translation for over 400 tribal languages, the government has launched Adh Vaani, an AI-powered platform for tribal language preservation.

India Today Education Desk
New Delhi, UPDATED: Sep 4, 2025 14:47 IST

The Ministry of Tribal Affairs has launched *Adi Vaani*, an AI translator for tribal languages, under the month-long *Janjatiya Gaurav Varsh* commemorating 150 years of Birsa Munda's birth. The beta version of the platform currently translates Santali, Bhili, Mundari, and Gondi, and will include additional languages such as Kui and Garo.

AI INITIATIVE TO PRESERVE INDIA'S TRIBAL LANGUAGES

The initiative comes against the backdrop of India's 2011 Census, which recorded 461 tribal languages spoken by Scheduled Tribes and 71 distinct mother tongues.

Journal of Management Education 35(1)

The government said that while the app is currently equipped to translate four languages – Gondi, Bhili, Mundari and Santali

Updated - September 02, 2025 17:41 hrs PST - New Delhi

View [Journal Article PDF](#)

READ LATER PRINT



Union Minister of State for Tribal Affairs Durgadas Utkay speaks during the launch of the beta version of Ady Vani app and website. Picture: KJRF/Tribal Affairs

The Ministry of Tribal Affairs on Monday (September 1, 2025) launched the beta version of its Adi Vaani Adivasi language translation application and website at the Dr. Ambedkar International Centre in New Delhi, with Minister of State Durgadas Uikey saying that it will "help bridge communication gaps for tribal communities in remote areas and empower tribal youth digitally".

Page 26 | 2/24 | 04/01/2020 | 10:01 | 2020 | 2/24/2020 | 10:01



The Indian EXPRESS
JOURNALISM OF COURAGE

News / India / Gov rolls out AI-based app for women to translate, preserve tribal languages

Made using AI and efforts of academicians and educators proficient in tribal languages, the app will translate Hindi and English to tribal languages and vice-versa, and also aims to help digitize and preserve these languages.

© 2000 Blackwell Science Ltd



It was developed by a consortium led by the ITCO with Sina Institute of Technology and Science (Parsi, ITCO) in collaboration with three research institutes in Parkland, Ontario, Magna Plastics, Chhatrapati and Macneville.

THE MINISTRY of Tribal Affairs on Monday rolled out the Beta version of 'Adi Vaani', an Artificial Intelligence (AI) based translation tool that will serve as a foundation for large language models dedicated to tribal languages.

Made using AI and efforts of academicians and educators proficient in tribal languages, the app will translate Hindi and English to tribal languages and vice-versa, and also aims to help digitize and preserve these languages.

It was developed by a consortium led by the IIT-[Delhi](#) with Birla Institute of Technology and Science-Pilani, IIT Naya Raipur, IIT [Hyderabad](#) in collaboration with tribal research institutes in Jharkhand, Odisha, Madhya Pradesh, Chhattisgarh and Meghalaya.

THE ECONOMIC TIMES tech

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Web Stories | Tech & Internet | Funding | Startups | TechStyle | Newsletters | Stocks & Crypto | 67 Securities Listed

Business News, Tech, AI, Stock Analysis, News, Analysis, Research, Market Data, and more.

DOI: 10.1002/for

Synopsis
Conceived by ST Duthie, BPG Plans iF Hyderabad and ST Navee Talwar, in collaboration with Tatum Research Institute (TRI), this initiative combined advanced AI tools with community participation to bridge communication gaps and safeguard endangered tribal languages.



The Tribal Affairs Ministry will soon launch **"Adi Vaani"**, India's first artificial intelligence (AI)-powered translator for **tribal languages**, in a move aimed at preserving the country's rich linguistic **diversity** and empowering tribal communities.

Developed by [IIT Delhi](#), [BITS Pilani](#), [IIT Hyderabad](#) and [IIT Navi Mumbai](#), in collaboration with Tribal Research Institutes (TRIs), the initiative combines advanced AI tools with community participation to bridge communication gaps and safeguard endangered tribal languages.

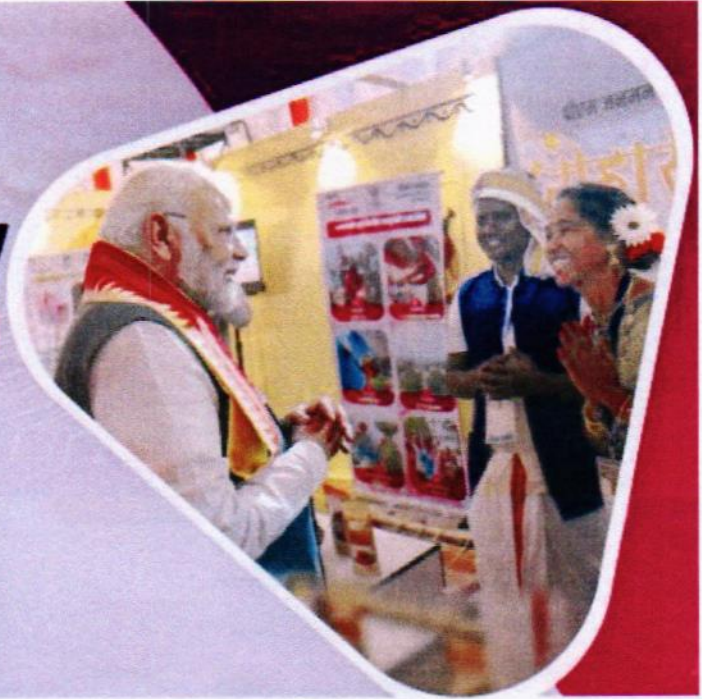
The app will be available on the Play Store with an iOS version coming soon. It will initially support Santali (Odisha), Bihli (Madhya Pradesh), Mundari (Jharkhand) and Gondi (Chhattisgarh). Languages such as Kux and Garo will be added in the next phase.

INDIA'S GIFT TO HUMANITY

World's First AI-Powered Tribal Language Translator

आदिVAANI

AI TRANSLATOR FOR TRIBAL LANGUAGES



The Challenge

- 7,000+ languages worldwide — half at risk (UNESCO).
- 461 tribal languages in India (2011 Census), with 123 endangered & 42 critically endangered.
- Each lost language means the loss of heritage, ecological wisdom & cultural identity.

The Solution – Adi Vaani

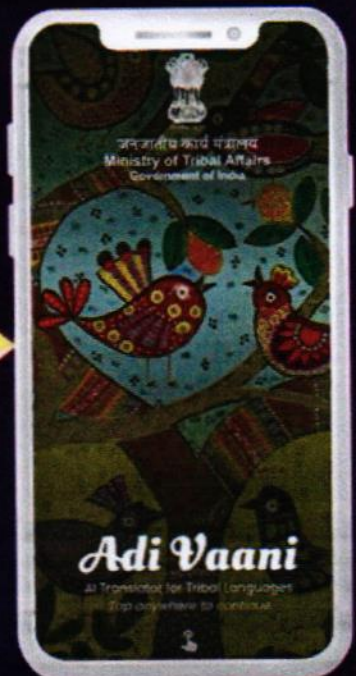
- **Mobile + Web App** → Real-time translation (Text, Speech, OCR).
- **Human-in-the-loop AI** → Validated by native speakers & Tribal Research Institutes (TRIs).
- **Digital Corpus** → Folklore, primers, dictionaries, oral histories.
- **Frugal Innovation** → Developed at 90% lower cost than global benchmarks.

CORE FEATURES – APP & WEBSITE

- 1 **Text-to-Text Translation** English/Hindi » Bhilli, Mundari, Gondi, Santali
- 2 **Speech-to-Text** Real-time voice-to-text
- 3 **Speech-to-Speech** » Instant conversation translator
- 4 **OCR** » Translate signs, textbooks, prescriptions instantly
- 5 **Corpus Repository** » Dictionaries, primers, folklore, songs
- 6 **Human-in-the-loop AI** » Ensures cultural accuracy & trust

IMPACT PATHWAYS (PHASE 1: 22M CITIZENS)

- **Education** - Bilingual learning in EMRS/Ashram Schools → ↓ dropouts
- **Healthcare** - Telemedicine & sickle cell awareness in native tongues
- **Governance** - Welfare schemes explained in tribal languages → ↑ enrolment
- **Culture** - Songs, folklore & rituals digitized & preserved
- **Economy** - Tourism guides, craft e-commerce, EdTech in tribal tongues
- **Global Leadership** - India's frugal AI model exported to Africa, Latin America & SE Asia



"No tribal voice silenced. No culture erased. No language left behind."

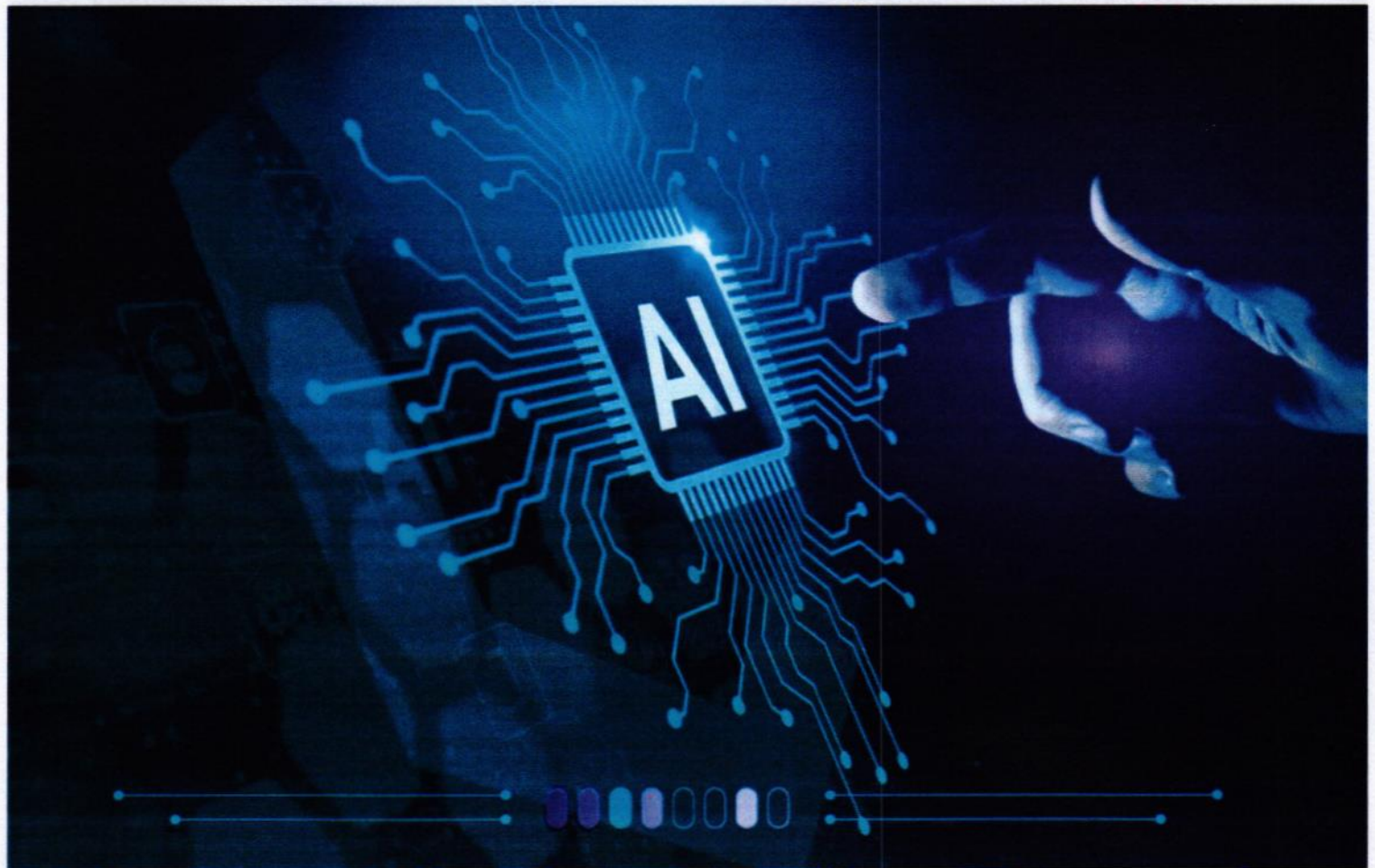


जनजातीय कार्य मंत्रालय
Ministry of Tribal Affairs
Government of India



150th
Birth Anniversary Year of Shegwan Shree Murda
JANJATIYA GAURAV VARSH

आदि**VAANI**
AI TRANSLATOR FOR TRIBAL LANGUAGES



INDIA'S GIFT TO HUMANITY

World's First AI-Powered Tribal Language Bridge Tool

आदिVAANI

AI TRANSLATOR FOR TRIBAL LANGUAGES



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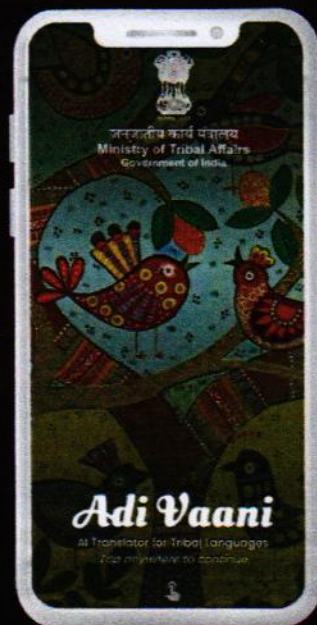
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