



DAILY EDITORIAL ANALYSIS

TOPIC

**INCLUSIVE & GENDER-RESPONSIVE AI:
REACHING INDIA'S INFORMAL WOMEN
WORKER**

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INCLUSIVE & GENDER-RESPONSIVE AI: REACHING INDIA'S INFORMAL WOMEN WORKER

Context

- The **India AI Governance Guidelines (2025)** and debates at the **India AI Impact Summit 2026** highlighting inclusive **Artificial Intelligence (AI)** utilisation to attain **Viksit Bharat by 2047**.

Why is Gender-Responsive and Inclusive AI Important?

- Artificial Intelligence (AI) is revolutionising agriculture, healthcare, logistics, education, finance and governance.
- India's informal workforce **comprises roughly 90% of the labour force** and contributes **nearly half of the Gross Domestic Product (GDP)**. AI can serve **India's 490 million informal workers** (NITI Aayog).
- According to **ILO (2018)**, almost 82% of working women in India are in the informal sector while the **PLFS 2023–24 reports** that 76.9% of rural women are in agriculture.
- AI systems that **do not cater to gender-specific needs** risk reinforcing existing disparities as women form a large part of India's informal workforce.
 - ♦ AI can cement prejudices, digital violence and algorithmic bias unless built with fairness, accessibility and accountability (**UN Women**).
- The vision of **Viksit Bharat by 2047** needs the increased productivity to be fairly dispersed and not cornered by the digitally privileged groups.

AI in Informal Livelihoods & Agriculture

- AI has huge potential to enhance livelihoods by:
 - ♦ **Precision farming** for crop monitoring, insect identification and weather forecasts.
 - ♦ **Advisory services based on AI** in local languages for input optimisation and market linkages.
 - ♦ AI-powered credit evaluation and insurance for **digital financial inclusion**.
 - ♦ **Skill upgradation** of home based workers, Self Help Groups (SHGs) and platform workers.
- A **Farmer.Chat study (2024) survey** across 12 States indicated that 61% of women users reported a better quality of life within 45 days and women were much more engaged than males.
 - ♦ The findings indicate that AI technologies are more effective when they take into account women's realities such as language preferences, land ownership patterns, mobility limits and access to information.
- Thus, inclusive AI has the potential to empower rural livelihoods, increase productivity and expand women's economic involvement.

Governance Priorities for Inclusive AI

- **Gender Impact Assessments:** India **AI Governance Guidelines (2025)** focus on fairness and equity.
 - ♦ AI systems with implications for employment, welfare delivery, credit, healthcare or public services must be subjected to gender impact assessments to identify gender, caste, disability, location and socio-economic status-based inequities.
- **AI Literacy as Public Infrastructure:** Digital Access Is Not Enough. Integrate AI literacy with **DAY-NRLM, DDU-GKY, Skill India Mission and Mission Shakti's Sakhi** network.
 - ♦ Training needs to be outcome-based so women can access government initiatives, digital platforms, markets and higher-paying livelihood options.
- **Digital Safety and Trust:** Technology-facilitated gender-based violence such as deepfakes, online abuse and non-consensual synthetic media restrict women's engagement in digital spaces.

- ♦ To build a safe digital environment, MeitY's proposed mandatory labelling of AI-generated material and effective implementation of the **Information Technology (Intermediary Guidelines and Digital Media Ethics Code) Rules, 2021**, is crucial.

Related Issues & Challenges

- Algorithmic bias due to non-representative datasets.
- Indian regional language datasets of quality are few.
- Persistent digital divide in terms of device ownership and internet access.
- Limited understanding of AI and digital literacy among women in informal work.
- Lack of openness and explainability in AI-enabled decision-making.
- Insufficient grievance redressal options for discrimination caused by AI.
- Cyber dangers, deepfakes and online abuse limit women's digital involvement.
- Under-representation of women in AI research, design and policy making.

Government Initiatives Supporting Inclusive AI

- India possesses a solid institutional structure for the advancement of responsible AI:
 - ♦ **IndiaAI Mission** for AI innovation, computing infrastructure, datasets and skilling.
 - ♦ **Bhasha Interface for India (BHASHINI)** will offer multilingual AI services to overcome linguistic obstacles.
 - ♦ **India AI Governance Guidelines (2025)** fostering fairness, accountability, transparency, safety, privacy and equity.
 - ♦ **NITI Aayog's Roadmap on AI** for inclusive societal development with focus on applications of AI in agriculture, healthcare, education and governance.
 - ♦ **Digital Public Infrastructure (DPI)** such as Aadhaar, UPI, and DigiLocker for inclusive AI-enabled service delivery
 - ♦ **Mission Shakti, Skill India, DAY-NRLM and DDU-GKY** to enable digital skills and livelihoods for women.
 - ♦ **Digital ShramSetu (NITI Aayog):** It aims to transform the livelihoods of India's **490 million informal workers** using AI and frontier technologies. It outlines a targeted strategy focused on persona or sector led prioritisation, state-driven implementation, regulatory enablement and strategic partnerships to ensure affordability and scale.

Road Ahead

- To make AI a vehicle of inclusive progress, India needs to:
 - ♦ Make gender audits a part of high-impact AI systems.
 - ♦ Facilitating multilingual and localised AI use cases on platforms such as **BHASHINI**.
 - ♦ Community based institutions and SHGs for enhancing AI literacy
 - ♦ Integrate **Gender Responsive Budgeting** for AI investments.
 - ♦ Strengthen cyber governance and speed up redressal of grievances to improve digital safety.
 - ♦ Promote increased engagement of women in AI research, entrepreneurship and policymaking.

Daily Mains Practice Question

[Q] Discuss the need for gender-responsive Artificial Intelligence (AI) in achieving the vision of Viksit Bharat 2047. Examine the challenges and suggest suitable policy measures.

Source: TH

