



AI and India's Macroeconomic - Social Trajectory (2025-2029)

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Background

Over the past few years, India has witnessed a rapid acceleration in the adoption of artificial intelligence (AI) across various sectors including government initiatives, private-sector innovation, and digital infrastructure expansion. As AI systems become more powerful and pervasive, their potential impact on labour markets, social welfare, governance, and economic growth at a national scale is drawing increasing attention. In this context, a systematic and forward-looking thinking is needed, one that moves beyond anecdotal optimism or alarmism, and instead offers a coherent, multi-layered framework for understanding how AI might reshape India's macro trajectory.

Why a Macro-Level Approach is Crucial?

Much of public discourse around AI in India remains micro-focused on how individual sectors (say, healthcare, education, agriculture) might benefit, or how specific jobs might be automated. While useful, such a fragmented view misses systemic dynamics, especially effects on income distribution, demographic employment patterns, regional inequality, governance capacity, and national competitiveness. A macro-level lens will help us examine not only sectoral gains, but structural transformation. This will also allow assimilation or disruption of traditional economic models, shifts in skill demand, patterns of urbanization, and long-term social welfare.

Key Dimensions of Impact

1. Labour Markets, Skills and Demographics

- AI-driven automation and augmentation may disproportionately affect repetitive, routine tasks, especially in manufacturing, certain service industries, and administrative work. Given India's large young and working-age population, this could lead to significant displacement, if not accompanied by proactive reskilling and education reforms.
- On the flip side, AI may generate new kinds of jobs, for example, in data annotation, AI-tool maintenance, AI-enabled services, local-language AI content creation, etc. The net effect on employment will thus depend heavily on policies that are driven in education, vocational training, and social safety nets.
- Regional disparities may widen or reduce, depending on where AI-driven industries concentrate. Digitally connected urban regions may flourish due to better awareness and exposure. On the other hand, it can raise concerns about rural-urban inequality unless AI opportunities are made more geographically inclusive.

2. Economic Productivity, Growth, and Innovation

- Widespread AI adoption across agriculture, manufacturing, logistics, health, governance, and services could significantly boost productivity and improve efficiency, reducing waste, enhancing decision-making. This could accelerate GDP growth, raise per-capita income, and spur innovation.
- India's demographic dividend might get reframed, where instead of sheer human labour, the younger population could contribute to a skilled, AI-literate workforce, giving India a comparative global advantage, especially in sectors combining human creativity/judgment with AI tools (e.g., design, entertainment, local-language content, region-specific solutions).
- With thoughtful public-private partnerships and regulatory push, India could emerge as a global hub for "frugal AI" or "resource-efficient AI" providing solutions tuned to emerging economies' constraints (low bandwidth, multilingualism, cost sensitivity).

3. Governance, Public Services and Democracy

- AI could also transform governance by improving public service delivery (health, education, welfare), enabling predictive planning, and enhancing transparency and accountability (through data-driven audits, e-governance, fraud detection).
- However, risks can also emerge due to data privacy, algorithmic bias, exclusion of marginalized populations, digital divide. Without equitable AI access and robust data protection laws, AI might exacerbate existing inequalities or create new forms of social injustice.
- The democratic implication is that if AI tools are used for surveillance or control, they may threaten privacy and civil liberties. On the other hand, democratized AI might help strengthen grassroots participation, bottom-up governance and inclusive development.

Challenges and Risks

Despite its transformative promise, the rise of AI in India carries several overlapping challenges that demand careful attention. One of the most pressing concerns is the uneven distribution of digital infrastructure. While major cities may benefit from rapid deployment of AI tools and connectivity, rural regions and marginalized communities could remain excluded, potentially widening existing socio-economic divides. This disparity is not only technological but also educational. India's current school and university systems, especially in underserved areas, often lack the capacity to equip students with the digital and analytical skills required for AI-driven work. Without significant reform, a large segment of the population may find itself unprepared for emerging job markets.

Another risk lies within the domain of data governance. As AI systems learn from vast quantities of personal information, issues of privacy, surveillance, and algorithmic bias become unavoidable. In the absence of robust regulatory frameworks, there is a genuine possibility of misuse or discriminatory outcomes that disproportionately affect vulnerable groups. The erosion of trust in digital systems could follow, threatening both individual rights and broader social cohesion.

Towards a Coherent Framework for India (2025–2029)

Meeting these challenges requires a coordinated response that integrates regulatory clarity, educational reform, technological inclusion, and democratic accountability. India's priority should be the development of comprehensive data protection and ethical AI frameworks that safeguard personal rights while enabling innovation. Regulation must not merely restrict harmful practices but also guide the creation of transparent and accountable AI systems that operate in the public interest.

Education and skill development should evolve in parallel. Schools, universities, and vocational centres need to move beyond rote learning and towards digital literacy, interdisciplinary problem-solving, and adaptability. Reskilling programmes for existing workers must become widespread and continuous, offering practical routes into new forms of employment created by AI-driven industries.

At the infrastructural level, India must commit to expanding affordable connectivity and digital access across rural and semi-urban regions. Equally important is ensuring that AI tools function in India's linguistic and cultural diversity. Local-language interfaces, culturally contextual design, and region-specific solutions can help democratize AI adoption and prevent the emergence of a technologically privileged class.

A strong ecosystem of public–private partnerships will be essential for scaling these efforts. Collaboration between government bodies, startups, universities, civil society, and global technology firms can accelerate the creation of locally relevant AI solutions in agriculture, healthcare, logistics, and public administration. These partnerships can also help test and refine ethical guidelines in real-world settings.

Finally, India will need to strengthen its social safety nets to support workers whose livelihoods are disrupted. Transition pathways, wage protection policies, and community-centred welfare mechanisms can mitigate the impact of economic shifts. At the same time, democratic engagement must remain central. Citizens should be informed and involved in conversations about AI ethics, data rights, and the boundaries of acceptable use. Transparent oversight and participatory decision-making can help ensure that AI serves society rather than shaping it without consent.

Conclusion

AI presents perhaps the most profound structural opportunity for India since liberalisation, but only if leveraged with foresight, equity, and inclusion. Without active, value-driven policymaking and social investment, AI could carve deep divides. However, with wise governance, democratic deliberation, and commitment to social justice, India could harness AI to accelerate growth, uplift human development, and lead a new model of “people-centric technology”.

Author Biography

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