



NITI Aayog

NITISंधान

Quarterly newsletter by Research and Networking (R&N) Division of NITI Aayog



Message from Vice Chairperson

India's journey towards sustained and inclusive growth will be shaped by how effectively it mobilises long-term capital and harnesses the transformative power of the services sector. This edition of NITISंधान reflects these twin imperatives through the UK-

India Infrastructure Financing Bridge: Year 1 report, alongside in-depth analyses of India's services sector that track Gross Value Added and employment trends across states.

The UK-India report emphasises the need for innovative financing architectures, deal-centric project preparation, and infrastructure development aligned with global benchmarks of governance, transparency, and sustainability. Complementing this, the services sector studies capture the sector's emergence as India's foremost driver of growth, propelled by productivity gains, digital transformation, and growing regional convergence.

Collectively, these perspectives point to the importance of integrated policy frameworks that reinforce institutional capacity, deepen financial markets, and embed services within vibrant local economies. I trust this edition will stimulate constructive engagement and advance shared efforts towards the vision of Viksit Bharat @2047.

Shri Suman Bery
Vice Chairperson, NITI Aayog



From the desk of CEO

Artificial Intelligence is poised to become a defining force in shaping India's economic and social transformation. This edition of NITISंधान foregrounds this imperative through the 'Roadmap for Job Creation in the AI Economy' and the 'Roadmap on AI for Inclusive Societal Development,' which together articulate a comprehensive vision for harnessing AI as a catalyst for productivity, employment, and inclusion.

The AI roadmaps underscore both the scale of opportunity and the urgency of coordinated action. They outline pathways to mitigate workforce disruption through large-scale reskilling, bridge critical talent gaps, and position India as a global hub for AI research and innovation. Equally, they emphasise the use of AI to empower informal workers, improve service delivery, and enable inclusive growth through human-centric digital public infrastructure.

Complemented by research across services, finance, infrastructure, and sustainability, this edition of NITISंधान reflects NITI Aayog's commitment to evidence-based policymaking. Through the dissemination of actionable insights and collaborative engagement, we seek to advance India's journey towards a resilient, future-ready, and inclusive economy in alignment with Viksit Bharat @2047.

Shri B.V.R. Subrahmanyam
CEO, NITI Aayog

About Research and Networking (R&N) Division

In 2024, NITI Aayog established a dedicated Research & Networking (R&N) Division to strengthen and streamline its policy research efforts by developing a robust pipeline of high-impact research studies. The division also fosters partnerships with premier think-tanks and relevant divisions of NITI to build a resource network and enhance collaboration across the policy ecosystem. It further plays a key role in evolving a multi-pronged dissemination strategy, ensuring that findings are shared widely through newsletters, reports, and policy briefs, so that knowledge becomes accessible, actionable, and aligned with national priorities. Through this mechanism, the R&N Division positions NITI Aayog as both a facilitator of research excellence and an enabler of meaningful national and international partnerships.

Ms Anna Roy

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NITI Spotlight: Ideas, Impact, Insights

AI by HER: Global Impact Challenge



Scan this QR to know more about AI by HER Initiative

AI by HER: Global Impact Challenge, organised by the Women Entrepreneurship Platform and the IndiaAI Mission ahead of the AI Impact Summit, aims to strengthen women's participation in the AI ecosystem through global innovation, mentorship, and capacity-building initiatives. Of the 792 applications received, 419 eligible teams were interviewed by expert panels, leading to the shortlisting of 30 teams for the bootcamp scheduled on 16-17 February.

Research Publications this Quarter

- From Intent to Impact: A Compendium of Good Practices on Gender Parity at Workplace
- Internationalisation of Higher Education in India Report
- Deepening the Corporate Bond Market in India
- Roadmap for Transforming India into a Leading Quantum-Powered Economy
- Water Budgeting in Aspirational Blocks
- India's Services Sector: Insights from GVA Trends and State-Level Dynamics
- India's Services Sector: Insights from Employment Trends and State-Level Dynamics
- Coal Gasification Technology for Indian High Ash Content Coal
- India's Blue Economy: Strategy for Harnessing Deep Sea and Offshore Fisheries
- Compendium on All-Weather Tap Water Supply in the Higher Reaches of the Himalayas
- Roadmap for Job Creation in the AI Economy
- Roadmap on AI for Inclusive Societal Development
- Trade Watch- Quarterly (January - March [Q4] FY25)
- UK-India Infrastructure Financing Bridge_Year 1 Report



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Voice of our Researchers

India needs to deepen the Corporate Bond Market for Viksit Bharat



Pravakar Sahoo

Programme Director, Economics and Finance-I Division

over ₹53 trillion by FY2025, registering an annual growth of nearly 12%. The outstanding market accounts for around ~16 % of GDP. Over the last 10 years, the representation of corporate bonds in the overall outstanding of bonds has been consistent between 21% to 25% (Fig 1). However, the size of the non-financial bond market accounts for only ~2-3% of GDP.

India's aspiration to become a developed economy under the vision of Viksit Bharat @ 2047 requires a financial system capable of mobilising long-term, low-cost capital at scale. While banks remain central to credit delivery, they alone cannot meet the expanding financing needs of infrastructure, industry, climate transition, and emerging sectors. In this context, a deep, liquid, and diversified corporate bond market is essential to complement bank lending, reduce systemic concentration risks, improve monetary policy transmission, and strengthen overall financial stability. The NITI Aayog's report, 'Deepening Corporate Bond Market in India', offers a comprehensive assessment of India's corporate bond ecosystem, tracing the market's evolution, analysing its size and composition, and detailing the key measures undertaken by regulatory authorities to support its development. It also analyses the benefits of market-based debt financing, and maps the structural, regulatory, and institutional constraints that limit depth and liquidity. The report presents a comparative analysis with global markets and provides a phase-wise reform roadmap to deepen the market.

Landscape of India's Corporate Bond Market

India's corporate bond market has expanded steadily over the past decade, with outstanding bonds rising from about ₹17.5 trillion in FY2015 to an annual growth of nearly 12%. The outstanding market accounts for around ~16 % of GDP. Over the last 10 years, the representation of corporate bonds in the overall outstanding of bonds has been consistent between 21% to 25% (Fig 1). However, the size of the non-financial bond market accounts for only ~2-3% of GDP.

Fig. 1: Types of Instruments in Bond Market - India (Mar 2024)

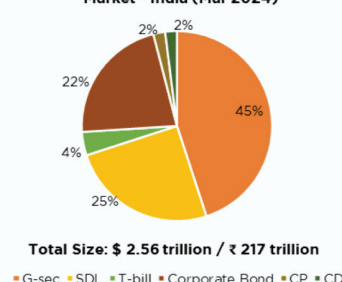
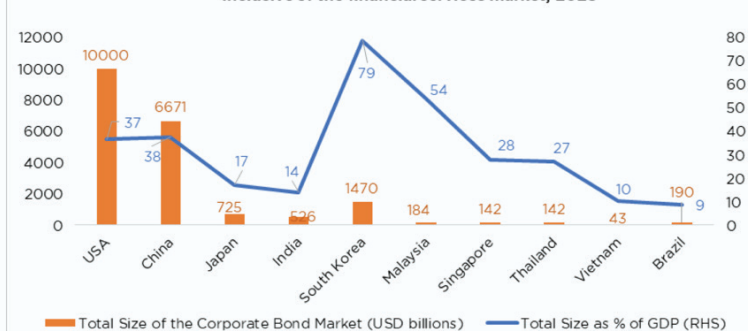


Fig. 12a: Total Size of Corporate Bond Market as % of GDP inclusive of the financial services market, 2023



Despite this progress, India's corporate bond market remains modest in size compared to international peers, well below levels observed in countries such as South Korea (79% of GDP), Malaysia (54%), Thailand (27%), and China (38%). The reasons for the development of corporate bond markets in some of these countries include unified regulation and streamlined disclosures, strong market infrastructure, active market-making, and deep secondary markets, which together enhance liquidity, investor diversity, and financing depth.

Challenges

India's corporate bond market continues to face several structural challenges, including fragmented regulatory processes, relatively high issuance and compliance costs, and a largely risk-averse investor base that prefers higher-rated bonds. Secondary-market liquidity remains limited, supported by modest market-making and still-evolving risk-management and credit-enhancement frameworks, while procedural and recovery-related inefficiencies add to frictions. As a result, the market remains concentrated among highly rated issuers and private placements, with relatively lower participation from MSMEs, retail investors, and foreign investors, thereby constraining its capacity to support long-term and inclusive financing needs fully.

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Recommendations and Way Forward

The report highlights that unlocking the bond market's full potential requires a sequenced and sustained reform strategy implemented in phases. In the short term, the focus is on streamlining regulations, improving inter-regulatory coordination and legal clarity, strengthening market infrastructure, easing issuer access, and expanding investor participation to reduce frictions and build confidence. Over the medium to long term, deeper structural and institutional reforms will support a unified regulatory architecture, scalable digital infrastructure, broader issuer and product diversification, and greater domestic and foreign investor participation. Together, these phased reforms aim to provide a roadmap to make India's corporate bond market globally competitive, resilient, and inclusive, positioning it as a key pillar of the financial system and a driver of long-term growth towards Viksit Bharat @2047.

Fig. 14: Outstanding Corporate Bonds as % of GDP (for Non-Financial Companies-2022)



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Trade Watch- Quarterly (January - March [Q4] FY25)

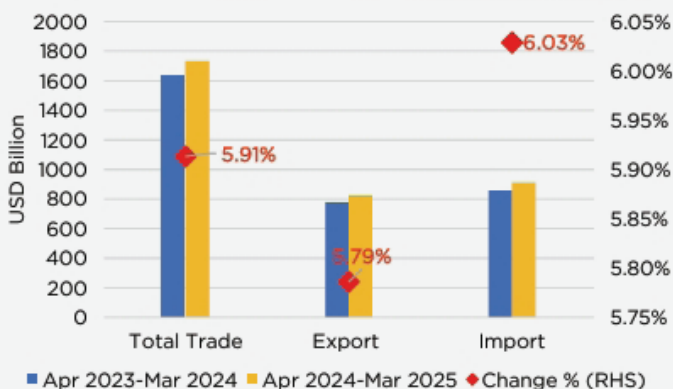
Economics and Finance-I Division

Global trade expanded by approximately 1.5% in Jan-March 2025, driven primarily by price increases, as trade volume rose by only around 1%. Trade between developed countries outpaced that of developing economies, reversing the recent trade in favour of developing countries.

India's merchandise and services trade performance continued to remain steady between April-March 2024-25. During this period, total trade reached \$1731 billion, marking a y-o-y growth of approximately 6%. Both exports and imports also grew by around 6% each, with exports reaching \$823 billion and imports at \$908 billion during April-March 2025.



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Trade performance in Apr-Mar FY25

From Intent to Impact: A Compendium of Good Practices on Gender Parity at Workplace

Women & Child Development Division

In collaboration with the CII Centre for Women Leadership, NITI Aayog has launched a compendium highlighting successful practices for gender parity in Indian workplaces. This initiative directly supports the Viksit Bharat @2047 vision, which recognises women not just as beneficiaries of progress, but as the principal architects of India's economic and social transformation.

To reach India's \$30 trillion economic goal, an estimated 145 million women must enter the workforce by 2047. The compendium adopts a lifecycle approach that supports women across every stage of their professional journey. It highlights inclusive recruitment practices such as blind screening and gender-neutral job descriptions, workplace policies that enable retention, such as childcare and caregiving support, and structured pathways for mentorship and leadership development.

Through these initiatives, organisations can move from intent to measurable impact. Ultimately, transitioning to women-led development is a strategic economic necessity for sustainable national growth.

Building a gender-equal workplace is like constructing a bridge: it requires a strong foundation of policy, steady pillars of institutional support, and a clear, wide path that allows everyone to cross into leadership roles.



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Report on Internationalisation of Higher Education in India: Prospects, Potential and Policy Recommendations

Education Division

As India advances toward Viksit Bharat@2047, the internationalisation of higher education is emerging as a pivotal force for shaping human capital and global leadership. Drawing inspiration from its ancient legacy of world-class learning centres like Nalanda and Takshashila, India aims to re-establish itself as a premier global higher education and research hub.

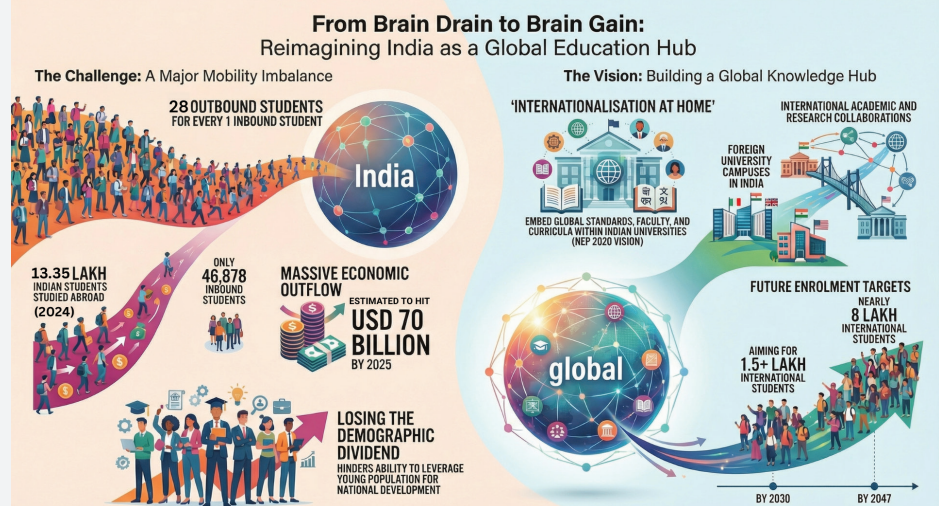
Central to this vision is 'internationalisation at home,' a priority under the National Education Policy (NEP) 2020. This strategy seeks to embed global curricula, faculty exchanges, and international research partnerships within leading Indian Higher Education Institutions (HEIs), particularly Top 100 NIRF-ranked institutions. By democratizing access to international standards, students can experience global ecosystems without necessarily leaving the country for long durations.

The regulatory landscape has been reinforced by UGC guidelines regarding international branch campuses and academic collaborations, providing a strong foundation for this transformation. A comprehensive study involving 160 HEIs and experts from 16 countries has produced 22 policy recommendations and 76 action pathways to guide this journey. To fulfil this vision, the report suggests flagship initiatives like talent attraction programmes and cross-border research partnerships. Data-driven projections indicate that international student enrolment in India could reach between 7.89 lakhs and 11 lakhs by 2047.

By aligning with international benchmarks while remaining rooted in Bharatiya values, India is poised to enhance domestic innovation and employability. Ultimately, this transformation will enable the nation to reclaim its historic position as a Vishwa Guru, leading the world through knowledge, research, innovation, and entrepreneurship. Internationalising higher education is like grafting a high-yield global variety onto a strong native rootstock: it combines international excellence with local resilience to produce a harvest of world-class and world-ready talent.



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Roadmap for Transforming India into a Leading Quantum-Powered Economy

Frontier Tech Hub Initiative

The NITI Frontier Tech Hub has unveiled a strategic roadmap to transform India into a premier quantum-powered economy by 2035. This blueprint, essential to the Viksit Bharat@2047 vision, seeks to harness quantum mechanics to multiply national productivity and secure strategic sovereignty. By 2035, these technologies are projected to unlock USD 1–2 trillion in value across sectors such as precision healthcare, finance, and logistics.

India's ambition is to rank among the top three global quantum economies. The roadmap sets bold targets: capturing over 50% of the global quantum software market and incubating at least 10 startups with revenues surpassing USD 100 million. India's core advantage is its human capital, featuring 91,000 STEM graduates and the world's second-largest base of active quantum users.

To bridge critical gaps, including heavy reliance on imported peripherals and a lower Ease of Doing Science (EoDS), the sources recommend expanding the scientific workforce tenfold

by 2028 and streamlining research procurement. Furthermore, policy interventions are urged to prevent 'flipping,' where deep-tech startups redomicile abroad, to ensure intellectual property remains in India.

Ultimately, the roadmap calls for 'Quantum Atmanirbharta,' positioning India as a net exporter of full-stack solutions and a leader in global standard-setting. Immediate, coordinated action across government and industry is vital to ensure India leads this technological wave from the outset.

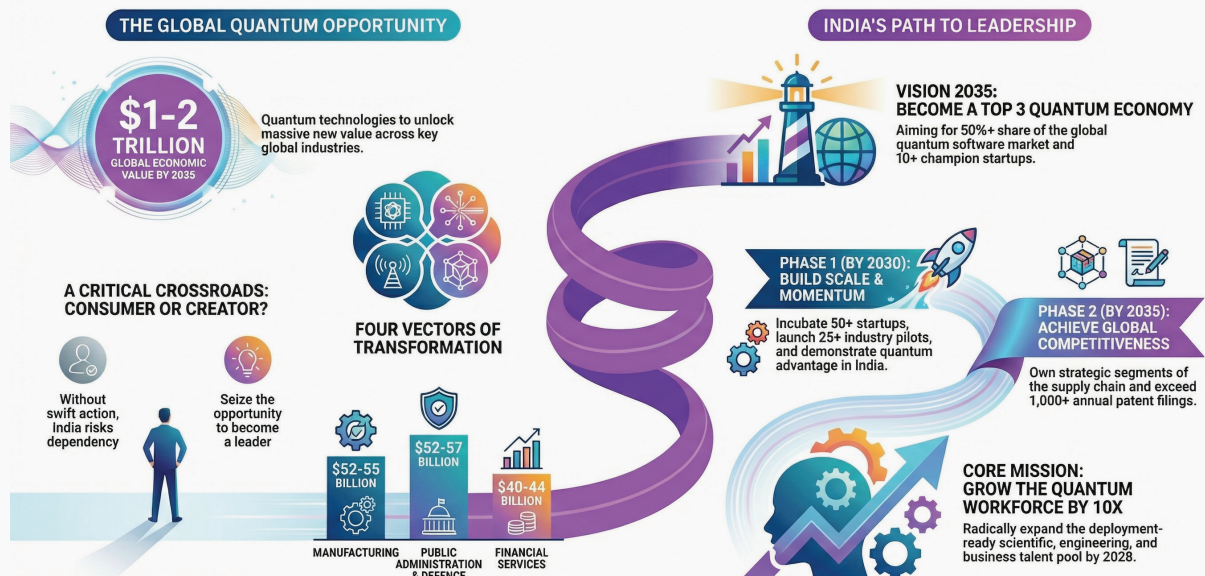
The quantum race is like building a high-speed rail network: while the tracks (hardware) are essential, India's greatest opportunity lies in designing the sophisticated navigation systems and services (software) that will move the entire world forward.

Atmanirbharta,



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INDIA'S QUANTUM LEAP: A ROADMAP TO GLOBAL LEADERSHIP BY 2035



Water Budgeting in Aspirational Blocks

Water and Land Resources Division

NITI Aayog, in partnership with GIZ India, has released a landmark report aligning with the Prime Minister's Water Vision @ 2047. This initiative addresses the urgent need for a scientific, proactive approach to water management amidst pressures from population growth, economic development, and climate change. At the heart of this strategy is Varuni, an automated web-based application designed to bridge the gap between water demand and supply. The application systematically accounts for water requirements across irrigation (the largest consumer at 80–90% in rural areas), human consumption, livestock, and industry. On the supply side, it evaluates local surface water sources, groundwater availability via the IN-GRES portal, rainwater runoff, and inter-block water transfers.

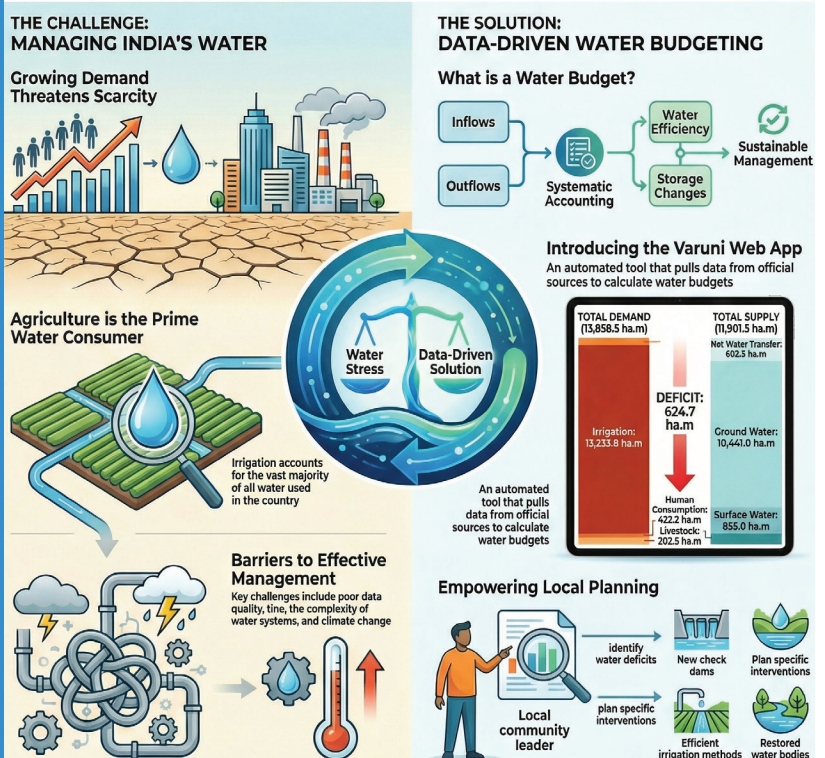
The project was piloted across 18 Aspirational Blocks covering all agro-climatic zones in India. The assessment revealed a complex landscape: some blocks, such as Kukarmunda in Gujarat, show risky over-dependence on groundwater (96%) despite nearby reservoirs, while blocks like Fatehpur underutilise surface resources. These insights allow for region-specific interventions, such as salinity management in coastal areas, groundwater recharge in Bundelkhand, or spring protection in the Himalayas.

By scaling this localised approach, NITI Aayog aims to empower local bodies with the tools needed for informed decision-making and climate resilience. Mainstreaming water budgeting through people's participation will be the backbone of ensuring equitable access and safeguarding India's water future. Water budgeting is like a financial ledger for nature: by precisely tracking every drop that enters and leaves a region, we ensure our 'natural capital' is spent wisely to sustain future generations.



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India's Water Budget: Balancing Supply and Demand



India's Services Sector: Insights from GVA Trends and State-Level Dynamics

Services and Economic Intelligence Unit Division

India is undergoing a distinctive services-led structural transformation, diverging from traditional economic sequences by transitioning early and robustly into a service-oriented economy. In 2024-25, the services sector contributed nearly 55% of India's Gross Value Added (GVA), consolidating its position as the nation's primary engine of growth, exports, and resilience.

Sub-sectoral analysis reveals a 'dual structure' where high-productivity, tradable activities coexist with traditional, labour-intensive segments. Computer and information services have seen the most significant expansion, growing nearly fourfold since 2011-12. While growth was initially concentrated in mature service economies like Maharashtra, Karnataka, and Telangana, the report identifies a significant trend of beta convergence. This indicates that structurally lagging states are growing their service base more rapidly, suggesting that this transformation is becoming more spatially inclusive.

To achieve the Viksit Bharat @2047 vision, where services output could potentially reach USD 15-16 trillion, the report introduces a strategic mapping of sub-sectors into Engines of Growth, Emerging Stars, Mature Giants, and Struggling Segments. This roadmap is anchored by three 'policy unlocks': establishing core digital and institutional infrastructure, embedding services within local industrial ecosystems through targeted skilling, and scaling decentralised innovation. By modernising traditional sectors with digital infusion, India aims to lead the world through a resilient and competitive knowledge economy.

The services sector is like a modern power grid: while traditional lines provide essential local stability, the new high-voltage digital circuits connect every corner of the country to global opportunities.



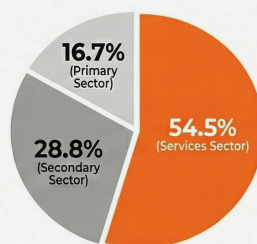
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India's Services Sector: The Engine of a Nation

THE RISE OF INDIA'S ECONOMIC ENGINE

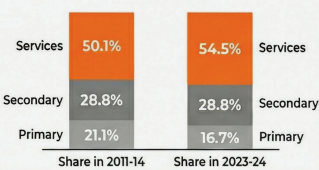
SERVICES DOMINATE INDIA'S ECONOMY, CONTRIBUTING 54.5% TO GVA

The services sector is the primary driver of India's economic growth, anchoring its economic stability.



The primary sector's share has fallen to 16.7%, while industry has remained stable.

STRUCTURAL SHIFT OVER A DECADE



KEY FINDINGS: STABILITY & GLOBAL PRESENCE



THE MOST RESILIENT SECTOR

Services have shown the lowest growth volatility compared to the primary and secondary sectors.

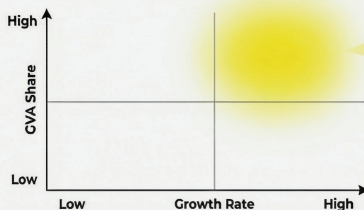


GLOBAL POWERHOUSE, RANKING 7TH WORLDWIDE

India jumped 10 ranks from 17th in 2000, with services output now at \$1.6 trillion.

MAPPING THE SERVICES LANDSCAPE

A POLICY FRAMEWORK FOR GROWTH: THE FOUR QUADRANTS

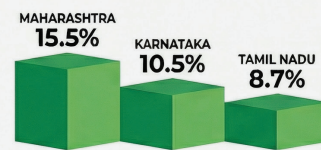


HIGH-GROWTH 'ENGINES' & 'EMERGING STARS'

- Computer & Information Services
- Professional Services
- Health
- Travel

Service sub-sectors are mapped by their GVA share and growth rate to guide policy.

GROWTH IS GEOGRAPHICALLY CONCENTRATED



These states contribute the most to services GVA.

India's Services Sector: Insights from Employment Trends and State-Level Dynamics

Services and Economic Intelligence Unit Division

India's services sector has emerged as a central pillar of economic growth, contributing over half of the national Gross Value Added (GVA) while employing approximately 188 million workers. However, a significant paradox remains: while services dominate economic output, they account for less than one-third of total employment, which is often characterised by informality and low wages.

The latest findings indicate that the sector added 40 million jobs over the last six years, with post-COVID employment elasticity rising to 0.63, highlighting its role as a vital labour shock absorber. Despite this, a deep structural divide persists. High-value segments such as IT, finance, and healthcare are globally competitive and productivity-rich but remain limited in scale. Conversely, traditional services like trade and transport continue to anchor the workforce but face slowing job creation and high informality.

Critical gaps also exist in spatial and gender inclusion. Services remain heavily urban-concentrated, with over 60% of urban workers employed in the sector compared to less than 20% in rural areas. Rural women are particularly excluded, with only 10.5% participation in services compared to 60% of their urban counterparts. Furthermore, 87% of service workers lack social security, highlighting pervasive informality even within salaried roles.

To realise the Viksit Bharat @2047 vision, the sources outline four "policy unlocks": accelerating formalisation, bridging gender and rural gaps, leveraging technology like AI, and fostering balanced regional growth through Tier 2 and Tier 3 city hubs.

Transforming the services sector is like upgrading a city's power grid: it is not just about adding more lines, but ensuring the voltage is high enough to power every home—urban and rural—while providing the safety of modern insulation for every worker.



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India's Services Paradox: Powering the Economy, Dividing the Workforce

India's services sector drives over half of national output and is the second-largest employer, yet its growth is marked by deep structural challenges in employment quality and inequality.

An Economic Powerhouse



The Deep Divides



Sector Contrast: Traditional vs. Modern Services Employment (2023-24)



40 Million

Jobs Added in 6 Years
The sector has shown a strong capacity for large-scale job creation, especially post-COVID.

Coal Gasification Technology for Indian High Ash Content Coal

Energy Division

NITI Aayog hosted a landmark workshop on September 2, 2025, to accelerate India's goal of achieving 100 million tonnes per annum (MTPA) of coal gasification by 2030. Chaired by Dr V.K. Saraswat, the event addressed technical hurdles presented by the high ash content (30-45%) of indigenous coal. Experts debunked myths regarding Indian coal's unsuitability, identifying Fluidised-Bed Gasification as the most effective technology for handling local feedstock variability.

Significant indigenous progress was highlighted, including IIT Delhi's successful methanol production and BHEL's development of large-scale gasifiers. To de-risk projects, the government has allocated ₹8,500 crore in Viability Gap Funding (VGF) and offered revenue rebates. The workshop concluded with a powerful call for the industry to evolve from importing designs to becoming confident indigenous technology developers. By fostering a collaborative ecosystem, India aims to ensure energy security and transition toward a self-reliant energy sector.



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India's Coal Future: The Right Tech for the Job



The National Goal: 100 MTPA

India aims to achieve 100 million tonnes per annum of coal gasification by 2030 to enhance energy security and reduce import dependency.



The Challenge: High-Ash Coal

Indian coal has a very high and variable ash content (30-45%), making globally dominant gasification technologies unsuitable.



The Solution: Fluidized Bed Gasifiers

National and international experts agree this technology is the most robust and promising option, as it handles high ash and fine particles effectively at lower temperatures.



Proven Indigenous Success

An IIT Delhi-Thermax pilot plant has already successfully produced high-purity methanol from coal with over 45% ash content, proving the "Made in India" capability.

India's Blue Economy: Strategy for Harnessing Deep Sea and Offshore Fisheries

Agriculture Technology Division

India's fisheries sector has emerged as a critical 'sunrise sector,' growing at an impressive 9% annually and contributing significantly to the national economy. With a coastline of 11,098 km and an Exclusive Economic Zone (EEZ) exceeding 2 million sq. km, India holds an untapped deep-sea potential estimated at 7.16 million tonnes. High-value species such as tuna, billfish, and deep-sea shrimp offer immense opportunities for economic expansion and job creation for over 30 million people.



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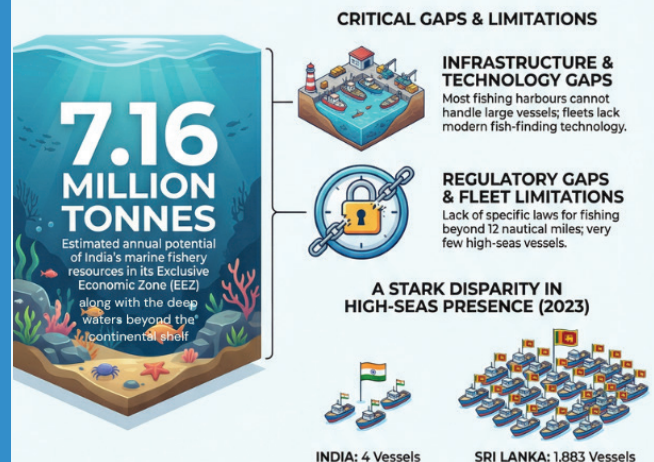
To harness this potential, the sources outline a three-phase roadmap towards global leadership. Phase 1 (2025-28) focuses on foundational reforms, including enacting comprehensive legislation for the 12-200 nmi zone and modernising infrastructure like fishing harbours and cold chains. Phase 2 (2029-32) aims at scaling operations through advanced fleet induction and cooperative ownership models to achieve global competitiveness. Finally, Phase 3 (2033 onwards) concentrates on high-value product development and establishing leadership in sustainable management practices.

The sources identify critical gaps in infrastructure, technology, and financing that must be addressed to manage high operational costs. Key recommendations include implementing satellite-based Vessel Monitoring Systems (VMS), providing targeted incentives for green technologies, and fostering public-private partnerships. By aligning these efforts with SDG 14 (Life Below Water), India aims to ensure long-term ecological balance while empowering traditional fishing communities through inclusive growth.

Harnessing India's Deep-Sea Potential: A Strategic Roadmap

India's vast deep-sea resources are largely unexploited due to critical infrastructure, technological, and regulatory challenges. This roadmap outlines a three-phase strategy for global leadership in sustainable deep-sea fishing.

The Untapped Opportunity & Its Hurdles



A 3-Phase Roadmap to Global Leadership



Compendium on All-Weather Tap Water Supply in the Higher Reaches of the Himalayas

Water and Land Resources Division

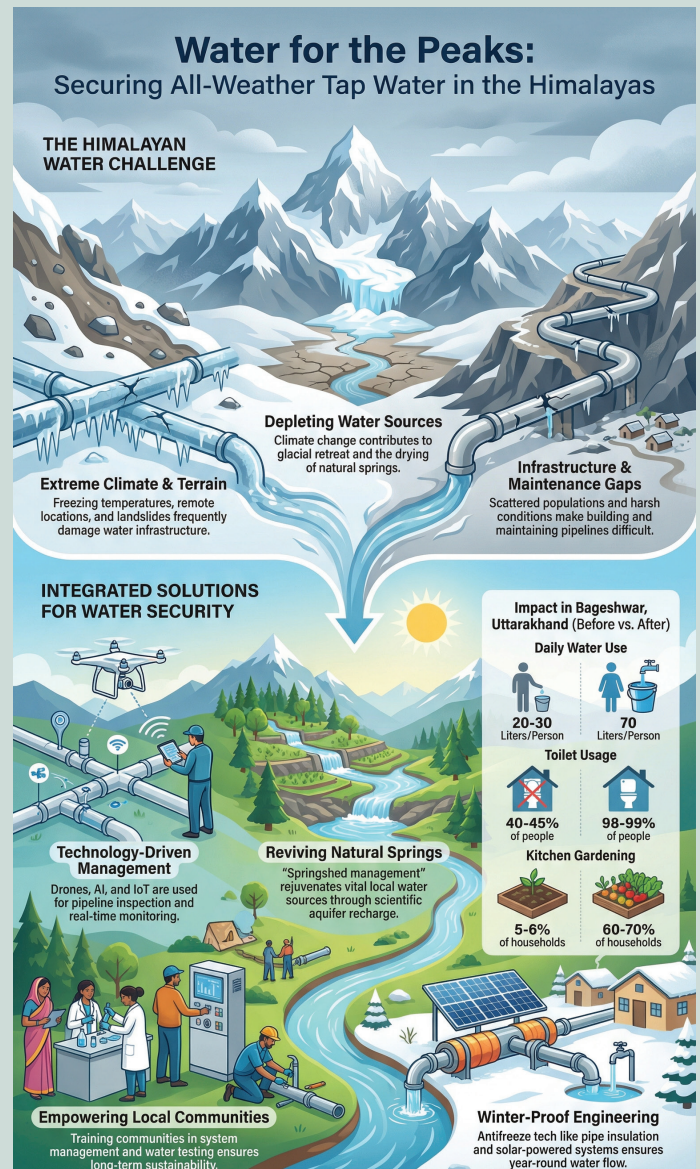
NITI Aayog has released a compendium detailing strategies to ensure year-round water security in India's most challenging terrains. The Himalayan region faces severe obstacles, including sub-zero temperatures that freeze pipelines, rugged topography, and the depletion of natural springs exacerbated by climate change and glacial retreat.

The sources highlight a necessary shift toward integrating traditional knowledge with modern technology. In regions like Ladakh and the Lahaul Valley, indigenous water management systems such as zings and kuhls are being augmented by antifreeze infrastructure, including nitrile tube insulation, heat trace cables, and solar-powered pumping systems to maintain flow during harsh winters. Additionally, the application of AI, IoT, and Machine Learning is revolutionising water management through real-time monitoring of quality and automated pipeline inspections via drones.

A central pillar of this initiative is springshed management, which addresses water scarcity by focusing on aquifer recharge and sustainable land use. Through the Jal Jeevan Mission (JJM) and regional programs like Himachal Pradesh's WASCA-II, the government is driving cross-sectoral convergence to provide safe drinking water directly to doorsteps. Ultimately, the compendium underscores that success depends on community involvement, empowering local groups to take ownership of infrastructure maintenance and governance, thereby ensuring ecological balance and social resilience for high-altitude populations.



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Roadmap for Job Creation in the AI Economy

Frontier Tech Hub Initiative

India's tech services sector, strategically vital to the economy, employing 13% of the total workforce and over 30% of the white-collar talent, stands on the frontline of AI disruption. By 2031, the industry could face a loss of 1.5 million jobs or, through proactive action, create up to 4 million new opportunities.

The roadmap utilises a 'Work-Worker-Workforce' framework to analyse AI's impact. While AI-driven productivity gains of 10–60% may render routine roles like LI help desk engineers and junior QA testers redundant, it is spawning three tiers of new roles: Enterprise AI (e.g., Ethical AI Specialists), Frontier AI (e.g., Quantum ML Engineers), and AI-for-AI (advanced research scientists).

Addressing current challenges is vital, as India currently faces a 50% supply-demand gap for AI talent and a net negative migration of researchers. To counter this, the report proposes a unified 'India AI Talent Mission' to replace siloed initiatives with a coordinated national strategy.

INDIA'S AI CROSSROADS: JOB CRISIS OR JOB BOOM?



A LOSS OF 1.5 MILLION JOBS

In a business-as-usual scenario, India's tech and CX sectors face significant job displacement.



THE SOLUTION: LAUNCH A NATIONAL AI TALENT MISSION

A unified, urgent, all-of-government initiative is essential to turn disruption into opportunity.



A GAIN OF 4 MILLION OPPORTUNITIES

With strategic action, India can capitalize on AI to become the world's workforce capital.

3 PILLARS FOR AN AI-READY INDIA



EMBED AI IN EDUCATION

Integrate AI fluency across all levels, from schools to universities.



BECOME AN AI TALENT MAGNET

Position India as a premier global destination for top AI skills and researchers.



LAUNCH A MASSIVE SKILLING ENGINE

Reskill and upskill the current workforce at a national scale for AI-native roles.

This mission rests on three core pillars: embedding AI fluency throughout the education system, becoming a global talent magnet by offering attractive grants and dedicated AI Talent Visas to reverse the brain drain, and launching a massive reskilling engine for the current workforce. Furthermore, the roadmap emphasises the need for an India Open-Source AI Commons and a federated national compute grid to provide the infrastructure required for indigenous innovation. By 2035, India aims to be the global epicentre of AI talent, transforming disruption into a generational opportunity.



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Roadmap on AI for Inclusive Societal Development

Frontier Tech Hub Initiative

NITI Aayog has unveiled a strategic roadmap to empower India's 490 million informal workers through Mission Digital ShramSetu. As a cornerstone of the Viksit Bharat 2047 vision, this national mission leverages AI, blockchain, and IoT to dismantle systemic barriers like trust deficits and low digital literacy.

By 2035, the roadmap envisions a transformative shift where verifiable digital credentials offer economic credibility and voice-first AI assistants provide universal service access. Innovations like smart contracts will guarantee transparent, milestone-based payments, while robotics and wearable safety gear enhance productivity for trades such as construction and farming.

To achieve a target per capita income of \$14,500 by 2047, the mission proposes a multi-layered governance structure to coordinate industry, government, and academia. This human-centric approach ensures that India's 'economic heartbeat' transitions from the margins to become a catalyst for inclusive, high-income growth.



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Digital ShramSetu: AI for India's 490 Million Workers

THE CHALLENGE: AN UNTAPPED ENGINE

490 MILLION
Informal Workers



~90% of India's labor force but is largely excluded from formal systems and social protections.



THE SYSTEMIC BARRIERS



TRUST DEFICIT



POOR ACCESS TO SERVICES



Four Core Barriers to Progress



KNOWLEDGE GAPS



OUTDATED TOOLS

THE SOLUTION: AI-POWERED INCLUSION



Voice-based access for all literacy levels



Smart contracts for fair pay



Safer, more productive tools



Technology for Transformation

THE MISSION: DIGITAL SHRAMSETU



'Digital ShramSetu' is a proposed mission to drive the adoption of frontier technologies for India's informal workforce.

THE 2047 GOAL: SHARED PROSPERITY



Achieve 100% social security coverage

UK-India Infrastructure Financing Bridge_Year 1 Report

Economics & Finance-II Division

NITI Aayog and the City of London Corporation have released the Year 1 Report for the UK-India Infrastructure Financing Bridge (UKIIFB). This partnership aims to bridge India's \$4.5 trillion infrastructure gap by 2030 by matching national projects with global capital and UK expertise.

The report advocates for a strategic shift toward 'deal-centric' thinking, prioritising long-term value and robust risk management over mere upfront costs. A major milestone is the Project Assessment Framework (PAF), which aligns Indian project preparation with international standards in sectors like highways and rapid transit. To enhance bankability, the roadmap emphasises embedding ESG standards, leveraging Digital Public Infrastructure (DPI) for transparency, and mitigating foreign exchange risks.

By fostering relationships with UK sponsors and supporting mid-tier firms, India seeks to create a competitive, transparent, and world-class investment destination.



Scan this QR to access the full report

Unlocking India's \$4.5 Trillion Infrastructure Opportunity



\$4.5 TRILLION
INVESTMENT NEEDED

India's dynamic growth trajectory calls for this estimated investment in infrastructure by 2030 to support urbanization and sustainability goals.



A Shift to an Investor-Centric Mindset

To attract international capital, India is moving from a project-focused approach to one that prioritizes investor needs for risk, value, and returns.



Think Deals, Not Just Projects

Projects are being reframed as integrated investment opportunities, bundling financing and long-term benefits into compelling packages for global investors.



Prioritize Value & Risk Management

The focus is shifting from minimizing upfront costs to highlighting long-term value, sustainability, and transparently managing project risks.



Align with Global ESG Standards

By embedding globally recognized Environmental, Social, and Governance (ESG) principles, projects are being designed to meet investor demands and unlock climate finance.

Working Papers this Quarter



Public RD Institutes in India: Opportunities for Multisectoral and Systemic Integration



Policy Perspectives for a : A Three-Dimensional Framework



International Student Mobility: A Global and Indian Temporal Overview



NITI Tax Policy Working Paper Series-II: Towards India's Tax Transformation: Decriminalisation and Trust-Based Governance



NITI Tax Policy Working Paper Series-I: Enhancing Certainty, Transparency and Uniformity in Permanent Establishment and Profit Attribution for Foreign Investors in India



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