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MEDIA EXCELLENCE

ADVANTAGE KARNATAKA

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Bengaluru's Next Sprint: Building the Infrastructure a Global Tech Capital Deserves

Few cities in the world embody the spirit of modern India the way Bengaluru does. As the engine powering nearly 40% of the country's IT exports, the city is both a symbol of technological excellence and a catalyst of national growth. But Bengaluru's extraordinary rise has also brought one unavoidable truth into sharp focus: a global tech hub cannot run on yesterday's infrastructure.

For years, the city has expanded faster than the systems meant to support it. The consequences are visible every day, traffic gridlock that ranks among the worst globally, overburdened public services, and a growing sense of friction in the city's economic rhythm. This congestion is not merely an irritation but it is also an economic drag. Millions of productive hours are lost annually, talent mobility is constrained, and the city's attractiveness as an investment destination is challenged.

Yet, the problem is far from insurmountable. What Bengaluru needs is a decisive, coordinated, and forward-looking infrastructure push, one that matches its stature as India's innovation nerve centre.

Public transport must anchor this transformation. The full completion of the Namma Metro network is critical; every phase delayed is an opportunity lost. The Metro is not just a transit corridor but it is the circulatory system of a future-ready city. Equally vital is the Suburban Rail project, which has the potential to rewire mobility across the wider metropolitan region, reducing dependence on private vehicles and easing pressure on city roads.

Complementing this must be smarter, faster road infrastructure. Projects like the Satellite Town Ring Road (STRR) are essential for redistributing traffic and opening new growth corridors. Meanwhile, integrating AI-driven traffic management can help extract far greater efficiency from existing road networks, ensuring smoother flows and better predictability for commuters and businesses alike.

Investing in these systems is not a luxury; it is a strategic imperative. Bengaluru is a national economic asset, and its future depends on infrastructure that is as advanced as the industries it supports. By building robust transport systems, efficient roads, and seamless regional connectivity, Karnataka can secure the next chapter of Bengaluru's growth story.

If the city can match its technological prowess with equally innovative urban planning, Bengaluru will not merely remain India's tech capital; it will stand shoulder to shoulder with the world's most future-ready cities, setting benchmarks in livability, productivity, and sustainable growth for decades to come. ■



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Content

04

The Innovation Engine: How Karnataka is Shaping the Future of Global Manufacturing

08

Bavaria: The Gateway for Indian Tech Companies into Europe

15

Karnataka's IT Renaissance: A Testament to Progress and Growth

16

The Great Rebuild

20

Born in Bharat: India's Defence Industry Marks a New Era of Sovereignty

21

Aatmanirbhar in Action: Inside India's Defence Revolution

22

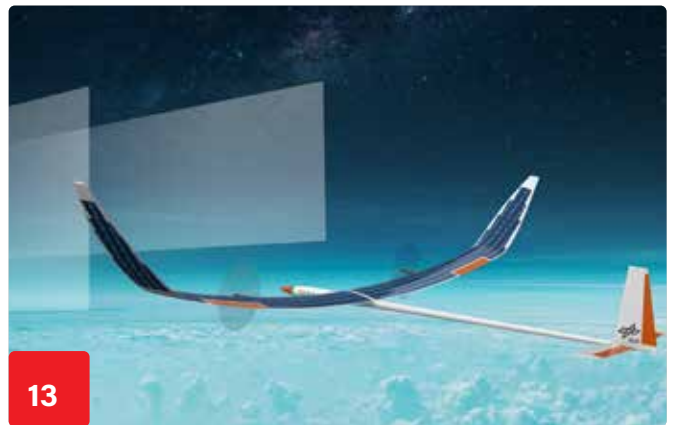
ISRO's V. Narayanan Calls Industry, the Lifeline of India's Space Journey

24

Tourism in Karnataka: A Land of Wonders

28

Metro to Airport: A Must for Bengaluru



The Innovation Engine: How Karnataka is Shaping the Future of Global Manufacturing

A \$1 Trillion Dream, a New Industrial Blueprint, and the Rise of India's 'Innovation Factory'

Karnataka is reinventing itself as the world's 'Innovation Factory'. With ₹27,000 crore in fresh approvals and over US \$118 billion in new investment commitments, the state is transforming its IT prowess into high-tech industrial strength. Backed by the Karnataka Industrial Policy 2025-30, it aims to attract ₹7.5 lakh crore and create 20 lakh jobs through flexible incentives, cutting-edge infrastructure, and future-ready talent. From semiconductors and EVs to aerospace, green hydrogen, and renewables, Karnataka is building an inclusive, sustainable manufacturing ecosystem that could propel it toward a \$1 trillion economy—and redefine what “Make in India” truly means.

In late October 2025, as India slipped into the festive season, Karnataka's corridors of power were abuzz with a different kind of celebration. The State High-Level Clearance Committee (SHLCC), chaired by Chief Minister Siddaramaiah, approved 17 major industrial projects worth ₹27,607 crore, promising over 8,700 new jobs. The approvals weren't routine. They symbolised the accelerating transformation of Karnataka from India's

'Silicon Valley' into the world's 'Innovation Factory.'

For decades, Karnataka's capital, Bengaluru, was the nerve centre of India's digital revolution — home to software giants, R&D labs, and Global Capability Centres (GCCs). But the state's new ambition goes far beyond code and servers. It now aims to convert intellectual strength into industrial muscle — building machines, microchips, and mobility solutions for the world. This shift

is anchored in the Karnataka Industrial Policy 2025–30, a strategic roadmap that seeks to attract ₹7.5 lakh crore in investments and create 20 lakh new jobs by the end of the decade.

As Industries Minister MB Patil puts it, “The goal is not just to make in India — it's for Karnataka to make for the world.”

From Silicon Valley to Innovation Factory

The shift from IT-driven growth to





industrial diversification is deliberate. For the first time in decades, Karnataka is pushing R&D and manufacturing to coexist — turning its 400-plus R&D centres into full-fledged production bases. This symbiotic strategy has begun to show results.

In the past 12 months alone, the state has witnessed an unprecedented wave of industrial commitments. At the Invest Karnataka 2025 Global Investors Meet, the government secured investment intents worth over US \$118 billion (₹10.27 trillion), 75 percent of which were targeted outside Bengaluru — a clear signal that regional development is central to the state's new industrial chapter. Among the headline announcements were Lam Research's US\$1.2 billion (₹10,000 crore) facility for semiconductor equipment manufacturing, JSW Neo Energy's ₹56,000 crore renewable manufacturing project, and a string of EV and green mobility investments, including a ₹400 crore project by Japan's JFE Shoji to produce motor cores for electric vehicles.

Across sectors — from steel and solar to chips and chemicals — capital is flowing in, but more importantly, it is spreading across the map. The once-

Bengaluru-centric story is now being rewritten by new industrial nodes in Dharwad, Kalaburagi, Koppal, Mysuru, and Yadgir, each emerging as a specialised cluster for electronics, FMCG, textiles, or pharmaceuticals.

A Policy Built on Precision

At the heart of this momentum lies a remarkably flexible and forward-looking industrial policy. The Karnataka Industrial Policy 2025–30 is structured around four core themes — incentives, infrastructure, ease of doing business, and human capital





— but what sets it apart is its pragmatism. Instead of the traditional one-size-fits-all subsidy model, the policy allows companies to choose between capital expenditure subsidies and production-linked incentives (PLI), tailoring benefits to fit business models. There are additional “booster incentives” for industries that generate high employment, especially for women, or that co-locate R&D and manufacturing — an innovation that ties Karnataka’s scientific ecosystem directly to its industrial expansion.

Infrastructure, the second pillar, is being treated as the backbone of this strategy. The state’s industrial board, KIADB, has been empowered to create Special Purpose Vehicles with private developers, offering land as equity to fast-track industrial parks and Special Investment Regions (SIRs). This public-private model is redefining the way industrial ecosystems are built, while a decision to double the Floor Area Ratio (FAR) for industries set up outside Bengaluru is nudging investment into newer districts.

The third pillar, ease of doing business, is undergoing its most ambitious reform yet. The government is developing a digital single-window clearance portal with AI-powered chatbots, automated incentive

calculators, and affidavit-based self-approval for MSMEs. “We are moving toward fixed timelines and real-time accountability. Investors will not need to wait in corridors — the system will move for them,” said the state industries department.

Equally critical is the fourth pillar: building a future-ready workforce. Karnataka has launched an aggressive drive to modernise its Industrial Training Institutes (ITIs) in partnership with private players like Tata Technologies, introducing curricula in robotics, AI-driven manufacturing, and advanced mechatronics. This industrial skilling revolution ensures that as new factories rise, the talent to run them is

already in place.

Sectors That Define the New Karnataka

If one sector symbolises Karnataka’s industrial dominance, it is aerospace and defence. Nearly 67 percent of India’s aircraft and helicopter production happens here, and the state accounts for a quarter of the nation’s entire aerospace output. Anchored by HAL, ISRO, and NAL, Bengaluru’s ecosystem has attracted global names such as Airbus, Boeing, GE, and Rolls-Royce, all of which now run major R&D or engineering centres in the city.

But the new growth story lies beyond



aerospace. Karnataka has quietly become India's EV and future mobility hub, being the first state to announce an EV policy back in 2017. Today, it hosts pioneers like Ather Energy, Mahindra Electric, and Toyota Kirloskar, and boasts the highest number of public EV charging stations in the country. The upcoming EV manufacturing clusters in Gauribidanur, Ramanagara, and Dharwad will further entrench its leadership in sustainable mobility.

In the semiconductor and electronics space, the state has emerged as a cornerstone of the national supply chain. Mysuru and Dharwad are seeing new Electronics Manufacturing Clusters (EMCs), while Bengaluru continues to house global leaders such as Foxconn, Cisco, Schneider Electric, and Texas Instruments. With Foxconn's iPhone component unit already operational in Devanahalli and expansion underway, Karnataka is positioning itself as India's answer to East Asia's manufacturing belts.

The sunrise sectors are equally promising. The government is betting big on space-tech startups, green hydrogen, and medical technology, leveraging its innovation ecosystem. The state's Industry 5.0 initiative, supported by a

₹100 crore Centre of Excellence, aims to infuse robotics, AR/VR, and AI into manufacturing — aligning Karnataka's growth with global industrial trends.

Unlike older industrial booms that were concentrated and carbon-intensive, Karnataka's is designed to be both inclusive and sustainable. The new policy incentivises eco-friendly operations, offering sustainability-linked benefits for industries that adopt Zero Liquid Discharge systems, effluent treatment plants, and GreenCo-certified practices.

Just as importantly, the policy's "Beyond Bengaluru" mission ensures balanced development. Regions like Koppal, Yadgir, and Kalaburagi are being transformed through dedicated clusters — from toy and textile manufacturing to pharmaceuticals and FMCG. The result is a new geography of growth, where each district makes a unique contribution to the state's industrial fabric.

MSMEs — long called the "backbone" of Karnataka's economy — are being integrated into this growth story through digital finance access, guaranteed land allotment, and a 15 percent price preference in government procurement. For the first time, small manufacturers are part of the same value chain as global

giants.

The Road to a \$1 Trillion Economy

The approval of ₹27,607 crore worth of projects in one day isn't just a bureaucratic milestone; it's proof that Karnataka's new model of industrial acceleration is working. Investors are responding to policy clarity, infrastructure delivery, and the promise of a talent-rich, future-ready workforce.

As Karnataka eyes its \$1 trillion economy goal, it is doing so with a unique combination of innovation, inclusion, and intent. From the hangars of HAL to the solar fields of JSW, from chip-tool giants like Lam Research to EV innovators in Dharwad, the state is weaving a new industrial narrative — one that blends technology with tangible production.

Karnataka's evolution from India's knowledge capital to its manufacturing powerhouse isn't just about growth. It's about redefining what 'Make in India' can mean when driven by intelligence, infrastructure, and imagination.

With a flexible policy, world-class industrial clusters, and a rising tide of global investment, the message is clear — the Innovation Engine is running, and Karnataka is driving it full throttle. ■



Bavaria: The Gateway for Indian Tech Companies into Europe

The state is Germany's innovation powerhouse where engineering excellence meets digital transformation and global opportunity.

Bavaria, Germany's largest and most innovative state, stands at the heart of Europe's technology revolution, where world-class research, cutting-edge industries, and a thriving start-up ecosystem converge. Home to global giants like BMW, Audi, Siemens, and Infineon, Bavaria combines engineering precision with entrepreneurial dynamism, making it the ideal gateway for Indian high-tech companies seeking a strong foothold in Europe. Backed by visionary policies such as the High-Tech Agenda Bavaria and Cluster Offensive Bavaria, the state continues to lead in AI, quantum technologies, mobility, semiconductors, and life sciences. The Indo-Bavarian partnership, strengthened through decades of cooperation, has reached new heights with recent MoUs and high-level delegations reaffirming joint efforts in sustainable, tech-driven growth. Through the State of Bavaria India Office – Invest in Bavaria, headquartered in Bengaluru, the state provides end-to-end support for Indian companies expanding to Europe. At Bengaluru Tech Summit 2025, Bavaria will showcase this spirit of collaboration, uniting technology, talent, and trust to shape a shared, innovation-led future between India and Germany.

Germany has long been the heartbeat of European innovation — a nation where precision engineering meets visionary technology. From pioneering the digital factories of Industry 4.0 to leading the global transition towards sustainable mobility and green energy, Germany's innovation ecosystem thrives on a powerful partnership between research, industry, and government. It is not just a country of inventors; it is a country that keeps reinventing itself.

At the centre of this success lies Bavaria, Germany's largest and most economically vibrant state. Stretching across more than 70,000 square kilometres, Bavaria is not only geographically strategic but also a pivotal gateway to Europe. It is home to industry titans such as BMW, Audi, Siemens, Infineon Technologies, and MAN Truck & Bus, as well as a thriving landscape of startups, SMEs, and globally respected research institutions. This powerful blend of tradition and transformation has turned Bavaria into an ideal destination for international businesses, especially Indian high-tech firms, looking to establish or expand their European presence.

World-Class Infrastructure and Connectivity

Bavaria's infrastructure ranks among the finest in Europe, offering seamless connectivity, efficient logistics, and a business-friendly environment. Munich Airport, one of Europe's best-connected global hubs, provides direct access to major international markets, while Nuremberg and Augsburg airports enhance



Bavarian Parliamentary Delegation Visit to the State of Karnataka



Ms Ilse Aigner
President of the
Bavarian State Parliament



Mr Tobias Reiß
Vice President of
the Bavarian State
Parliament



Mr Alexander Hold
Vice President of
the Bavarian State
Parliament



Ms Martina Gießübel
Member of the
Bavarian State
Parliament Presidium



Mr Ludwig Hartmann
Vice President of
the Bavarian State
Parliament



Mr Andreas Jäckel
Member of the
Bavarian State
Parliament Presidium



Mr Markus Rinderspacher
Vice President of
the Bavarian State
Parliament

As the Indo-Bavarian partnership continues to grow in depth and direction, a new chapter unfolds this November with the visit of a high-level Bavarian Parliamentary Delegation to India. The delegation, led by Ms. Ilse Aigner, President of the Bavarian State Parliament, will be in India from 16th to 20th November 2025.

The delegation's visit coincides with the Bengaluru Tech Summit 2025, South Asia's premier innovation and technology platform, where Bavaria will once again

play a prominent role. During the summit, the delegation will engage directly with Indian industry leaders, entrepreneurs, innovators, and policymakers — exploring new avenues for cooperation in areas such as digital transformation, sustainable industry, and emerging technologies.

This mission underscores Bavaria's enduring commitment to strengthening ties with India, not only in business and innovation but also through political dialogue and institutional collaboration. The presence of the Bavarian State

Parliament's leadership at India's flagship technology event highlights the strategic importance both regions place on fostering sustainable economic growth, mutual investment, and technological advancement.

Beyond the summit, the delegation's engagements are expected to deepen partnerships in science, industry, and education, reaffirming Bavaria's belief that long-term collaboration with India is vital to shaping a shared, innovation-driven future.



Minister-President Dr. Markus Söder with Dr. S. Jaishankar, Minister of External Affairs, India

domestic and regional connectivity. The Oberpfaffenhofen Special Airport further adds to Bavaria's distinction by supporting research flights, electric aviation test fields, and advanced aerospace testing.

The state's high-speed rail and highway networks ensure easy access to major European economic corridors, while its digital backbone stands among the best on the continent. With smart cities, AI testbeds, and extensive data infrastructure, Bavaria continues to evolve as a model for intelligent mobility and digital transformation.

**Research and Development:
Innovation at Its Core**

Innovation has long been Bavaria's lifeblood. The state's deep-rooted

commitment to research and development is anchored by a world-class academic ecosystem comprising nine state universities, 24 universities of applied sciences, and a rich network of private and public research institutes. Leading institutions such as the Technical University of Munich (TUM), Ludwig Maximilian University (LMU), and FAU Erlangen-Nuremberg consistently rank among Europe's best, producing exceptional talent and pioneering research.

Government-backed initiatives such as the Bavarian Innovation Strategy and the High-Tech Agenda Bavaria have further strengthened collaboration between academia, industry, and startups. This integrated innovation model

accelerates the transformation of scientific breakthroughs into market-ready technologies, spanning fields like advanced manufacturing, autonomous systems, biotechnology, quantum computing, and artificial intelligence.

**Economic Strength and
Industrial Synergy**

Bavaria's economy is one of Europe's most powerful, underpinned by a diverse industrial base that includes automotive, aerospace, electronics, mechatronics, biotechnology, and advanced manufacturing. Its economic dynamism lies not just in its global corporations but also in its network of Mittelstand companies — small and medium-sized enterprises that are often family-owned yet globally competitive.

This ecosystem fosters deep cross-sector collaboration, ensuring that innovations move quickly from research labs to real-world applications. Strong supply chains, openness to partnerships, and an ingrained culture of quality and precision make Bavaria a breeding ground for industrial synergy and scalable innovation.

Talent and Workforce Excellence

The Bavarian workforce is among the most skilled and productive in Europe. Its universities and technical institutions produce highly qualified professionals across engineering, data analytics, science, and management. Complementing this talent pipeline is the state's renowned vocational training system, which ensures practical, industry-aligned skills.



Hon'ble Minister Dr. Florian Herrmann with Mr. M.B. Patil, Hon'ble Minister for Large & Medium Industries and Infrastructure Development, and Shri Priyank M. Kharge Hon'ble Minister for Rural Development, Panchayati Raj, and Information Technology & Biotechnology (IT & BT), Government of Karnataka during the MoU signing with Karnataka.



Mr. Tobias Gotthardt, Vice Minister, with Mr. M.B. Patil, Hon'ble Minister for Large & Medium Industries and Infrastructure Development, along with Ms. Kerstin Schreyer, Member of the Bavarian Parliament and Deputy Chairwoman of the Committee on Economic Affairs, Regional Development, Energy, Media and Digitalization, and Mr. Horst Arnold, Member of the Bavarian Parliament.

Bavaria also attracts a multicultural, globally minded workforce through its international collaborations and strong quality of life. This combination provides companies with access to talent that is both technically skilled and innovation-driven, a critical factor for success in today's high-tech industries.

Government and Policy Support

The Bavarian State Government plays an active and strategic role in shaping the region's innovation ecosystem through a series of forward-looking initiatives that combine strong policy direction with long-term investment. Among its flagship programmes, the High-Tech Agenda Plus stands out as a cornerstone — expanding Bavaria's research and development capacity while investing heavily in next-generation fields such as artificial intelligence, quantum computing, and hydrogen technologies. This initiative is transforming Bavaria into one of Europe's most competitive research landscapes, positioning it at the forefront of scientific discovery and industrial application.

Equally impactful is the Cluster Offensive Bavaria, a state-wide initiative designed to foster collaboration between companies, universities, and research centres across 17 strategic technology clusters. By connecting industry with academia and facilitating cross-sector partnerships, this programme ensures that innovation thrives across the value chain — from idea conception to commercial success. Complementing these efforts is the Digital Bavaria Programme, which focuses on driving digital transformation

among SMEs and start-ups, enabling them to integrate advanced technologies and remain globally competitive.

Together, these initiatives form the backbone of Bavaria's innovation policy, ensuring that companies investing in the state not only find opportunity but also long-term stability and sustained government support — the key ingredients for sustainable growth in the European market.

Key Technology Sectors Driving Bavaria's Innovation Economy

Bavaria's technological and industrial landscape is as diverse as it is advanced, spanning sectors that define the future of global industry.

In automotive and mobility, Bavaria remains the undisputed heart of Germany's automobile industry, home to global icons such as BMW, Audi, and MAN Truck & Bus. The sector is undergoing a historic transformation — transitioning from combustion engines to e-mobility, autonomous systems, and digital vehicles. Extensive R&D collaboration between automakers, software firms, and digital start-ups is redefining the future of mobility, with Bavaria at the epicentre of this shift.

In aerospace, Bavaria has emerged as Europe's new hub for space and satellite technology, hosting a thriving network of start-ups, global leaders like Airbus, and research institutions associated with the European Space Agency (ESA). Focused on cutting-edge areas such as in-orbit manufacturing, propulsion systems, and AI-driven flight technologies, Bavaria's

aerospace ecosystem blends academic expertise with entrepreneurial innovation.

Additive manufacturing represents another key pillar of Bavaria's high-tech strategy. The "Bavaria Makes" alliance, centered at the Technical University of Munich (TUM) in Garching, has positioned the state as a rising star in 3D printing and industrial digitalisation. Its applications now extend across multiple industries — from medical technology and aerospace to railways and advanced machinery — showcasing how academic research can powerfully drive industrial reinvention.

The life sciences and digital health sectors are equally robust, supported by a strong biomedicine and medtech ecosystem. Global players such as Siemens Healthineers, BioNTech, and Rosenthal are leading the way in integrating digital technologies and artificial intelligence into R&D, diagnostics, and production scaling. This fusion of healthcare and digital innovation has made Bavaria as one of Europe's most influential centres for biomedical advancement.

In electronics and electrical engineering, Bavaria holds an unrivalled position, generating 42% of Germany's total electronics market revenue. Intensive R&D investment by both global and local companies continues to drive advancements in Industry 4.0 technologies, connected devices, chip design, and sensor systems. This sector's strength not only fuels Bavaria's own industrial productivity but also cements its role as a critical player in Europe's digital and semiconductor economy.



Dr. Florian Herrmann, Head of the Bavarian State Chancellery with Shri Priyank Kharge Minister of Electronics, Information Technology & Biotechnology and Rural Development & Panchayat Raj, Mr. M.B. Patil Hon'ble Minister for Large & Medium Industries and Infrastructure Development, Ms. Gunjan Krishna (Commissioner for Industrial Development and Director, Department of Industries & Commerce, Government of Karnataka), and Mr. Achim Burkart, German Consulate General Bangalore

Together, these sectors reflect Bavaria's unique innovation DNA — one that seamlessly blends engineering precision, research excellence, and entrepreneurial vision, creating a powerful ecosystem for sustainable growth and global collaboration.

Clustered for Success and the High-Tech Agenda Bavaria

Central to Bavaria's innovation framework is the Bavarian Cluster Initiative, which connects companies, academia, and research bodies across 17 sectors, from aerospace and mobility to biotechnology, ICT, energy, and nanotechnology. This network fosters collaboration, accelerates R&D, and helps translate innovation into commercial success.

Complementing it is the High-Tech Agenda Bavaria, a €3.5 billion investment programme aimed at strengthening research infrastructure and competitiveness. The agenda funds over a hundred new professorships in emerging technologies like AI, robotics, quantum computing, hydrogen, and life sciences, while also expanding centres of excellence in mobility, semiconductors, and biotechnology.

Digital Hubs and Start-up Ecosystem

Complementing its research excellence and industrial strength, Bavaria has emerged as one of Europe's most dynamic start-up and digital innovation hubs. The state has cultivated a vibrant

entrepreneurial culture through a powerful mix of infrastructure, funding, and collaboration. At the core of this ecosystem lies the Digital Hub Initiative, a national network of 25 hubs across Germany that connects SMEs and large corporations with start-ups, academia, and research institutions, accelerating the transfer of innovation from lab to market.

Bavaria is home to four major digital hubs that exemplify this synergy. The Digital Hub Mobility in Munich, based at UnternehmerTUM, focuses on big data, e-mobility, and autonomous driving. It serves as a collaborative platform where corporates and start-ups co-develop next-generation mobility solutions. Regular events such as start-up pitches, demo days, and the Digital Product School foster hands-on experimentation and co-creation.

Equally transformative is the InsurTech Hub Munich, located in the heart of

Germany's insurance capital. This hub unites start-ups, corporate partners, investors, and research institutions to continuously drive innovation in the insurance and fintech sectors. Through networking events, accelerator programmes, and virtual exchanges, it has helped establish Munich as Europe's undisputed InsurTech capital.

Meanwhile, de:hub Mobility and de:hub Munich, two of Bavaria's leading Digital Ecosystem Hubs, promote deep-tech innovation across industries. These hubs act as vital interfaces connecting start-ups with established digital pioneers, corporates, and research networks, fostering the kind of cross-sector collaboration that defines Bavaria's technology landscape. Adding to this ecosystem is BASED, a next-generation innovation framework that aligns Bavaria's digital hubs more closely with research universities and industrial partners,



ensuring that innovation flows seamlessly across academic, entrepreneurial, and industrial domains.

Digital Incubation and Entrepreneurial Support

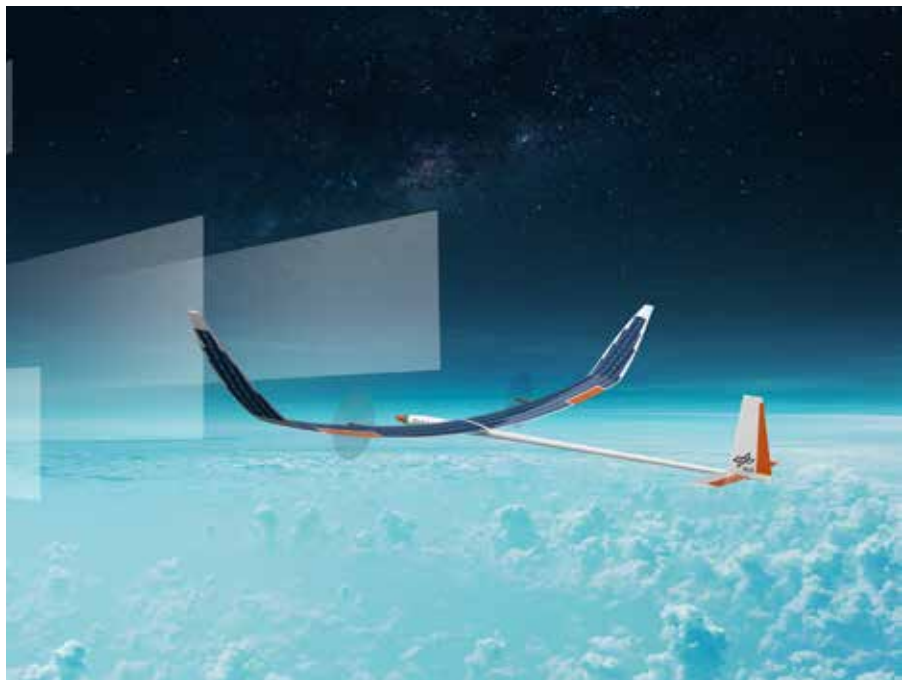
Beyond the hub network, Bavaria has built a comprehensive support system for entrepreneurs and innovators. A network of 19 Digital Start-up Incubation Hubs, operating across 30 locations, provides co-working spaces, mentoring, and direct access to investor and corporate networks. These initiatives are supported by the Bavarian Ministry of Economic Affairs, which has invested €150 million since 2016 to strengthen digital entrepreneurship across the state.

The ecosystem's financial backbone is further reinforced by BayStartUP, Bavaria's state-wide start-up financing network. It offers intensive business coaching, pitch preparation, and investor matchmaking services, dramatically improving start-up survival and growth rates. One of the most celebrated examples of Bavaria's entrepreneurial spirit is WERK1 Munich, often called the "most start-up-friendly place in Munich." It has become a blueprint for next-generation incubation, combining workspace flexibility with community-driven innovation. Since 2023, WERK1 has gone a step further by introducing co-living facilities, allowing young founders to live, work, and innovate under one roof, a first-of-its-kind model in Europe that perfectly embodies Bavaria's forward-looking innovation culture.

Indo-Bavarian Partnership: A Decade of Deepening Ties

The relationship between Bavaria and India has evolved over decades into one of the most dynamic international partnerships in innovation, trade, and technology. Over the years, more than 35 high-level Bavarian governmental and business delegations have visited India, underscoring the depth and continuity of this collaboration. What began as a strong economic connection has matured into a broad-based alliance spanning science, research, and sustainable development.

Building on this longstanding partnership, two landmark Bavarian delegations visited India in April 2025, marking a new phase of cooperation. The missions were led by Minister-President Dr. Markus Söder, accompanied by State Minister Dr. Florian Herrmann, Head of the Bavarian State Chancellery, and



Mr. Tobias Gotthardt, Bavarian Vice Minister of Economic Affairs, Regional Development, and Energy.

The economic delegation, which included over 30 senior representatives from Bavaria's aerospace and defence sectors, showcased the state's industrial prowess and technological leadership. Through strategic meetings, trade dialogues, and sectoral exchanges, the visit reinforced Bavaria's position as a global hub for innovation and a trusted partner for India's rapidly growing high-tech industries.

A key highlight of the visit was the renewal of the Memorandum of Understanding (MoU) between Karnataka

and Bavaria, a symbolic and strategic step that reaffirmed the mutual commitment to deepen cooperation across multiple fronts. The renewed MoU sets the stage for joint initiatives in Artificial Intelligence, Quantum Technologies, Cybersecurity, Biotechnology, Smart Cities, Higher Education, Sustainable Agriculture, Industry 4.0, and Aerospace, among other high-impact sectors.

This agreement not only renews ties but also redefines the partnership, aligning Bavaria's advanced industrial and research capabilities with India's technological dynamism and entrepreneurial energy. It stands as a significant milestone in the enduring and evolving Indo-



Bavarian relationship, reinforcing both regions' shared vision of innovation-led, sustainable growth for the future.

State of Bavaria India Office – Connecting Continents

Established in 2001, the State of Bavaria India Office – Invest in Bavaria operates under the Bavarian Ministry of Economic Affairs, Regional Development, and Energy, serving as the official representative of the Free State of Bavaria in India. Based in Bengaluru, the office functions as a central point of contact for Indian companies seeking to establish or expand their presence in Bavaria, and for Bavarian enterprises exploring opportunities in India. Over the years, it has become a vital enabler of economic cooperation, offering free and confidential support that includes strategic market guidance, location analysis, and connections to key stakeholders across Bavaria's business and innovation ecosystem.

As part of Bavaria's global network of 27 representative offices, the India office plays a particularly crucial role in deepening the bilateral partnership between the two regions. Since its inception, it has acted as a bridge linking Indian enterprise with Bavaria's industrial, academic, and research strengths, facilitating two-way investment, collaboration, and knowledge exchange.

What Our Office Provides

The office provides end-to-end support for investment and business setup in Bavaria — from location scouting and regulatory guidance to connecting investors with the state's dynamic industry clusters. It also actively promotes trade missions and delegation visits, having

organized and supported over 32 Bavarian business and political delegations to India, further strengthening institutional and commercial engagement.

Beyond business facilitation, the India office plays an important role in research and academic collaboration, linking universities, start-ups, and corporates from both regions for joint innovation projects. It also partners with leading industry associations and government bodies to promote trade, investment, and technology transfer — ensuring that cooperation between Bavaria and India remains both strategic and sustainable.

Why Indian Companies Choose Bavaria?

Today, hundreds of Indian technology and engineering companies — including Infosys, Wipro, Tech Mahindra, KPIT, Quest Global, L&T Infotech, Motherson Group, and many others — have chosen Bavaria as their European base of operations. They are drawn by Bavaria's unique advantages: strategic access to the German and EU markets, a highly skilled talent pool, a robust industrial supply chain, strong government incentives for R&D and innovation, and a deep-

rooted culture of collaboration between academia and industry.

However, the India office's role extends well beyond economics. It also acts as a vital channel for cultural diplomacy, strengthening the long-standing bond between Bavaria and Karnataka, formalized through the 2007 Memorandum of Understanding that continues to drive exchange in business, education, and research. Celebrations such as Oktoberfest Bengaluru and the Nuremberg Christmas Market have become living symbols of this friendship — bridging two vibrant cultures through shared spirit, creativity, and collaboration.

As industries worldwide pivot toward sustainability and digital transformation, Bavaria and India stand united in their vision of innovation that is inclusive, enduring, and globally relevant. Guided by a shared belief in progress through partnership, the State of Bavaria India Office continues to serve as a trusted partner and gateway — connecting Indian ambition with Bavarian excellence.

Join Bavaria at Bengaluru Tech Summit 2025

The 28th Bengaluru Tech Summit, to be held from 18–20 November 2025 under the theme "Futurise," will serve as a platform to showcase the strength of Indo-Bavarian cooperation. The Invest in Bavaria Pavilion will host opportunities for partnerships, networking, and collaboration across technology, innovation, and research.

Together, Bavaria and India are shaping a future where technology, talent, and trust transcend borders, a partnership grounded in innovation, inspired by progress, and powered by shared vision. ■

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Karnataka's IT Renaissance: A Testament to Progress and Growth

Since the Congress government assumed power in Karnataka, the state has witnessed a remarkable transformation in the information technology (IT) sector. The government's proactive approach has attracted substantial foreign investment, cementing Karnataka's position as a hub for innovation and growth.

Economic Growth and Investment

Karnataka has seen a surge in investments from global giants, with companies like Walmart, Alphabet's Google, Infosys, and Wipro setting up or expanding their operations in the state.

The government's focus on creating a business-friendly environment has yielded results, with the state witnessing a notable increase in foreign direct investment (FDI).

According to the Department for Promotion of Industry and Internal Trade (DPIIT), Karnataka's cumulative FDI inflow stood at Rs. 4,27,130 crore (US\$ 55.52 billion) between October 2019 and December 2024, accounting for 20% of India's cumulative FDI inflows.

Infrastructure Development

The government has prioritised infrastructure development, with initiatives like the Revitalisation of Roads with TenderSURE project in Bengaluru aimed at improving urban mobility. The Bangalore Satellite Town Ring Road, a 280.8 km expressway, is expected to alleviate traffic congestion and boost economic development in the region.

IT Policy and Initiatives

The Karnataka IT Policy 2020-25 aims to solidify the state's position as a leader in the IT sector while contributing significantly to India's goal of becoming a trillion-dollar digital economy. The policy targets the creation of over 60 lakh jobs directly and indirectly within the IT industry, emphasising infrastructure development, market growth beyond Bengaluru, and fostering a remote workforce.

Foreign Investment and Collaborations

Karnataka has attracted significant foreign investment, with companies



like Foxconn, Wistron Infocomm Manufacturing India, and Air India Limited setting up or expanding their operations in the state.

The government's focus on promoting foreign investment has led to the signing of memorandums of understanding (MoUs) worth Rs. 1.29 lakh crore (US\$ 16 billion) in the renewable energy sector.

Startups and Innovation

Karnataka has become a hub for startups and innovation, with initiatives like the Global Innovation Alliance-Market Access Programme (GIA-MAP) aimed at supporting startups in exploring business opportunities globally. The state's IT ecosystem has witnessed significant growth, positioning Karnataka as a powerhouse in various technology sectors.

Challenges and Concerns

Despite the progress, the IT sector in Karnataka faces challenges, including concerns over working hours and job security. The Karnataka State IT/ITeS Employees Union (KITU) has expressed concerns over the proposed amendment to the Karnataka Shops and Commercial Establishment Act, which could lead to increased working hours and job losses.

The government's people-centric policies and commitment to progress have transformed Karnataka into a hub for innovation and growth.

With continued focus on infrastructure development, promotion of industrial growth, and attraction of foreign investment, Karnataka is poised to remain a leader in India's growth story.



The Great Rebuild

Karnataka's Master Plan to Power a \$1 Trillion Economy

To secure its \$1 trillion economic ambition, Karnataka is undertaking a massive infrastructure transformation. 'The Great Rebuild' aims to solve Bengaluru's legendary traffic congestion and build a future-proof ecosystem for business. Funded by reinvesting industrial tax revenues, the plan is both bold and multi-pronged. It features a 50-km urban tunnel network, the expansive Satellite Town Ring Road (STRR), and new expressways. The Namma Metro's Blue Line will soon connect the IT corridor to the airport, enhancing mobility. Furthermore, the 'Beyond Bengaluru' strategy is decentralising growth, launching a 300-acre Data Centre Park, and developing Mangaluru as a new tech frontier. This integrated approach is set to create India's most efficient logistics and tech corridor.

Karnataka, with Bengaluru as its pulsating core, has long been India's innovation capital, the cradle of its technology revolution, and a magnet for global enterprise. Yet, the very success that put it on the world map has also turned into its biggest challenge. The city's roads are bursting, its growth corridors are jammed, and "Bengaluru traffic" has become both a meme and a policy priority.

Now, the Karnataka government is launching what could be one of the most ambitious, multi-pronged infrastructure drives in the country's history through a coordinated effort not just to unclog roads, but to reshape the economic geography of the state. The goal is to build the infrastructure backbone that can

sustain Karnataka's \$1 trillion Gross State Domestic Product (GSDP) ambition.

At the heart of this transformation is a simple but powerful idea — a virtuous cycle where growth funds growth. Tax revenues generated by Karnataka's thriving industrial and tech sectors are being reinvested into world-class infrastructure. In essence, every vehicle sold, every export made, and every software contract signed in the state will, in some way, help fund the roads, rails, and data networks of tomorrow.

Taming the Beast: Decongesting Bengaluru

For millions of professionals and businesses in Bengaluru, the phrase "traffic nightmare" is painfully literal.

What should be a 20-minute commute can stretch to an hour. This inefficiency doesn't just test patience but it drains productivity and global competitiveness.

But the government's new roadmap moves far beyond short-term fixes. It's a transformative rethink of how the city moves. The centrepiece is a 50-km tunnel road network, one of India's most audacious urban infrastructure projects. The first phase, a 16.74-km twin tunnel connecting Hebbal's Esteem Mall to the Central Silk Board junction, targets the city's most congested north-south axis. A journey that now takes 90 minutes is expected to take less than 35 minutes once operational.

This subterranean network will form the backbone of a new "Business Corridor",

designed to move vehicles seamlessly through key economic zones — from Hebbal to KR Puram and onward to Hosur. Combined with elevated and surface toll roads, the project is expected to decongest the city's arterial routes that serve major IT clusters and industrial zones.

Above ground, Bengaluru's road network is getting an extensive facelift under the "Free Traffic 2026" plan. Detailed Project Reports (DPRs) are being prepared for 500 km of white-topped roads, promising longer life spans and smoother commutes. The message is clear: Bengaluru is no longer tinkering at the edges but it's tunnelling through the core.

Expanding the Arteries: Ring Roads and Expressways for the Future

Beyond inner-city fixes, the government's strategy expands Bengaluru's reach through a network of ring roads and expressways, designed to ensure that the state's logistics and mobility systems can keep pace with its economic expansion.

The Peripheral Ring Road (PRR), now rebranded as the Bengaluru Business Corridor (BBC), is finally seeing movement after years of delay. The 74-km, 8-lane expressway will connect the city's major highways, from Tumakuru Road to Ballari

Road and Old Madras Road to Hosur Road. The road will act as a bypass for long-distance and freight traffic, freeing the city's interior roads from heavy-vehicle congestion.

While the project has faced challenges, from land compensation disputes to design concerns about its width, the government is determined to push it through, calling it critical to the city's "economic blood circulation."

But it's the Satellite Town Ring Road (STRR) that promises to redefine how Bengaluru connects to its periphery. Stretching 288 km, the STRR will form a massive loop linking 12 satellite towns, including Doddaballapura, Devanahalli, Hoskote, Sarjapura, and Kanakapura.

An 80-km stretch between Dabaspet and Hoskote is already operational, and the results are visible — truck traffic entering the city from Tumakuru Road has dropped by up to 50%. Another 21-km segment from Hoskote to the Tamil Nadu border is expected to open by March 2025, creating a seamless link to the Bengaluru–Chennai Expressway.

Speaking of expressways, the success of the Bengaluru–Mysuru Expressway has set the tone for future projects. The Bengaluru–Chennai Expressway (NE-7), now nearing completion, will reduce travel

time between the two industrial hubs from 5–6 hours to just over two. In parallel, a 28-km toll road from Devanahalli to Hoskote will improve airport access and connect the region's industrial clusters. Collectively, these corridors form a logistical web — one that will allow goods, talent, and capital to move faster and more efficiently across Karnataka and southern India.

The Mass Transit Revolution: Moving People, Not Just Cars

The government knows roads alone can't carry the weight of the city's growth. Bengaluru's mass transit revolution is therefore unfolding on multiple fronts, led by the expansion of Namma Metro and the Bengaluru Suburban Rail Project (BSRP).

Under Metro Phase 2 (72 km), the Green and Purple lines are being extended deep into the suburbs, connecting emerging residential and commercial zones.

The most crucial additions are the Blue Line phases (2A and 2B). Phase 2A, a 19-km stretch linking Central Silk Board to KR Puram, will directly serve the Outer Ring Road IT corridor — home to some of India's biggest technology parks. Phase 2B, a 38-km extension from KR Puram to Kempegowda International Airport, will





finally give Bengaluru its much-awaited airport metro link. Both are slated for completion between mid-2026 and early 2027.

Complementing this is the Bengaluru Suburban Rail Project (BSRP), a transformative scheme that will connect the city to its far-flung suburbs and neighbouring towns. Together, these projects are designed to create a truly multimodal city.

To make travel seamless, the state has also introduced the “One City, One Card” system, which is a single smart card that works across metro, bus, and suburban rail networks. The goal is to make public transport both frictionless and aspirational.

Beyond Bengaluru: Building the Next Tech Frontiers

While much of the spotlight remains on the capital, Karnataka’s planners are equally focused on the “Beyond Bengaluru” initiative, which is an ambitious program to decentralise growth and create new technology and industrial hubs across the state.

One of the flagship projects is a 300-

acre Data Centre Park at Tavarekere near Hoskote. It will house a gigawatt-scale facility — the largest in southern India — and act as the central hub in a hub-and-spoke model that connects smaller edge data centres of 25–30 MW in Mysuru, Hubballi, and Belagavi. This will form a seamless digital backbone for cloud computing, fintech, and AI-driven enterprises.

Meanwhile, Mangaluru is being groomed as the state’s next tech powerhouse. With its port, international airport, and growing talent pool, it is ideal for IT exports and data connectivity. The government is developing a new tech park there under a public-private partnership model and studying the feasibility of designating Mangaluru as a data hub, leveraging its cable landing station.

Other regional cities are also getting a boost. Mysuru, Belagavi, and Hubballi are being positioned as “growth anchors” — each with industrial parks, logistics nodes, and education clusters that complement Bengaluru rather than compete with it.

From Congestion to Connection: The Road Ahead

What makes Karnataka’s infrastructure strategy stand out is its integration — roads, rails, metros, and digital highways are being planned together rather than as isolated projects.

The scale is immense, including tunnels burrowing under the capital, ring roads looping around it, expressways racing outward, and data parks rising across the hinterland. Together, they represent a once-in-a-generation transformation that aims to turn the “Bengaluru bottleneck” into a Karnataka growth corridor.

For the government, this is as much about economic vision as it is about civic necessity. Every rupee earned from our industries will go back into the infrastructure that supports them, and that’s how the government ensures growth sustains itself.

If the plan succeeds, Karnataka will not only retain its crown as India’s innovation capital but it will also become the nation’s most connected, efficient, and future-ready economy. From tunnels 50 metres below the surface to data centres powered by gigawatts, Karnataka is not just building roads but also building tomorrow’s economy. ■

Bengaluru Tech Summit 2025: A Global Platform for Innovation and Collaboration

The Bengaluru Tech Summit (BTS) 2025 is set to be a landmark event in the technology and innovation landscape, scheduled to take place from November 18 to 20, 2025, at the Bangalore International Exhibition Centre (BIEC).

As Asia's largest technology event, BTS 2025 promises to be a hub for global leaders, innovators, entrepreneurs, and industry stakeholders to converge, share ideas, and shape the future of technology.

Theme: "Futurise"

The theme for BTS 2025 is "Futurise," reflecting the summit's focus on driving conversations on the future of technology across sectors.

The event aims to explore emerging areas like AI, deep tech, biotechnology, and sustainable tech solutions, providing a platform for experts to share insights and experiences.

Key Highlights

- Startup Ecosystem Track: Curated pitch sessions, mentorship, and growth insights for startups.
- Founders Conclave: Fireside chats and talks by India's top startup leaders.
- Exhibition: Showcasing cutting-edge technologies, enabling cross-border partnerships and market exploration.
- Global Innovation Alliance Pavilion: Delegations from over 25 countries



Priyank M Kharge
Minister of Electronics, Information Technology & Biotechnology and Rural Development & Panchayat Raj

showcasing innovations.

- Research & Academia Pavilion: Partnerships between academic institutions and industry experts.
- Women in Innovation Track: Celebrating women founders and tech leaders driving change.

Speakers and Participants

The summit will feature a stellar lineup of speakers, including industry leaders, innovators, and experts in various fields. Some of the notable speakers include:

- Priyank Kharge, Minister for Electronics, IT, BT, and Rural Development and Panchayat Raj, Government of Karnataka.
- Mukesh Bansal, Founder and CEO of Nurix AI.
- Sandeep Singhal, Co-founder and MD of WestBridge Capital.



Future Makers' Conclave

The Future Makers' Conclave, a key component of BTS 2025, will bring together change makers, entrepreneurs, artists, and pioneers to discuss emerging technologies and trends.

The conclave is expected to attract over 10,000 entrepreneurs from across the country, making it larger than the Startup Mahakumbh organised by the Central Government.

Government Initiatives

The Government of Karnataka has announced several initiatives to support the growth of the startup ecosystem in the state. These include:

- Deep Tech Elevate Fund: A fund of Rs 150 crore set aside for startups in Bengaluru.
- Elevate Beyond Bengaluru: A scheme providing Rs 80 crore to support startups.



Siddaramaiah
Chief Minister of Karnataka

Exhibition and Networking

The exhibition at BTS 2025 will showcase cutting-edge technologies, enabling cross-border partnerships and market exploration.

The event will also provide ample networking opportunities, allowing attendees to connect with global leaders, innovators, and entrepreneurs.

Participants can choose from multiple options, including delegate passes, startup showcase booths, and B2B/B2G access passes.

The Bengaluru Tech Summit 2025 promises to be a landmark event in the technology and innovation landscape, providing a platform for global leaders, innovators, entrepreneurs, and industry stakeholders to converge, share ideas, and shape the future of technology.

With its focus on emerging technologies, startup ecosystem, and global collaboration, BTS 2025 is set to be a must-attend event for anyone interested in technology and innovation. ■



D. K. Shivakumar
Deputy Chief Minister of Karnataka

Born in Bharat: India's Defence Industry Marks a New Era of Sovereignty



IMS 2025 INDIA MANUFACTURING SHOW

Union Minister for Parliamentary Affairs, Coal and Mines Pralhad Joshi said that India's transformation from a major defence importer to a nation producing 90% of its defence requirements domestically marks a defining milestone in its journey toward self-reliance and national strength.

"Earlier, 70% of our defence procurement was imported. Today, 90% comes from Indian industries," Joshi said, addressing the 7th edition of IMS 2025. "Over 15,000 items once imported are now reserved for domestic production. This is not just economic progress — it's the assertion of India's sovereignty."

He said India's rapid strides in the defence sector were supported by MSMEs, startups, and private innovators who have emerged as critical partners in nation-building. "Earlier, industries were seen with suspicion, as if growth and welfare were opposites. Today, under Prime Minister Narendra Modi's leadership, that mindset has changed. Supporting trade, MSMEs, and industry means empowering the poor and strengthening the nation," Joshi said.

Recalling his experience from the 1980s, he remarked, "In 1984, my father stood in line the whole day for one bag of cement. That was the India of scarcity. Today, our ISRO can launch satellites at a cost cheaper per kilometre than a car ride. That's the new India."

Joshi highlighted how the government is promoting 'trust-based governance', simplifying compliance systems, and integrating ministries to accelerate reforms. He cited achievements such as renewable energy growth from 2.8 GW in 2014 to 128 GW, the transformation of toy exports, and the rise of India as a global mobile manufacturing hub, producing nearly 30% of the world's mobile phones.

Union Minister of State for MSMEs Shobha Karandlaje said MSMEs are the backbone of India's industrial resurgence. The sector, she said, employs 30 crore people, contributes 30% to GDP, 45% to manufacturing output, and 40% to exports. She urged large PSUs such as ISRO, DRDO, HAL, BEL, and BHEL to integrate MSMEs into their supply chains.

Karandlaje added that over 7 crore MSMEs are now registered on the Udyam Portal, and the Prime Minister's Employment Generation Programme

(PMEGP) has created 1 crore jobs, with 90% of subsidies benefiting micro and small units.

Bengaluru South MP Tejasvi Surya said technological leadership is the true test of sovereignty. "Every defence product we make — whether N72 or P72 — proudly carries the mark 'Born in Bharat.' If we depend on others for technology, we import dependency. If we import technology, we export sovereignty," he said.

Surya praised India's progress in semiconductors, quantum technology, renewable energy, and defence innovation, urging the youth to pursue precision, discipline, and excellence in manufacturing. "Only then can India rise to the top of the global supply chain," he said.

The leaders jointly lauded Laghu Udyog Bharati and the IMS Foundation for their efforts to unite MSMEs, innovators, and policymakers.

"India's destiny now rests on its factories, its entrepreneurs, and its self-belief," Joshi concluded. "This is the era of Aatmanirbhar Bharat — the era when India builds for itself and the world." ■

Aatmanirbhar in Action: Inside India's Defence Revolution



India's defence sector has witnessed a historic transformation, moving from importing nearly 70 percent of its weapon systems to placing most new orders with domestic industries, said Dr. Sameer V. Kamat, Secretary, Department of Defence R&D and Chairman, DRDO. He described this as a defining moment in India's journey towards Aatmanirbhar Bharat and the foundation of its emerging technology leadership.

Speaking at the inaugural session of the seventh edition of the India Manufacturing Show (IMS 2025) in Bengaluru, Dr. Kamat said India's new industrial and defence ecosystem reflects growing national confidence, innovation capability, and technological maturity.

"Aatmanirbhar Bharat is not just a slogan—it is a mission that integrates innovation, design, and industry collaboration. The shift from import dependency to indigenous production demonstrates how India has built the ability to design and deliver systems that meet global standards," he said.

Highlighting the major strides made in indigenous technology development, Dr. Kamat said: "We have moved from a country that used to import the majority of its weapon systems to one where domestic industries now receive most new orders. This is a defining change, and it underlines the success of the government's self-reliance policy in defence."

He said the backbone of this success

lies in India's network of Micro, Small and Medium Enterprises (MSMEs). "Over 2,000 MSMEs participated in the development of the Light Combat Aircraft (LCA) and Akash missile systems. These enterprises have become vital partners in the nation's defence manufacturing chain," he added.

Dr. Kamat pointed out that several indigenous systems had performed exceptionally well in Operation Sindhur, proving the capability and reliability of India's homegrown defence technologies. "Our next goal should be technology leadership — to make not only for India but for the world," he asserted.

He called for a "whole-of-nation approach" where DRDO, large industries, MSMEs, start-ups, and academic institutions work together to create cutting-edge solutions. "Collaboration is the cornerstone of innovation. Only when every segment of the ecosystem contributes can we achieve global competitiveness," he said.

Bharat Forge Chairman and Managing Director Mr. Baba Kalyani echoed Dr. Kamat's views, saying India's manufacturing transformation must move from innovation to a product nation. "In a world witnessing geopolitical shifts, self-reliance in technology is essential for both economic and national security. We must develop critical technologies indigenously to safeguard sovereignty," he said.

Kalyani lauded the government's

support for the defence industry, noting that the Aatmanirbhar Bharat initiative has opened opportunities for thousands of enterprises to contribute to national capability building. "Self-reliance is a milestone; technology leadership must be the destination," he added.

Union Minister of State for MSME, Labour and Employment Ms. Shobha Karandlaje, Bangalore South MP Tejasvi Surya, and ISRO Chairman Dr. V. Narayanan also addressed the gathering, stressing the importance of innovation-led industrial growth and the role of MSMEs in building a robust manufacturing ecosystem.

The event brought together policymakers, scientists, industrialists, and innovators to discuss strategies for India's technological advancement. Speakers agreed that the convergence of research, entrepreneurship, and public policy is vital for ensuring India's leadership in global technology and manufacturing.

Dr. Kamat concluded by congratulating IMS Foundation and Laghu Udyog Bharati Karnataka Chapter for organising the event, describing it as "a timely platform that reflects India's confidence in its own innovation ecosystem."

"With the right momentum and collaboration, India is on its way to becoming not just self-reliant but a true technology leader — a nation that creates, innovates, and delivers for the world," he said.

ISRO's V. Narayanan Calls Industry, the Lifeline of India's Space Journey



Indian Space Research Organisation (ISRO) Director (LVM3 and Cryogenic Systems) V Narayanan said India's space programme has reached a stage where nearly 85 per cent of all systems used in ISRO missions are now delivered by Indian industries, MSMEs, and startups, reflecting the country's transformation from dependence to self-reliance in advanced space technology.

Addressing over 500 senior delegates and nearly 20,000 business professionals at the 7th edition of the India Manufacturing Show (IMS) 2025 in Bengaluru, Narayanan said India's industry and startup ecosystem has become the backbone of the nation's space achievements.

"Almost 80 to 85 percent of the systems in every ISRO mission are supplied by Indian industry. That shows the scale of their contribution. The strength of our space programme is not only in science and engineering but in the power of Indian manufacturing," he said.

He cited the recent successful launch of the CMS-03 communication satellite on November 2 aboard India's heaviest rocket, LVM3-M5 (Bahubali), as a symbol of this success. "While this mission was led by ISRO, almost 85 percent of its systems were built by Indian industries," he said.

Narayanan recalled India's humble beginnings in space exploration. "Our first rocket was launched on November 21, 1963, using parts received from the United States. Back then, we were 70

years behind advanced countries. We carried rocket parts on bicycles and even transported our first experimental satellite on a bullock cart. From that era, we now launch satellites to the Moon and Mars," he said.

The ISRO scientist highlighted several major milestones in India's space journey — including the NASA-ISRO Synthetic Aperture Radar (NISAR) satellite launched in July 2023. "NASA's Jet Propulsion Laboratory invested ₹10,300 crore to build its radar payload, while India built a similar advanced payload entirely through its own industries and launched it on an Indian rocket," he said, adding that again, 80 percent of the contribution came from Indian industries.

Narayanan said ISRO currently partners with over 450 Indian companies, which have become an integral part of the space value chain. "In 2020, under the visionary leadership of Prime Minister Narendra Modi, the government announced space sector reforms. At that time, there were just three or four space startups. Today, India has more than 330 active startups working in the sector," he said.

He said ISRO has also handed over production of five PSLV rockets to a consortium led by HAL and L&T, with the first expected to be launched by February 2026. "Once the first launch succeeds, we plan for 50 percent of PSLV production to be taken up directly by Indian industry," he said.

In addition, ISRO has transferred the

Small Satellite Launch Vehicle (SSLV) technology to HAL through a ₹511 crore agreement, with plans to shift production of 16 SSLVs to private industries.

Recalling key achievements, Narayanan said India's soft landing near the Moon's South Pole on August 23, 2023, was a defining moment for global space science. "India became the first country to achieve a successful landing near the lunar South Pole," he said.

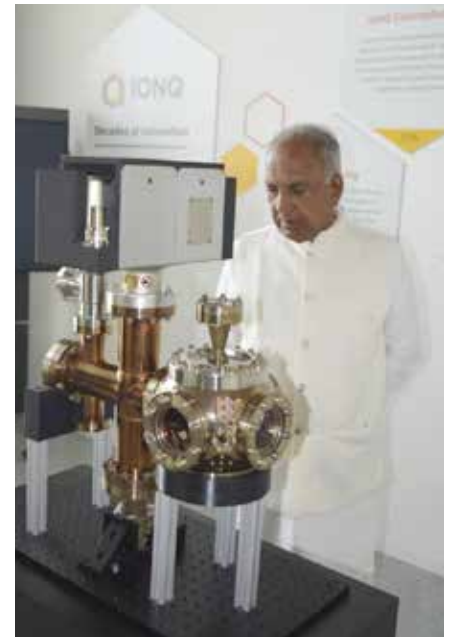
He also described the Mars Orbiter Mission (Mangalyaan) as a "marvel of precision," adding, "The spacecraft travelled 600 million kilometres, and its engine restarted flawlessly after 295 days — a feat no other nation has achieved in its first attempt."

Narayanan also underlined India's technological self-sufficiency in cryogenic engine technology, which was denied to India in the early 1990s. "Today, we have developed three indigenous cryogenic propulsion systems. A country that once carried rocket parts on bicycles now builds world-class engines," he said.

Marking another milestone, Narayanan said ISRO completed its 100th rocket launch on January 29, 2024, calling it "a golden chapter in India's space history." He also mentioned the recent development of a 32-bit indigenous computer processor, jointly built by HCL and ISRO, as a major step in achieving electronics independence.

India currently operates 56 satellites serving communication, navigation, and

Partnership, Research and Innovation in Quantum Technologies: Karnataka Govt. Invites Global Collaboration



The Government of Karnataka has announced bold initiatives to transform the State into a \$20-billion quantum economy by 2035, positioning Bengaluru as a major global hub for quantum technology and innovation.

The government has extended an open invitation to global partners to collaborate with Karnataka in research, innovation, and industrial development within the quantum ecosystem.

"Karnataka believes the future belongs to collaborative innovation. We invite global researchers, institutions, and industries to join hands with us in building a shared future in quantum technologies," said Science and Technology Minister Mr N Boseraju, highlighting the State's ongoing efforts to advance the sector.

He noted that under the National Quantum Mission (NQM) launched by the Government of India with an investment of ₹6,000 crore, Karnataka has emerged

as a frontrunner in implementing this national vision through proactive policies, infrastructure, and talent development.

The Indian Institute of Science (IISc), Bengaluru, has already established a Quantum Research Park that supports over 55 research and development projects and 13 startups, while training more than 1,000 quantum professionals annually. To sustain long-term growth, the State Government has sanctioned an additional grant of ₹48 crore for this initiative.

The Minister also recalled the successful Quantum India Summit 2025, held in Bengaluru on July 31 and August 1, which attracted more than 2,000 researchers and entrepreneurs, including two Nobel Laureates. During the event, the government announced a ₹1,000-crore allocation for comprehensive quantum development and confirmed land allocation for the proposed Q-City, Karnataka's dedicated quantum

technology zone.

Emphasizing India's strong human resource base — producing over 90,000 quantum engineers annually — the Minister reaffirmed Karnataka's leadership in research, innovation, and collaboration.

"Bengaluru, the Silicon Valley of India, is ready to become a global hub for quantum research and innovation. Karnataka welcomes partnerships from across the world to co-create the future of this transformative field," he added.

Mr Boseraju also unveiled the concept video of "Q-City – Phase One", offering a first look at Karnataka's dedicated quantum technology campus to be developed in Bengaluru. The proposed Q-City will integrate hardware manufacturing units, advanced research and development facilities, incubation centres, and collaborative workspaces designed to accelerate quantum innovation from lab to market. ■

Earth observation needs. "In the next four years, we aim to increase this number three to four times. The Prime Minister has also set a goal to raise the number of annual launches from the current 10–12 to around 50 within five years," he said.

Narayanan said these goals are achievable only through continued partnership with Indian industries. "IMS 2025 is not just an event; it is a launchpad for India's manufacturing

resilience and innovation. Without strong manufacturing, rockets and satellites would remain on paper — they would never fly," he remarked.

He praised the contribution of industrial leaders such as Baba Kalyani and the L&T team, and lauded all MSMEs and startups for their commitment. "When India celebrates its 100th year of Independence, it will do so as a developed nation. By 2040, India's space program

will stand shoulder-to-shoulder with the world's most advanced space powers — in launches, satellites, and applications," he said.

Concluding his address, Narayanan said, "The entire world is looking towards India today. Behind ISRO's every success is the strength of our industries, our MSMEs, and our startups. Together, we will take India to new frontiers."

Tourism in Karnataka: A Land of Wonders



Karnataka is a treasure trove of diverse attractions, ranging from stunning natural beauty to rich cultural heritage. With its unique blend of ancient temples, vibrant festivals, and breathtaking landscapes, Karnataka has emerged as a popular tourist destination in India.

Key Tourist Destinations

Karnataka is home to numerous iconic tourist spots that attract millions of visitors every year.

Known for its majestic palaces, vibrant festivals, and rich cultural heritage, Mysuru is a city that showcases the state's royal past. The Mysuru Palace, Sri Chamarajendra Zoological Gardens, and Brindavana Gardens are some of the must-visit attractions.

A UNESCO World Heritage Site, Hampi is a treasure trove of ancient ruins, temples,

and monuments that reflect the glory of the Vijayanagara Empire. The Virupaksha Temple, Vithala Temple, and Lotus Palace are some of the iconic landmarks.

The capital city of Karnataka, Bengaluru is a hub of technology, innovation, and culture. From the Lalbagh Botanical Garden to the ISKCON Temple, the city offers a mix of natural beauty, spirituality, and modernity.

Known for its lush green hills, coffee plantations, and misty landscapes, Coorg is a popular honeymoon destination and a haven for nature lovers.

A coastal town famous for its pristine beaches, Gokarna is a popular spot for beach lovers and adventure enthusiasts.

Future Potential

Karnataka has immense potential for growth in the tourism sector, driven by its rich cultural heritage, natural beauty, and

government initiatives.

With its numerous national parks and wildlife sanctuaries, Karnataka offers a unique opportunity for wildlife enthusiasts to explore the state's rich biodiversity.

From trekking and rock climbing to water sports and rafting, Karnataka's diverse landscapes offer a range of adventure activities for tourists.

Karnataka's rich cultural heritage, including its ancient temples, festivals, and traditional arts, provides a unique opportunity for cultural tourism.

With its lush forests, hills, and wildlife, Karnataka is an ideal destination for eco-tourism, offering opportunities for sustainable tourism practices.

Karnataka Government's Initiatives

The Karnataka government has taken several initiatives to promote tourism in the state.



The government has invested in developing tourism infrastructure, including hotels, resorts, and transportation facilities.

The government has launched several marketing and promotion campaigns to attract tourists to the state.

The government has emphasised the importance of sustainable tourism practices, including eco-friendly tourism initiatives and community-based tourism projects. Some of the places can be developed as tourism corridors.

Connecting the cultural and historical hubs of Mysuru and Hampi, this corridor can offer a unique blend of heritage and cultural tourism.

Linking the state's capital city with the hill station of Coorg, this corridor can promote nature-based tourism and adventure activities.

Connecting the coastal towns of





Gokarna and Karwar, this corridor can offer opportunities for beach tourism, water sports and adventure activities.

Linking the hill stations of Chikmagalur and Kudremukh, this corridor can promote eco-tourism and adventure activities.

Challenges and Opportunities

While Karnataka's tourism industry has immense potential, it also faces several challenges.

The state's tourism infrastructure, including roads, transportation, and accommodations, needs to be improved to support the growing number of tourists.

The state needs to adopt sustainable tourism practices to protect its natural and cultural resources.

The state needs to launch more effective marketing and promotion campaigns to attract tourists.

Despite these challenges, Karnataka's tourism industry also offers several opportunities.

The tourism industry can create new job opportunities for locals, including those in the hospitality, transportation, and tourism sectors.

Tourism can contribute to the state's economic growth by generating revenue and stimulating local economies.

Tourism can promote cultural exchange between visitors and locals, helping to preserve and promote the state's rich

cultural heritage.

Karnataka's tourism industry has immense potential for growth, driven by its rich cultural heritage, natural beauty, and government initiatives. By developing tourism infrastructure, promoting sustainable tourism practices, and creating new tourism corridors, the state can attract more tourists and create new opportunities for economic growth and development.

Recommendations

To further develop Karnataka's tourism industry, the following recommendations can be made.

The state should adopt sustainable tourism practices, including eco-friendly tourism initiatives and community-based tourism projects.

The state should invest in improving its tourism infrastructure, including roads,

transportation, and accommodations.

The state should promote its rich cultural heritage, including its ancient temples, festivals, and traditional arts.

The state should develop new tourism products, including adventure tourism, wildlife tourism, and eco-tourism.

By implementing these recommendations, Karnataka can unlock its full potential as a tourist destination and create new opportunities for economic growth and development.

Future Outlook

Karnataka's tourism industry is expected to continue growing in the coming years, driven by its rich cultural heritage, natural beauty, and government initiatives. The state's tourism industry is expected to attract more tourists, create new job opportunities, and contribute to the state's economic growth.



Airbound inks partnership with Narayana Health to enable drone deliveries

Bengaluru-based Airbound, an autonomous delivery logistics firm specialising in blended-wing-body aircraft, has announced \$8.65 million in seed funding and a pilot partnership with Narayana Health.

The round was led by Lachy Groom, co-founder of Physical Intelligence, with participation from Humba Ventures and continued participation from Lightspeed. This seed round also includes investment from senior leaders at Tesla, Anduril and Ather Energy, reflecting deep conviction from operators who have scaled complex hardware and autonomy programs.

The logistics sector faces significant challenges in delivering packages efficiently across urban, semi-urban, and remote areas. Traditional delivery networks are often constrained by traffic congestion, limited road access, and high last-mile costs, leading to delays and increased operational expenses. Additionally, delivering small packages to hard-to-reach locations remains costly and time-consuming, limiting scalability and reliability for businesses and consumers alike.

Founded in 2023, Airbound is on a

mission to make logistics seamless and delivery costs negligible, enabling fast, reliable transport across all sectors, including underserved regions. Their proprietary carbon-fibre manufacturing process allows rapid production of drones, each achieving a payload-to-aircraft mass ratio of 1kg-to-1.5kg.

The unique blended-wing-body tailsitter design combines vertical takeoff and landing with the aerodynamic efficiency of fixed-wing flight, overcoming the limitations of tilt-rotor and quadplane designs. More than just drones, Airbound's aircraft form the backbone of a scalable, cost-efficient, and borderless supply chain.

As part of its growth strategy, Airbound has launched a three-month pilot partnership with Narayana Health, aiming to complete 10 medical deliveries per day including blood samples, test kits, and essential supplies. This program provides a high-stakes proof of concept for one of the most demanding delivery applications, demonstrating reliability, speed, and cost efficiency.

Naman Pushp, Founder and CEO of Airbound, said, "The healthcare sector

represents the perfect testing ground for our technology because it demands both reliability and efficiency. Our partnership with Narayana Health validates that our approach can handle the most critical delivery requirements while demonstrating the cost advantages that will make our service accessible globally."

Lachy Groom, Co-founder of Physical Intelligence, said, "Airbound's approach to drone delivery addresses fundamental physics and economics problems that have limited the scalability of existing solutions. Their blended-wing-body design and manufacturing capabilities position them to achieve the cost efficiency needed to make drone delivery truly viable for a wide range of applications."

Dr Devi Shetty, Founder and Chairman, Narayana Health said, "Our partnership with Airbound allows us to pilot a promising technology that could significantly improve the speed and reliability of medical deliveries. This initiative reflects our commitment to leveraging technology to better serve patients, particularly in areas where timely access to critical diagnostics and supplies can make a life-saving difference." ■

Kirloskar to Invest ₹3,000 Crore in Karnataka: M. B. Patil

Bengaluru: Kirloskar Ferrous Industries is set to invest ₹3,000 crore in its Hiriyuru plant in Karnataka over the next three years. This development comes alongside several major firms expressing interest in investing in the state, including Wipro PARI, Atlas Copco, Bel-Rise Industries, Finolex, and Fluid Controls Limited. Industries Minister M. B. Patil announced that these companies will receive full support from the government in terms of land, infrastructure, and other facilities.

The minister, accompanied by a high-level delegation from the Department of Industries and Commerce, conducted a roadshow in Pune and held discussions with prominent industrialists regarding investment opportunities in Karnataka. Following the meetings, Minister Patil stated that Kirloskar Ferrous, which already operates a unit at Hiriyuru in Chitradurga

district, plans to upgrade its facilities. The company intends to commence sponge pipe production, enhance the capacity of its steel manufacturing unit, increase iron ore processing, and modernise its foundry operations.

Highlighting the company's contribution to the local economy, Minister Patil noted that nearly 99% of Kirloskar Ferrous's employees are Kannadigas. "This investment will further strengthen regional economic growth and promote inclusive development," he said. The company has also been contributing 2% of its profits to its CSR fund for over 20 years, focusing on improving healthcare facilities in rural areas. Wipro PARI has already established an electronic copper laminate manufacturing unit in Karnataka and plans to set up a Smart Robotics Laboratory.

Atlas Copco, which acquired Bengaluru-based HHV Pumps in 2021, intends

to expand its production operations in Karnataka. Bel-Rise Industries, known for its aerospace and defence sectors presence, seeks to expand its operations in Mysuru, while Finolex is expected to set up a unit in Karnataka.

Fluid Controls Limited has proposed an investment of ₹90 crore and has requested five acres of land.

The minister held detailed discussions with industry leaders, including Vipul Tandon (CEO, Wipro PARI), Sripad Ramanathan (CFO, Wipro PARI), Shrikant Badwe (Managing Director, Bel-Rise Industries), Dr. Tanasan Chaudhary (CEO, Fluid Controls Ltd.), and Udeepth Agarwal (Managing Director, Finolex Industries). The government delegation included Dr. Selvakumar, Principal Secretary of the Industries Department, and Gunjan Krishna, Commissioner for Industries and Commerce.



Metro to Airport: A Must for Bengaluru

The metro rail connectivity project to Bengaluru airport is a vital infrastructure project that will have a transformative impact on the city's transportation landscape. By completing the project on a war footing and speeding up its execution, Bengaluru can look forward to a future with improved connectivity, reduced congestion, and enhanced economic growth.

Bengaluru, the Silicon Valley of India, has been grappling with the challenges of rapid urbanisation, population growth, and inadequate infrastructure. The city's Kempegowda International Airport (KIA) is a crucial transportation hub, serving millions of passengers every year. However, the airport's connectivity to the city has been a significant concern, with road congestion being a major issue. In this context, the metro rail connectivity project to Bengaluru airport is a much-needed solution.

The metro rail connectivity project to Bengaluru airport is essential for several reasons. Bengaluru's roads are notorious for traffic jams, and the airport is no exception. The metro rail will provide a reliable and efficient mode

of transportation, reducing the number of vehicles on the road and alleviating congestion.

By providing a cleaner mode of transportation, the metro rail will help reduce air pollution in the city, which is





The project is being constructed in two phases: Phase 2A and Phase 2B. Phase 2A will connect Central Silk Board to Krishnarajapura, while Phase 2B will connect Krishnarajapura to the airport.

The construction work on Phase 2A is progressing well, with 13 elevated metro stations being built between Central Silk Board and Krishnarajapura. The construction work on Phase 2B has also begun, with 17 metro stations being built between Krishnarajapura and the airport. The project includes the construction of an at-grade and underground tunnel, Airport City and KIAL Terminals stations.

Benefits of the Metro Rail Project

The metro rail connectivity project to Bengaluru airport will have numerous benefits. The metro rail will reduce travel time between the airport and the city, making it easier for passengers to reach their destinations. It will have a higher passenger capacity than buses or taxis, reducing congestion on the roads. The metro rail will be an environmentally friendly mode of transportation, reducing air pollution and greenhouse gas emissions.

a significant concern due to the growing number of vehicles. The metro rail will connect the airport to various parts of the city, making it easier for passengers to travel to and from the airport. The metro rail will not only improve connectivity but also boost economic growth by facilitating the movement of people and goods.

An Urgent Call to Action: Completing the Project on a War Footing

Given the pressing need for efficient transportation solutions in Bengaluru, it is imperative that the metro rail connectivity

project to the airport be completed on a war footing. The project should be speeded up to ensure timely completion and to reap the benefits of improved connectivity, reduced congestion, and enhanced economic activity. Every effort should be made to expedite the project's swift execution.

Update on Metro Construction Works

The Bengaluru Metro Rail Corporation (BMRCL) is working on the Blue Line project, which will connect the airport to the city's central business district.

Karnataka's Smart City Projects: A Testament to Progress and Innovation

Karnataka has emerged as a frontrunner in India's Smart Cities Mission, with seven cities - Bengaluru, Belagavi, Davanagere, Hubballi-Dharwad, Mangaluru, Shivamogga, and Tumakuru - undergoing transformative development.

These projects aim to enhance urban infrastructure, promote sustainability, and improve the quality of life for citizens.

Bengaluru: The Silicon Valley of India

Bengaluru, the state's capital, is a hub for IT and biotechnology industries. The city's smart city projects focus on integrated command and control centres, smart mobility, and waste management.

The Revitalisation of Roads with TenderSURE project is redesigning key roads to create wide lanes, pedestrian footpaths, and underground ducts for utilities. Bengaluru's smart city initiatives are expected to boost its economy and solidify its position as a global tech hub.

Belagavi: Preserving Heritage and Embracing Modernity

Belagavi, a historic city, is preserving its heritage while upgrading infrastructure. The Kanbargi Lake Rejuvenation project has transformed a 7.4-acre lake into a scenic destination, and the Khau Katta Pedestrian Market features 52 shops, supporting local entrepreneurs.

Belagavi's smart city projects aim to promote tourism and economic growth

while maintaining its cultural identity.

Davanagere: Rejuvenating Water Bodies and Urban Life

Davanagere's smart city mission focuses on rejuvenating water bodies, particularly the Kunduvada Kere lake. The project includes developing parks, walkways, and boating facilities, enhancing the city's aesthetic appeal and recreational spaces.

Davanagere's initiatives aim to improve urban living and promote sustainable development.

Hubballi-Dharwad: Enhancing Mobility and Green Spaces

The twin cities of Hubballi-Dharwad are prioritizing mobility, green spaces, and citizen services. The Green Mobility Corridor project promotes cycling and walking, while the Tolankere Lake Development project creates a vibrant public space. Hubballi-Dharwad's smart city initiatives aim to improve air quality and enhance the overall quality of life.

Mangaluru: Waterfront Development and Economic Growth

Mangaluru's smart city project focuses on waterfront development, smart bus shelters, and efficient drainage systems. The Waterfront Promenade project connects communities to water, promoting tourism and economic growth. Mangaluru's initiatives aim to leverage its coastal location and drive economic

development.

Shivamogga: Sustainable Development and Tourism

Shivamogga's smart city initiatives prioritise sustainable development, riverfront projects, and tourism. The Tunga Riverfront Development project creates a vibrant public space, while the Shivappa Nayaka Market Redevelopment modernises the city's central market. Shivamogga's projects aim to promote eco-tourism and enhance urban living.

Tumakuru: Industrial Development and Smart Infrastructure

Tumakuru's smart city projects focus on industrial development, smart classrooms, and reliable water supply. The Amanikere Lake Development project transforms a historic lake into a recreational and ecological zone. Tumakuru's initiatives aim to drive industrial growth and improve urban infrastructure.

Progress and Achievements

Karnataka's smart city projects have made significant progress, with over 200 affordable housing projects planned and numerous infrastructure initiatives underway. The state's smart cities have witnessed improved governance, enhanced citizen services, and increased economic activity. ■

Karnataka's GCC Revolution: Unlocking Growth and Innovation

Karnataka has emerged as a powerhouse in India's Global Capability Centre (GCC) sector, with the state government unveiling a comprehensive policy framework to drive growth and innovation.

The Karnataka GCC Policy 2024-2029 is a bold initiative aimed at establishing 500 new GCCs, creating 3.5 lakh jobs, and generating \$50 billion in economic output.

GCC Policy: A Game-Changer

The policy focuses on four key pillars: Talent, Local Ecosystem, Infrastructure and Incentives, and Regulatory Easing.

Karnataka's IT-BT Minister, Priyank Kharge, emphasises that GCCs have evolved from back-office operations to critical drivers of global strategic initiatives, R&D, and technology solutions.

Karnataka's GCC sector is poised for remarkable growth, with projections indicating a compound annual growth rate of 12-14% over the next decade.

The state aims to hold nearly 50% of India's GCC market share by 2029, solidifying its position as a global hub.

Key Initiatives

- Beyond Bengaluru Package:

Incentivises GCCs to set up operations in tier-2 and tier-3 cities, promoting regional growth and decentralisation.

- Global Innovation Districts: Fosters collaboration between startups, academia, and industry leaders, driving innovation and entrepreneurship.

- AI Skilling Council: Develops curriculum and training programs for AI, machine learning, and emerging technologies.

- Centre of Excellence for AI: Advances AI research and application, promoting ethical AI practices and innovation. ■

Karnataka's Strides in Artificial Intelligence and Emerging Technologies

Karnataka, particularly Bengaluru, has established itself as a global hub for innovation and technology. The state government has been proactive in leveraging artificial intelligence (AI) and other cutting-edge technologies to drive growth, improve governance, and enhance citizen services. This article explores Karnataka's initiatives in AI, deep tech, and other emerging technologies, highlighting its efforts to stay ahead in the global race.

Artificial Intelligence: A Key Focus Area

Karnataka's IT Minister, Priyank Kharge, has emphasised the state's commitment to AI, citing its potential to transform industries and governance. The state has launched several initiatives to promote AI research, development, and adoption. Some notable initiatives include:

- Centre for Applied AI for Tech Solutions (CATS): A ₹50 crore investment over five years to foster innovation in governance, public services, and industry.
- Nipuna Karnataka: A large-scale reskilling and upskilling initiative aimed at safeguarding and future-proofing the talent pool in AI, cybersecurity, and digital forensics.
- AI Administrative Unit: Improving citizen service delivery from grassroots to city levels.
- AI-powered tools and systems: Enhancing governance, such as the AI-based Government Order Summary and Information Extraction Tool, and the IPGRS 2.0, an AI-driven grievance redressal system.

Deep Tech and Emerging Technologies

Karnataka is also focusing on deep tech and other emerging technologies, including:

- Deep Tech Fund: A ₹600 crore fund to support deep tech startups, with a focus on advanced technology startups in AI, machine learning, and other areas.
- Local Economic Acceleration Program (LEAP): A ₹1,000 crore initiative to decentralise innovation across the state, building new technology clusters in cities like Mysuru, Mangaluru, and Hubballi-Dharwad.



- Centres of Excellence: Multiple CoEs have been established to advance research in AI, machine learning, cybersecurity, and digital forensics.

Global Partnerships and Collaborations

Karnataka is actively seeking global partnerships and collaborations to stay at the forefront of AI and emerging technologies:

- Global Innovation Alliances (GIA): The state has expanded its GIA initiative, enabling startups to access global markets and collaborate with leading innovation hubs.
- International collaborations: Karnataka is working with global organisations like the World Economic Forum to facilitate the exchange of technological trends, foster research collaboration, and respond to global issues.

Impact on Industries and Governance

Karnataka's AI initiatives have the potential to transform industries and governance, driving economic growth and

improving citizen services:

- Healthcare: AI-powered diagnostic tools and telemedicine platforms are improving healthcare access and outcomes.
- Agriculture: AI is being used to analyse data, soil conditions, and crop health, providing farmers with personalised recommendations.
- Education: AI-powered digital assistants, like the Shiksha Co-pilot, are enhancing learning outcomes and empowering teachers.

Conclusion

Karnataka's strides in AI and emerging technologies demonstrate its commitment to innovation and growth. With a strong focus on people, policy, and participation, the state is well-positioned to lead India's AI transformation.

By leveraging AI and other cutting-edge technologies, Karnataka can drive economic growth, improve governance, and enhance citizen services, ultimately becoming a model state for AI-driven development.



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