



Karnataka: Powering India's growth

March 2024

Table of contents

Foreword	04
Executive summary	06
India: A land of opportunities	09
Four growth catalysts in the past 10 years	10
Six pillars for India's GDP growth story	14
In focus: Karnataka	19
Services - The biggest growth driver	21
A US\$1 trillion GSDP vision	22
Government initiatives to drive the trillion-dollar ambition	24
Contribution of the key sectors	27
Aerospace and defence	27
Agro and food processing	30
Automobile and auto ancillaries	34
Capital goods	38
Clean energy	40
Construction	44
Education	46
IT, ITES, and electronics	50
Pharmaceuticals and biotech	54
Start-ups	58
Textile and garments	62
Tourism	66
Recommendations and the way forward for Karnataka	71
References	72
Connect with us	78
Contributors	78
Acknowledgements	78

Foreword



Romal Shetty
Chief Executive Officer
Deloitte South Asia

India, with its vibrant economy, burgeoning market potential, and diverse investment opportunities, is a compelling destination for investors from across the world. In the past 10 years, urbanisation, infrastructure development, and increased disposable incomes have contributed to its tremendous growth, making it the world's fifth-largest economy. It seeks to become the third-largest economy by 2027 through various reforms and substantial participation from state governments. Furthermore, India aims to become a developed country by 2047. This would require India to capitalise on its strengths and competitive advantages.

Amongst its states, Karnataka, a renowned technology hub in India and home to a burgeoning start-up ecosystem, attracts investors from different sectors. It has emerged as a key investment destination. One of the primary reasons is that the state is India's largest software exporter. Bengaluru, the capital city and often referred to as the Silicon Valley of India, is synonymous with innovation and technology. It has numerous IT parks, making the city a hotspot for technology investments. Other sectors, such as automobile manufacturing, electronics, and capital goods also contribute significantly to the state's GDP. With more than 200 SMEs, Karnataka is also the second-fastest growing start-up ecosystem in India due to the presence of renowned educational institutions, venture capitalists, and incubators.

This report explores India's attractiveness as an investment destination while focussing on Karnataka's economy and its key sectors. The report evaluates the comparative advantages of India, especially Karnataka, and assesses the government initiatives implemented to capitalise on these advantages. In addition, the report provides an overview of the current economic and sectoral trends, tax incentives, and action plans for each sector in Karnataka to move forward.

To fully realise the potential, the report suggests the way forward in terms of reforms and initiatives the state government should undertake to attract investment in key sectors, such as aerospace and defence, agriculture and food processing, automobiles and auto ancillaries, capital goods, clean energy, construction, education, IT/ITES, electronics, pharmaceuticals and biotech, start-ups, textiles and garments, and tourism. These initiatives will help investors tap into Karnataka's potential, unlock lucrative opportunities, and chart a new path for the state to contribute to India's journey towards becoming a global economic powerhouse.

We hope you find the insights shared in the report useful.

Happy reading!



Executive summary

India has been making waves in the global economy with its remarkable Gross Domestic Product (GDP) growth. The GDP growth has been driven by domestic demand, a large consumer base, declining poverty, a rising income of the middle-class population, with the aspirations of its young population. The Indian economy was going through difficult times before FY14. Ten years later, there has been a remarkable change. From an expected GDP growth of 7.3 percent in FY24, the CAD has been narrowed, foreign exchange reserves have nearly doubled, and inflation is within the RBI's tolerance band.ⁱ

India has turned its story around in one decade by focussing on four catalysts. With a liberal foreign investment policy regime, initiatives around Atmanirbhar Bharat and Make in India, the Production Linked Incentive (PLI) scheme, policies on public procurements, and favourable tax policies have augmented India's manufacturing capabilities and exports. The service sector's growth has been robust, led by a rise of IT services and professional management services. The government's focus on expanding physical and digital infrastructure (including highways, freight corridors, airports, metro rail networks, and trans-sea links) over the past 10 years, has also been contributing to the growth. The Ease of Doing Business (EODB) reforms with the National Single Window System (NSWS) have helped instil confidence amongst investors. The introduction of Goods and Services Tax (GST) has brought transformative changes.

India now aspires to be the world's third-largest economy over the next three years and a developed country by 2047. Six key pillars will be essential to leading sustainable growth in the near future. Taking digital India to the next level by incorporating Artificial Intelligence (AI), blockchain, and the Internet of Things (IoT) to transform all sectors. Emphasising high-end manufacturing by pursuing digital transformation to increase efficiency and enhance business processes. Enhancing skills to build a future workforce and –the rise of Global Capability Centres (GCCs) has put India on the global map. Promoting the MSME sector as growth in this sector is crucial for a broad-based and sustainable growth. Preparing India for larger exports by adapting to the new trade ecosystem and changing the nature of cross-border transactions. And lastly, promoting cleaner energy sources for sustainable growth.

Karnataka occupies a pivotal place in the Indian economy. In FY23, Karnataka was the fourth-largest state in the country and contributed about 8.2 percent of the country's GDP. Karnataka's per capita GSDP is the highest compared with other states and is higher than India's per capita GDP.ⁱⁱ It has been ranked as a top achiever alongside a few other states in the EODB done by DPIIT. Consequently, it has been able to attract significant foreign direct investment. Given that Karnataka has been a powerhouse of skilled workforce, this has been a crucial driver. Karnataka has strong physical infrastructure, which is the backbone of any economy, comprising a robust network of roads, highways, railways, and airports.

Karnataka's share of the services sector in GSDP has been rising in the past decade.ⁱⁱⁱ This has been possible due to the favourable Information Technology (IT) policy, which included a reduction of stamp duty, Value Added Tax (VAT), and income tax for IT companies, subsidised land for IT parks and campuses, and infrastructure support. Bengaluru, the state capital, referred to as the "Silicon Valley of India", has become a global IT powerhouse, housing the headquarters of major tech giants in India and Multi National Corporations (MNCs). Karnataka's start-up policy has been successful in promoting entrepreneurship by offering tax benefits, incubation facilities, and access to funding. The government has introduced a single portal for the approval of key requirements, such as electricity, water, land, incentives, labour, and building planning, making it easier for companies, including start-ups, to invest. A robust ecosystem has led to the sprawling of many other IT giants and tech start-ups.

The report identifies the key sectors that will propel Karnataka's ambition of the trillion-dollar economy. Karnataka is the fourth-largest automobile producing state.^{iv} The state's high per capita income has led to rapid growth of vehicles, especially in Bengaluru. Karnataka is one of the leading capital goods producing states, with Bengaluru alone producing 60 percent of the country's machine tools.^v The goods cater to industries such as aerospace, automobile, and engineering. Karnataka has a high literacy rate, and numerous esteemed

research and educational institutes; this will help meet the high demand for skilled workforce.^{vi}

The state is also thriving in sectors such as biotechnology, aerospace and defence, pharmaceuticals, textiles, and tourism. Karnataka is also known as the biotech capital and contributes to more than one-third of India's biotech exports.^{vii} A biotech policy and a bio-innovation centre has made the state conducive for innovative biotech start-ups. Karnataka leads other states in expertise in aircraft manufacturing.^{viii} This has attracted global aerospace players to enter joint ventures and set up Research and Development (R&D) and manufacturing facilities in the state.

Karnataka is known for its heritage destinations, wildlife sanctuaries, national parks, hill towns, waterfalls, pilgrimage sites, and beaches. This has helped tourism become a significant contributor to GDP growth. Karnataka is known as the garment capital of India and accounts for one-fifth of the country's garment production.^{ix} The government schemes and incentives have improved the quality and variety of textile and apparel products. In addition, the state has a strong ecosystem of the food processing industry and a well-established infrastructure of food parks and cold chain infrastructure (facilitated by its fertile land and high agricultural productivity in areas along river basins).



India: A land of opportunities

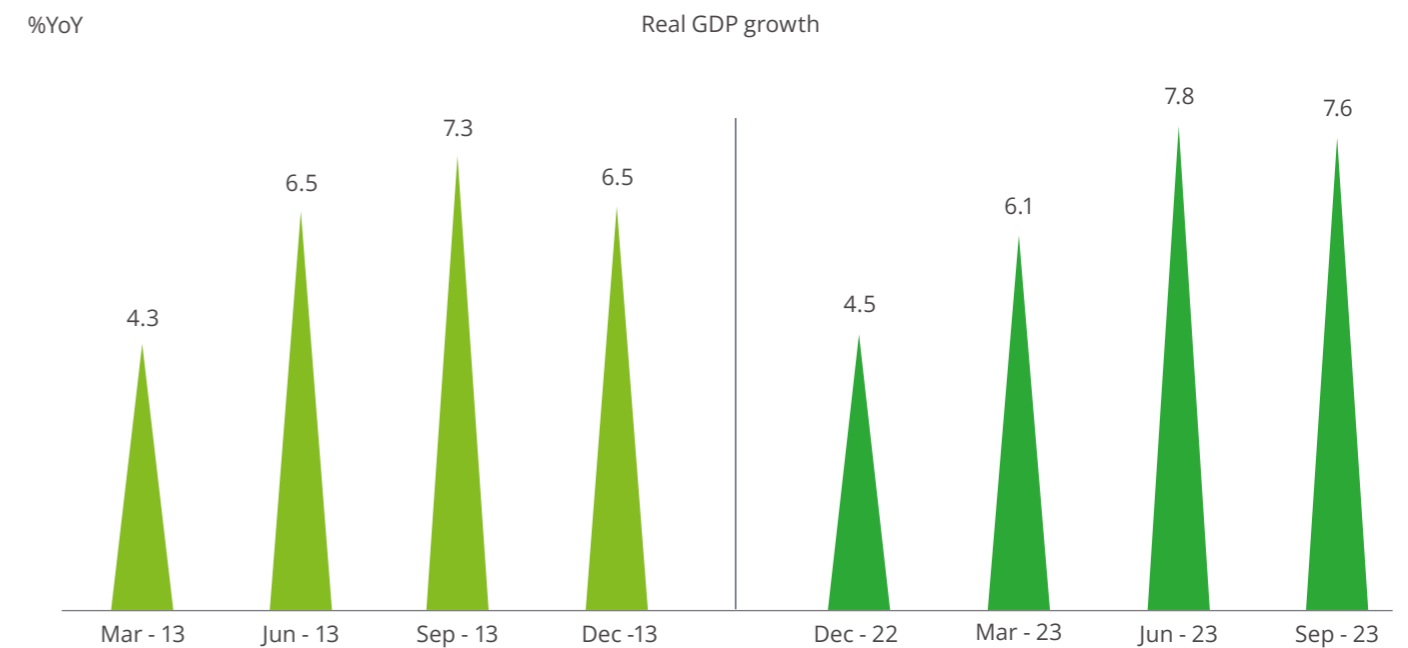
India, the largest democracy and the world's most populated country, has been making waves in the global economy with its remarkable Gross Domestic Product (GDP) growth. Over the past few decades, it has witnessed significant economic transformation, propelling it to emerge as one of the fastest-growing major economies in the world. Its GDP growth is primarily driven by domestic demand, particularly private consumption and investment spending. What works in India's favour is the size of its consumer base, the rising income of the middle-class population and falling poverty, and the aspirations of its young population. The size and scale of operations it has to offer global companies, the availability of skill and talent, and technology and innovation capabilities, India continues to be an attractive investment destination.

However, the journey towards achieving steady growth has not been easy. Before FY14, the Indian economy was going through difficult times, with the economy struggling to grow over 6.5 percent between FY12 and FY14 and mired in inflation running

into double digits.^x The current account deficit (CAD) in FY13 was 4.7 percent of GDP (and it reached 6.1 percent of GDP in one of the quarters), and the foreign exchange reserve stood at about US\$292 billion. The fiscal deficit was nearly 4.5 percent.^{xi}

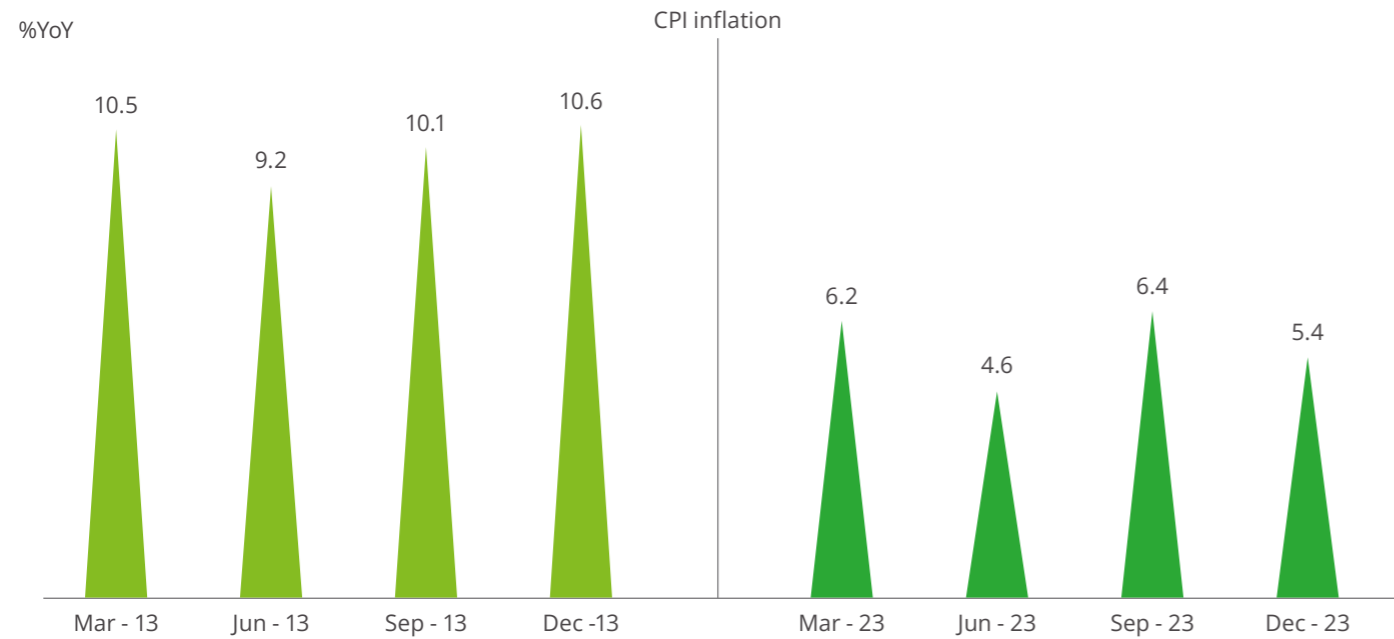
Ten years later, there has been a remarkable change. US Federal Reserve (Fed) policy rates stand at 4.5 percent and oil prices are hovering below US\$80 per barrel (as of the date of writing)—and that is where the similarities end. GDP growth expanded by 7.8 percent and 7.6 percent in Q1FY24 and Q2FY24, respectively and likely to grow by 7.3 percent in FY24, according to National Statistical Office (NSO) (Figure 1).^{xii} The International Monetary Fund (IMF) also increased its GDP growth forecast for India to 6.5 percent for FY24.^{xiii} India's CAD narrowed to 1.9 percent of GDP in FY23, (this is like to be lower in FY24), the foreign exchange reserves have nearly doubled to US\$568 billion. Current inflation stands at 5 percent, and the fiscal deficit is targeted to be 5.8 percent of GDP this fiscal year (FY24) (Figure 2).

Figure 1: Resilient GDP growth



Source : Ministry of Statistics and Program Implementation (MOSPI), Centre for Monitoring Indian Economy (CMIE), Deloitte Research

Figure 2: Inflation down from double digit in 10 years



Source : MOSPI, CMIE, Deloitte Research

Foreign Direct Investment (FDI) has been a significant catalyst for India's economic transformation. The FDI inflows amounted to only US\$21.3 billion during FY24 (April-November), due to tighter liquidity conditions and global uncertainties weighing on global investor sentiments. However, in the previous nine years between FY15 and FY23, India has received a cumulative FDI of US\$596.5 billion.^{xiv} The government's liberalisation policies and efforts to improve the Ease of Doing Business (EODB) have attracted foreign investors from around the world. This influx of FDI has not only provided capital but also brought in new technologies, best practices, and global market access.

While improving the economic fundamentals and improving the external balance, the government has also been walking the road of fiscal consolidation. Currently, the fiscal deficit is estimated to be 5.8 percent in FY24 and is likely to narrow down to 5.1 percent in FY25. In the interim budget presented on 1 February 2024, the government has been conservative in its estimate of gross tax revenue, but has continued to prioritise capex spending. The proposed expenditure is 11.1 percent higher compared with the revised estimate for FY24.^{xv} This included a continued focus on the Production Linked Incentive (PLI) scheme, with a substantial increase in the FY25 expenditure budget for disbursements under PLI schemes (covering electric vehicles (EVs), auto components, and air conditioners).

Four growth catalysts in the past 10 years

India turned its story around in a decade by focussing on building high-end manufacturing capacity, improving competitiveness in its services sector, constructing world-class infrastructure and improving the EODB. These formed the four necessary catalysts, boosting the growth trajectory and improving economic fundamentals over the years.

Manufacturing accounts for 15 percent of India's GDP, and the government has focussed on developing niche manufacturing sectors. With a liberal foreign investment policy regime and the

government's specific initiatives around Atmanirbhar Bharat and Make in India, India's manufacturing capabilities and exports are being augmented in the right direction. This initiative is already seeing an inflow of investments, the development of world-class infrastructure, and the transformation of India into a global hub for manufacturing, design, and innovation. Specific incentive schemes, such as PLI and the government's policy on public procurements are encouraging the industry to add more value across sectors. The government aims to consolidate growth reforms for 24 sub-sectors, such as fisheries, auto components,

agrochemicals, electronics, and textiles, to promote domestic manufacturing and exports while reducing imports under the leadership of the Department for Promotion of Industry and Internal Trade (DPIIT).^{xvi}

Favourable tax policies have been implemented to promote Make in India, encourage businesses, and boost employment (Box 1). The government has also initiated schemes such as tax incentives, FDI reforms, and the ease of implementing

business reforms to attract manufacturing. It has concentrated on industries that use India's comparative advantage in resources, talent, and the size of the local market, helping India move up the global value chain. Consequently, sectors such as telecommunications, medical devices, and IT hardware, which lie at the upper end of Global Value Chains (GVCs), have seen strong growth over the past few years.

Box 1: Tax policies to promote Make in India

- A low corporate tax rate of about 17 percent for new manufacturing companies commencing production on or before 31 March 2024.
- Simplification of the tax regime by rationalising concessions and providing a concessional corporate tax rate of nearly 25 percent (globally competitive rate) to companies.
- Additional depreciation of 20 percent on the value of investment in plant and machinery is available to manufacturers not opting for concessional regimes.
- Introduction of a beneficial tax regime with respect to royalty incomes from Indian patents (more popularly known as the patent box regime).
- Introduction of an additional deduction from income with respect to the salary costs of new employees hired to increase employment.

The Indian government's philosophy regarding taxation has been to (i) spur economic growth through favourable tax policies and promoting the entrepreneurial spirit; (ii) incentivise compliance; and (iii) boost the ease of doing business in India by reigning in simplicity, equity, and transparency in the tax

administration. The larger vision behind this philosophy is to establish a stable and predictable tax regime and become one of the most trustworthy tax systems across the globe. A host of measures have been undertaken to give shape to this vision (Box 2).

Box 2: Measures to simplify the tax process

- The introduction of the concept of an updated return enables revised tax filings for an extended timeframe.
- Smaller businesses and individuals are exempt from audit requirements.
- Provisions for the early closure of tax assessments lead to quicker tax certainty for businesses.
- Improved taxpayer services include computerised processing of tax returns and faceless assessments.
- The tax return is pre-populated with data based on past records.

The introduction of the Goods and Services Tax (GST) has brought transformative changes to India's taxation landscape by removing tax arbitrage and reducing the compliance burden on businesses. Envisioning 'One Nation, One Market, One Act,' GST has established a unified technological infrastructure known as the Goods and Services Tax Network (GSTN) that streamlines filings and registrations, obviating the need for physical interactions with tax authorities. GST completed six years of implementation in 2023, experiencing substantial jump in taxpayer's base from INR6.4 million since its inception in 2017 to INR14 million in 2023.^{xvii} Various benefits are available to the industry players under GST which include exemptions from payment of tax, seamless credit flow, refunds in cases of inverted duty structure.

India has a robust **service sector**, and it has been a major contributor to GDP growth and service exports. Services exports grew by 27 percent in FY23 and are likely to continue to grow at a fast pace this year as well.^{xviii} The growth in service exports has been led by a rise in the share of IT services and professional management services. The need for digitisation and a desire for online service delivery have prompted the export of commercial services. This is supported by the government's Digital India campaign, which focusses on technology to drive inclusive growth and improve governance. The government seeks to provide digital infrastructure, enhance connectivity, and promote digital literacy across the country through this initiative.

The government's focus on **developing infrastructure**, including investments in transportation, energy, and telecommunications, has provided a strong foundation for sustained economic growth. According to budget estimates, the capex increased 3.3X between FY15 and FY24. There has been an expansion of physical and digital infrastructure during the past 10 years, in the form of highways, freight corridors, airports, metro rail networks, and trans-sea links. The railways ministry has been granted INR2.6 trillion for FY25, an increase of 5.8 percent with an emphasis on infrastructure investment.^{xix} This will fall under the PM GatiShakti, which will facilitate multimodal connectivity by expanding economic, social, and digital infrastructure. The Ministry of Road Transport and Highways (MoRTH) has been allocated INR2.8 trillion, including INR1.7 trillion for the National Highways Authority of India (NHA).^{xx} This action will expedite the building of roads and the completion of projects in areas awarded under the Bharatamala project. The government has also implemented reforms to encourage domestic investments, such as simplifying regulations, reducing bureaucracy, and promoting entrepreneurship, further driving India's GDP growth.

Finally, **EODB reforms** have instilled confidence amongst investors across sectors. The National Single Window System (NSWS), introduced to eliminate duplication of work, has gained popularity within the investor community by providing a unified interface for obtaining Government-to-Business (G2B) clearances from various ministries/departments.^{xxi} The platform

has attracted over 420,000 visitors from 157 countries, with more than 75,000 approvals granted for diverse clearances across the centre, states, and Union Territories (UTs).^{xxii}

The DPIIT has served as the foundational pillar for EODB in India, fostering collaboration and breaking silos amongst departments to facilitate reforms. On 30 June 2022, the DPIIT unveiled the 5th edition of the Business Reform Action Plan (BRAP) 2020, reflecting the implementation of reforms by states/UTs. The assessment revealed a noteworthy accomplishment of 7,496 reforms executed across the country, underscoring a substantial enhancement in the EODB landscape. Notably, as on 17 January 2023, ministries and states/UTs have successfully trimmed down over 39,000 compliances.^{xxiii} The government has further demonstrated its intent to promote EODB for both domestic and global businesses by decriminalising minor economic offences under the Companies Act 2013 and introducing civil liabilities for simple defaults, helping foster trust-based governance. Additionally, the Jan Vishwas (Amendment of Provisions) Act, 2023, notified in August 2023, decriminalised 183 provisions of 42 Central Acts administered by 19 ministries/departments.

India has evolved into one of the world's most attractive destinations for business. The combined efforts of India's central and state governments have laid the foundation for the investment landscape, resulting in remarkable advancements in the EODB rankings. Figure 3 gives an overview of these measures that drive foreign investment.



Figure 3: Measures to propel foreign investment



Revolutionising corporate insolvency framework

The Insolvency and Bankruptcy Code (IBC) set up a structure and process for resolving distressed assets, instilling confidence among investors and boosting FDI.



Single window clearance

The initiative gave businesses a clear understanding of the processes required for setting up operations in India, unifying the procedures under a single umbrella and attracting global companies to the Indian market.



Start-up India: Nurturing innovation

This created a conducive environment for start-up growth, attracting substantial FDI by offering tax incentives, simplifying compliances, providing funding support, and making India an attractive proposition for foreign investments.



Land acquisition laws: A level playing field

The Right to Fair Compensation and Transparency in Land Acquisition, Rehabilitation, and Resettlement (RFCTLARR) Act, 2013, established a level playing field across industries, attracting businesses.



GST Reforms: Streamlining taxation

This reform streamlined the intricate web of taxes, eliminating cascading effects and simplifying compliances for businesses.



Enhanced access to credit: Fuelling entrepreneurship

The establishment of Credit Information Bureau and the introduction of the Movable Property Security Interest Act simplified the process of securing credit, promoting entrepreneurship and business expansion.



RBI's Role: Growth and stability

The RBI's consistent accumulation of forex reserves, active market intervention to stabilise exchange rates, and liberalisation of External Commercial Borrowings (ECB) guidelines bolstered India's foreign investment landscape.

Source : India Briefing^{xxxv}, IBEF^{xxxvi}, Business Today^{xxxvii}, Press Information Bureau^{xxxviii}

Six pillars for India's GDP growth story

Policies that have been enacted over the past 10 years have put the Indian economy in a strong position to tackle any major issue. India seeks to become the third-largest economy in the world over the next three years and a developed nation by 2047. India has to leverage its sizable home market to become more competitive and scale up production to enjoy the benefits of scale economies. It will have to ensure inclusive and broad-based growth by ensuring the right environment for investment opportunities, strengthening governance, and stepping up technology transformation while pursuing sustainability's decarbonisation targets. The following six key pillars will be essential to driving sustainable growth in the near future.



Taking digital India to the next level

The growth of India's digital economy is creating new opportunities for its own economy, people, and the world. Between 2014 and 2019, India's digital economy expanded 2.4 times quicker, creating over 62.4 million jobs.^{xxxviii} Digital payment methods, such as the Unified Payments Interface (UPI), improving credit through account aggregator networks, and improving compliance through online tax platforms are a few examples of transformations that have aided in reducing the digital divide between rural and urban India, building a more inclusive society and empowering citizens, increasing the quality of offerings, and helping deliver more efficient and effective solutions for digital India.^{xxxix}

Tax filing has become simpler and more accessible with the advent of internet e-filing platforms. Since digitisation has made it simpler to identify tax evasions, there has been a rise in the number of people filing income taxes, leading to higher government revenues. The percentage of people using banks has now increased to 80 percent.^{xxx} As more people adopted digital technologies, individual investors found it easier to enter the financial markets. This has seen a rise in the number of demat accounts over the past 10 years, leading to greater mobilisation of savings for investment.

The growth momentum is expected to pick up over the next decade, contributing significantly to India's economy. Artificial Intelligence (AI), blockchain, and

Internet of Things (IoT) are expected to transform various sectors, including social sectors such as healthcare and education. The launch of next-gen communication technologies such as 5G and the gradual transition to technologies such as 6G and satellite networks will help reduce energy consumption and improve broadband connectivity. By 2040, the potential economic impact of 5G is expected to reach US\$455 billion.^{xxxi} Strong growth in cloud-based services will likely be driven by the rising demand for digital platforms as India aspires to realise its "Digital India" dream. Cloud computing contributed US\$70-90 billion to India's GDP in 2021 and is expected to reach US\$310-380 billion in 2026.^{xxxii} Automation and robotics will help cut down on mistakes and expenses in product delivery, and modern technology, such as Augmented Reality (AR)/Virtual Reality (VR) and Artificial Intelligence Markup Language (AIML) tools, will allow digitally empowered health centres and classrooms to enable collaborative and accessible resources from anywhere.

The government will have to play an important role in democratising the digital infrastructure and ensuring safeguarding measures that cover virtual interactions and user interests. It is the government that must implement and promote innovative measures to increase inclusivity and build trust.



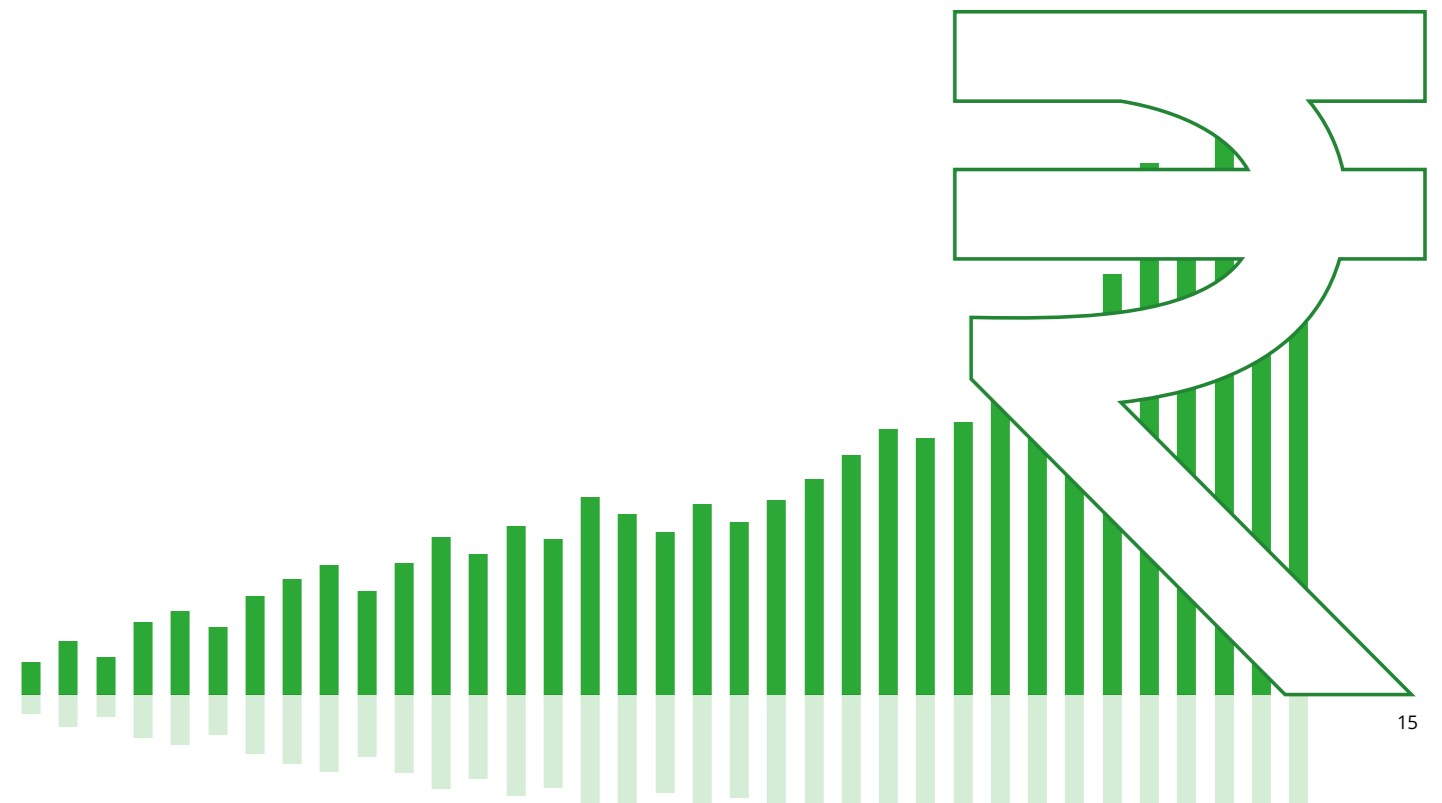
Focussing on high-end manufacturing

From R&D to quality assurance, technology has transformed the entire manufacturing value chain of a product over the years. The trend is likely to continue as technology will play a key role in helping manufacturers overcome their current challenges. Manufacturers will have to pursue their digital transformation targets to increase efficiency, enhance business processes, and develop resilience. According to a Deloitte survey, 86 percent of surveyed manufacturing executives in the US believe that smart factory solutions will be the primary drivers of competitiveness in the next five years.^{xxxiii} India can achieve a higher degree of self-sufficiency by creating strong forward linkages.

India aims to become a global leader in semiconductor design, joining countries such as the US, Taiwan, South Korea, and Japan.^{xxxiv} For that, India will need high investments in building the right ecosystem and infrastructure. Advances in AI technologies will increase demand for large amounts of storage and computing capacity, as well as powerful and scalable computing capabilities. It will also require investments in the growth of cloud services and data centres. The government is providing initiatives such as the PLI to push domestic manufacturing and investment in the sector, and efforts have to be made to ensure more investors tap into such schemes.

There is growing awareness of the environmental impact of traditional vehicles, and consumers are increasingly looking for more sustainable transportation options. Recognising the need, there is an emphasis on the EV market, which is expected to reach US\$7 billion by FY25.^{xxxv} The EV charger market is also set to register a Compound Annual Growth Rate (CAGR) of 46.5 percent until 2030, and IoT is likely to be a major driver of growth in this sector.^{xxxvi} Government initiatives such as the Faster Adoption and Manufacturing of Hybrid and Electric Vehicles (FAME-II) scheme, which provides subsidies for the purchase of EVs, will be important in driving growth in this sector.

The Indian armed forces are undergoing modernisation, leading to significant investments in advanced weaponry and equipment. The government is prioritising domestic production of defence equipment to reduce dependence on imports and boost self-reliance.^{xxxvii} The aviation and defence sectors have been exploring new technologies inter alia Industry 4.0 technologies to reduce cost, reorganise the supply chain, accelerate delivery, and improve connectivity.





Enhancing skills to build future workforce

The government will have to focus on building physical and digital infrastructure to create opportunities for youth. Lately, the government has stepped up its effort to invest in skills, especially in technology and AI, so that India can employ its workforce to support the growth of new manufacturing sectors such as electronics, auto, and solar panel manufacturing, which will also require a significant number of workers with specific skills. The government's efforts to create jobs will have to be complemented with training and skill development programmes. India must tap into the opportunity of rising global demand for technical skills by improving its ability to deliver or export such services.

The rise of Global Capability Centres (GCCs) has put India on the global map and pushed the boundaries of innovation to remain ahead of the global competition. From being a 'service provider,' India is now leapfrogging to be the 'value creator,' and that will require the rapid building of a high-quality workforce and infrastructure of the future.^{xxxviii} The vibrant start-up ecosystem will play an important role as well by bolstering the growth of the new-age entrepreneurial class of India that is agile, risk-taking, and innovative. Investment in this sector will be integral to the adoption of the Trade 4.0 revolution.



Promoting the MSME sector

At the end of FY23, there were 75 million micro, small, and medium-sized (MSME) businesses in India, accounting for around 123 million jobs.^{xxxix} The MSME sector accounted for almost 30 percent of the country's GDP and 43.6 percent of its merchandise exports.^{xl} Clearly, growth in this sector is crucial for broad-based and sustainable growth.

Recognising the role of the MSME sector in the economy, the Indian government will have to ensure that the sector rebounds strongly by promptly addressing the structural and institutional challenges faced by the sector through the right policies and recommendations. Measures around formalisation, addressing infrastructural bottlenecks, encouraging exports, and promoting digitisation will go a long way towards improving the sector's contribution to employment, income, and exports. Doing this will

require a sector-specific approach (separate policies for manufacturing and services) during policy formulation, as a generic approach may not address the shortcomings.

Efforts will have to be focussed on elevating quality standards and preventing brand dilution from low-quality products. This may require the government to grant a level of exclusivity to the MSMEs and encourage them to protect their intellectual property, inventions (with the help of patents), and designs (by legally registering the design). To encourage innovation and adoption of technology, the government must make its digital public infrastructure accessible and affordable for MSMEs to scale up businesses and their customer base. This will also help boost entrepreneurship and create job opportunities, especially among women, where the potential remains untapped.



Preparing India for larger exports

Currently, India's exports account for just 2.1 percent of the global exports of goods and services. Its share in global merchandise exports is even smaller, at 1.7 percent.^{xli} Given the dominance of GVC exports in overall exports, no country can sustain rapid growth in exports without improving its GVC participation.

India will have to play to its strength. Backed by skilled talent and infrastructural facilities (such as the 5G rollout), India's service exports will grow, and it must benefit from the changing trade landscape and digitisation of trade by capturing a greater share of global technology services.

The government must ensure it protects its industry (from anti-dumping or commodity subsidisation) and citizens (by upholding safety standards and protecting consumers). For that, it needs to establish an adequate regulatory framework for trade policy measures, enforce laws and policies, adjudicate disputes efficiently, and keep pace with the innovations and disruptions they are causing. This will necessitate jurisdiction and laws to strengthen international patent rights; re-design intellectual property and its protection;

ensure privacy and personal data/consumer protection; impose web content restriction and competition policies; and develop cybersecurity to deter non-compliance and fraudulent behaviour.

As India gears towards export-led growth, it must ensure inclusive development of the disadvantaged sectors by forging new partnerships and trade agreements that offer greater access to markets and resources. This can be achieved by building strong trade relationships with partnering nations (as India is already doing by engaging in several Free Trade Agreements (FTAs)) and positioning the country in sectors, such as fintech, healthcare, technology, and education, where it has a strong comparative advantage.

The Indian industry will also have to adapt to the new trade ecosystem. Adapting to the changing nature of cross-border transactions, identifying the right market, managing real-time inventories, increasing online presence, and tapping into customer preferences will require Indian businesses to unlearn old methods and learn new techniques of doing trade.



Promoting cleaner energy sources for sustainable growth

The Indian government has committed to decoupling economic growth from energy growth by increasing energy efficiency. According to Deloitte, this decoupling will have to be achieved through energy efficiency and the adoption of modern technologies.^{xlii} A targeted set of initiatives, including policy and regulatory, investment, and R&D, are required to contain the rise in final energy demand. The focus will have to be on reducing greenhouse gases (GHG) and on the key energy demand sectors—grid carbonisation, industrial decarbonisation, and transport transition—which will have the most consequential impact and merit policymaker attention.

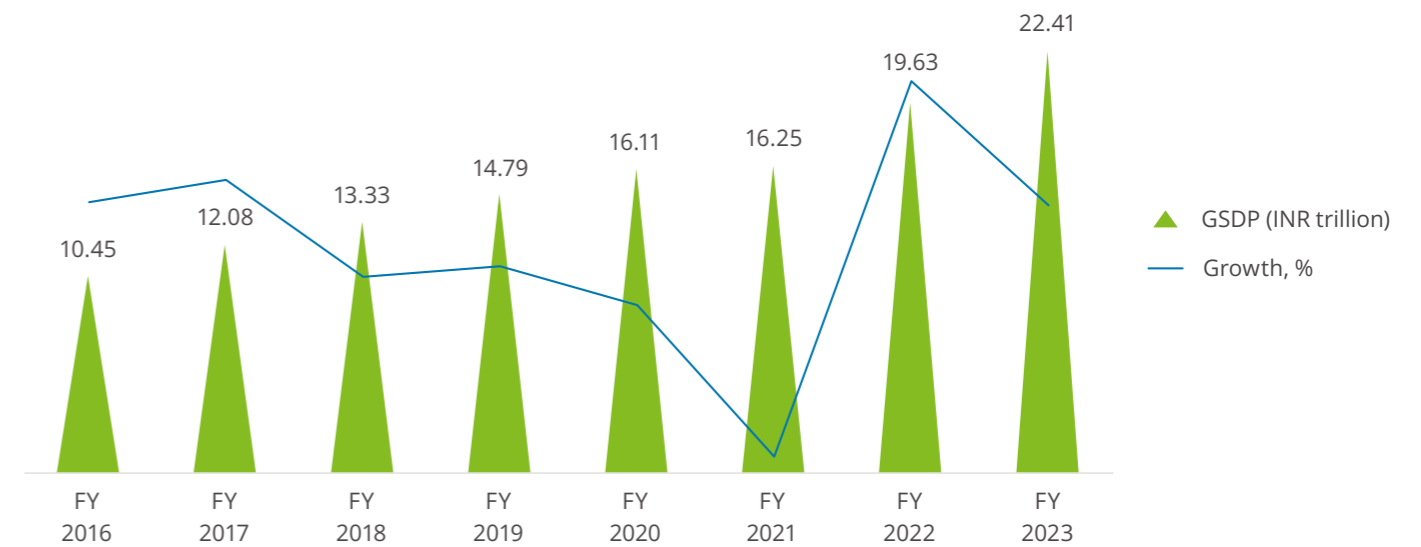
The transition to renewable energy will help India's economic growth, jobs, and prosperity and require developing strategies that remove the challenges associated with the existing infrastructure and regulatory systems and a collaborative approach from industry, government, and academia. The pace of adoption, however, will depend on the economics behind the transition. Bending the emissions curve onto a path that is consistent with the target to reach net-zero emissions and India's aspiration to be a global leader is inevitable.



In focus: Karnataka

Karnataka occupies a pivotal place in the Indian economy. Its nominal GSDP posted an 11.5 percent CAGR between FY16 and FY23, with GDP increasing approximately 2.1 times during the period (Figure 4). The state registered a growth of 0.9 percent when India's GDP contracted by -5.6 percent in FY21. In FY23, Karnataka's nominal GSDP grew by 14.2 percent and stood at INR22.41 trillion, compared with a nominal GSDP of INR19.6 trillion in FY22. The per capita GSDP of Karnataka has expanded over the past few years, from INR0.2 million in FY15 to INR0.3 million FY23 at a CAGR of 9.3 percent. Karnataka's per capita GSDP is highest compared to the other states and is considerably higher than India's per capita GDP.^{xliii}

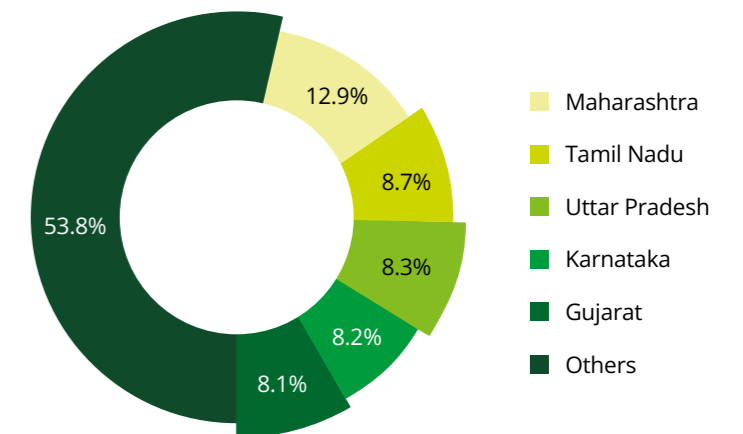
Figure 4: Karnataka growth trend over the years



Source : Haver Analytics, Deloitte Research

As of FY23, the top five states in India, that together contribute approximately 46.2 percent of India's GDP (Figure 5). Karnataka was the fourth largest state in the country and contributed around 8.2 percent of the country's GDP.

Figure 5: Contribution of the top states to GDP in FY23

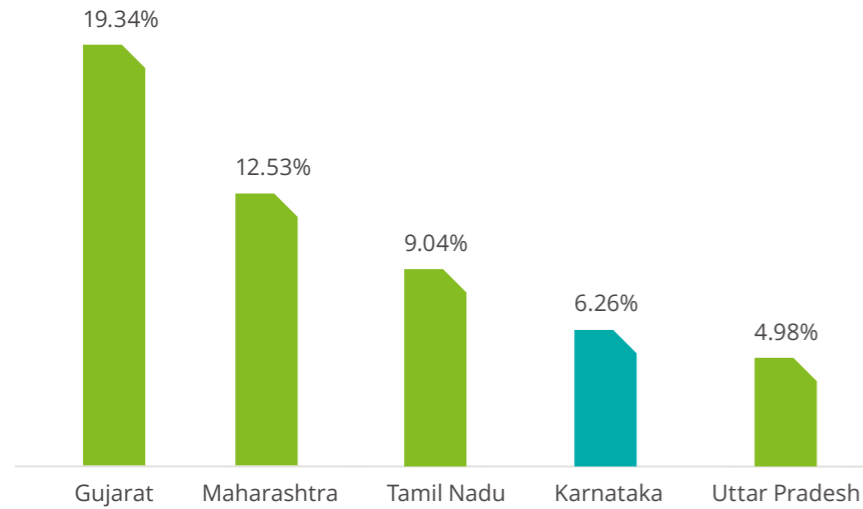


Source: MOSPI, Haver Analytics; Deloitte Research
GSDP current prices base year 2011-12

The distribution of invested capital across states in the registered manufacturing sector shows that Karnataka is amongst the preferred investment destinations (Figure 6).^{xliv} The state has been ranked as a top achiever alongside a few other states in the Ease of Doing Business done by DPIIT.^{xlv} Karnataka Udyog Mitra, which works under the Directorate of Industries and Commerce, has also been awarded the leading investment promotion agency at the national level.^{xlvi} The government has already introduced a single portal for approval of key requirements, such as electricity, water, land, incentives, labour, and building planning, making it easier for companies, including start-ups, to invest in the state.

Figure 6: Distribution of invested capital across states

% share in factory sector invested capital

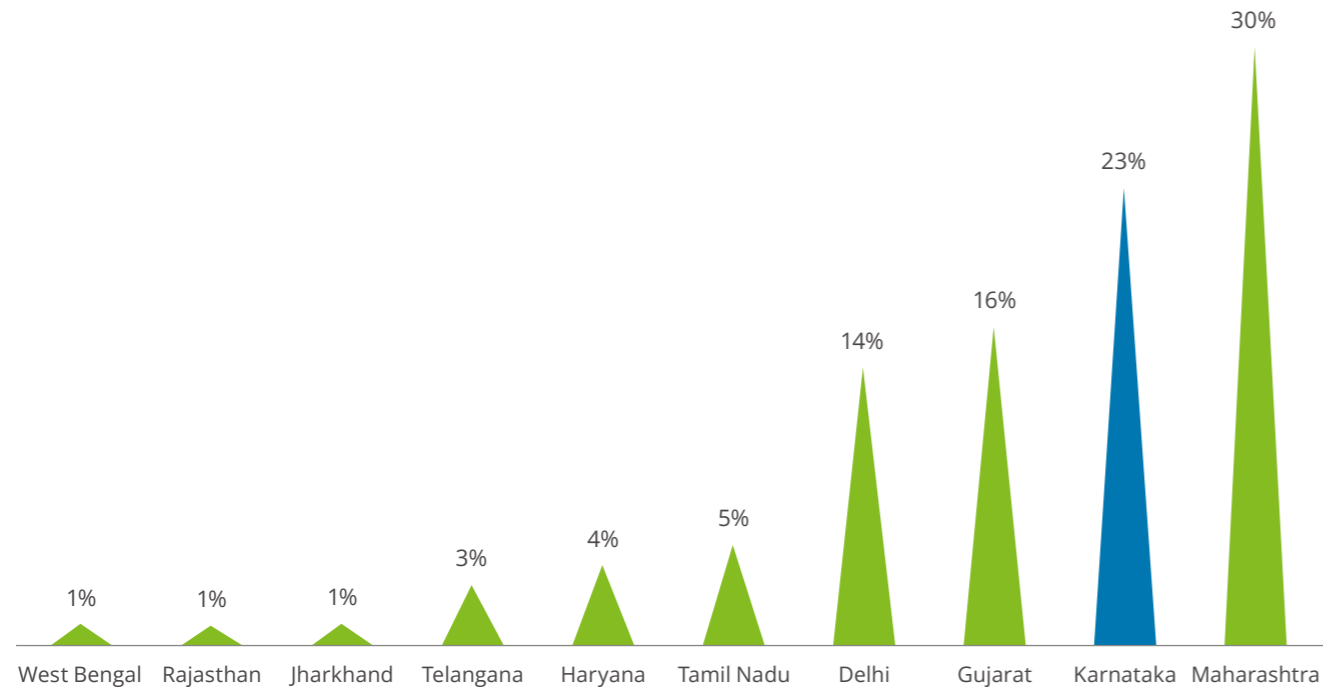


The state has attracted significant FDI compared with other economically comparable states (Figure 7). Bengaluru, the state capital, referred to as the "Silicon Valley of India", is a global IT powerhouse housing the headquarters of major tech giants in India and MNCs. A robust ecosystem for IT and IT-enabled services (ITES) has attracted many other IT giants and tech start-ups. The state is also thriving in other sectors, such as biotechnology, aerospace and defence, pharmaceuticals, textiles, and tourism.

Source : Annual Survey of Industries 2019-20 (ASI), Deloitte Research

Figure 7: State-wise FDI inflows

% share in FDI inflow (from October 2019 to September 2023)



Source : DPIIT, Ministry of Commerce and Industry, Deloitte Research

Services – The biggest growth driver

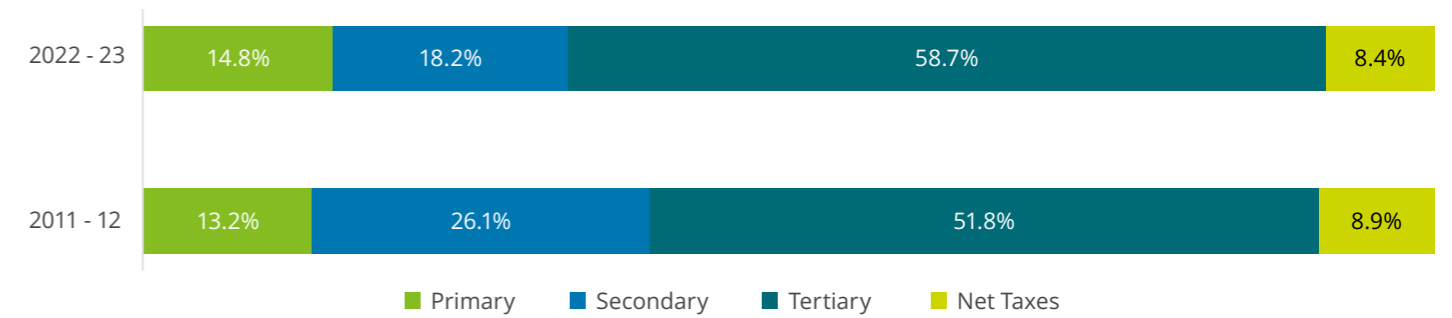
Over the past decade, the pattern of sectoral contribution to GDP has moved from the secondary sector to the tertiary sector. The share of the secondary sector's contribution to the GDP declined by around 8 percent, while the share of the tertiary sector increased from 51.8 percent in FY12 to 58.7 percent in FY23. This was attributed to the state's thriving IT services sector and other technology-driven industries. The contribution of the primary sector has increased slightly, from 13.2 percent in FY12 to 14.8 percent in FY23 (Figure 8).^{xlvii}

Over the past decade, the Karnataka IT policy has attracted significant IT investments. It includes a reduction of stamp duty, VAT, and income tax for IT companies, subsidised land for IT parks and campuses, and infrastructure support. This has also attracted major IT companies. Karnataka's start-up policy has promoted entrepreneurship by offering tax benefits, incubation

facilities, and access to funding. The government offers early-stage entrepreneurs financial support, subsidised workspace, mentorship programmes, and stamp duty exemptions. This has attracted venture capitalists, private equity investors, and angel investors to fund start-ups.

The government of Karnataka offers tax advantages to investors in biotech enterprises, expedited licencing and clearance processes, and grants and subsidies for establishing labs and research facilities. This attracted leading biotech businesses and academic institutions to the state. It further created biotech goods for the environment, healthcare, and agriculture industries. The Karnataka Innovation and Technology Society (KITS) also promotes innovation across sectors through funding, incubation, and mentorship programmes.

Figure 8: Sectoral contribution of Karnataka's GDP



Source : Source: MOSPI, Haver Analytics, Deloitte Research
GSDP current prices base year 2011-12



Skilled workforce

One of the biggest reasons for this shift towards the services sector has been because the state has been a powerhouse of skilled workforce in India. The state has a large number of skilled IT professionals who are in high demand by both domestic and international companies.

The state has a large pool of skilled and educated professionals due to its focus on education and research. There are 52 universities and 4,519 pre-university colleges.^{xviii} It also has renowned educational institutions, such as the Indian Institute of Science, the Indian Institute of Management Bengaluru, and the National Institute of Mental Health and Neuro-Sciences. Karnataka has 401 R&D centres.^{xix} In addition, it plans to set up venture funds and New Age Innovation Network (NAIN) centres to encourage students and research scholars.

Strong infrastructure

The physical infrastructure, which is the backbone of any economy, and a robust network of roads and highways, railways, and airports are necessary for resilient growth. Karnataka boasts an extensive road network, including national highways, state highways, and rural roads. As of March 2022, Karnataka has 14 national highways with a total length of 8,037 kilometres. It also has 115 state highways covering 27,880 km. The Golden Quadrilateral and North-South and East-West corridors pass through the state, enhancing connectivity to other parts of India. Additionally, initiatives such as the Bengaluru-Mumbai Highway and the Bengaluru-Mysuru Expressway improve intrastate and regional transport.ⁱ

The state has eight domestic airports. The Bengaluru airport, Kempegowda International Airport (KIAL), is processing record numbers of both passengers and cargo. The construction of other airports throughout the state, such as those in Belagavi and Kalaburgi, would aid in diverting traffic from Bengaluru and increasing the state's passenger and cargo capacity.ⁱⁱ

A US\$1 trillion GSDP vision

Building an ecosystem that focusses on promoting industrial development with a strong push on exports through institutional, financial, structural, and governance reforms is a consistent theme that emerges from the growth stories that have transformed themselves within a short span of time. The growth stories of South Korea, China, and Singapore are outstanding examples of how they transformed their economies in a such a short period.

In these countries, public expenditure was geared towards creating the infrastructure – both physical (highways, port facilities, electricity, irrigation, transportation, communication, etc.) and social (primarily through expenditure on education with a strong focus on training and skilling the workforce) – needed to support the growth of the identified industrial sub-sectors. Upgrading physical and digital infrastructure, including roads, ports, railways, and broadband connectivity, is crucial for

The New Mangalore port in Karnataka is a major port. The state has 13 minor ports in Karnataka; of which, New Mangalore is a major port. The New Mangalore port has the deepest inner harbour on the west coast that can be expanded to handle heavy trade volumes.ⁱⁱⁱ

Karnataka has a geographical trade advantage compared with other states. Its proximity with the Suez Canal, and access to high-volume markets, such as Europe and the East Coast of the US – compared with Southeast Asia it can easily capture these markets. The Mangalore port is the deepest inner water harbour on the west coast and can be developed to handle large trade volumes to complement the growing industry ecosystem. The Karwar port can be developed to supplement capacity.

efficient logistics and attracting investments. The economic policy framework was pro-business, pro-foreign investment, and export-oriented.

Transitioning to a trillion-dollar economy within a short time span is undoubtedly an ambitious goal but not unattainable. This will be aided by measures to eliminate or upskill the unorganised labour force, as this will increase employability and income prospects. During the pandemic, the fiscal balance of the state became unfavourable, but it has made consistent efforts to address its deficit. The state has reduced its fiscal deficit to 2.8 percent in FY23 per the budget revised estimates, which remains within the Fiscal Responsibility and Budget Management (FRBM), set by the central government. The notable surge in revenue for two years and adherence to fiscal consolidation will enable the state in stepping up capex spending.ⁱⁱⁱⁱ

The growth will be technology-led. Leveraging Karnataka's existing strength in IT and fostering advancements in AI, biotechnology, and aerospace are key drivers. Strengthening existing industries and promoting high-tech manufacturing in sectors such as electronics, EV, and pharmaceuticals, can contribute significantly.

Capitalising on Karnataka's rich history, natural beauty, and diverse cultural offerings can attract domestic and international tourists and boost the service sector. Modernising agriculture, investing in value-added processing, and improving rural infrastructure are essential for inclusive growth and sustainable development.

Despite agriculture having the lowest GVA contribution, the sector employed 45.6 percent of the workforce in 2019-20.^{iv} Meanwhile, the industry and services sectors have an asymmetric workforce distribution. Similarly, there is a considerable gap between the north and south of Karnataka. The northern part of Karnataka has many poor districts; the districts are populous and hence the per-capita income is low. There is also a large gap between the urban and rural areas. The rural population does not have access to high-growth opportunities; a large segment of the rural population depends on agriculture, where the average income level is low.



Government initiatives to drive the trillion-dollar ambition

Karnataka was the first state to initiate a labour-intensive industry policy. The New Industrial Policy 2020-25 recognises the importance of these industries and includes several initiatives to promote their growth and development. This includes an objective of creating 2 million new jobs over the next five years.^{lv}

A turnover-based incentive system for industries has been adopted that is likely to benefit labour-intensive industries. The policy also has a strong focus on developing MSME units. The state has 0.9 million registered MSME units and can become a major source of employment in India.^{lvii} To attract investments, Karnataka offers various incentives which are given in Box 3.

Box 3: Various incentives as part of the Industrial Policy and sectoral-based policies^{lvii}



- The state offers an investment promotion subsidy of 1.75 percent to 2.25 percent for Super Mega to Large industries based on their turnover.
- There is a 50 percent subsidy on the cost of setting up an Effluent Treatment Plant, capped at INR25 million.
- A 50 percent subsidy is provided for the cost of setting up a Common Effluent Treatment Plant, capped at INR50 million.
- Anchor Industries, which are industries set up with no industrial investments, receive additional investment subsidy.
- The state provides concessional registration charges, reimbursement of land conversion charges, and stamp duty exemption for investments in areas other than Zone 3.
- There is a 100 percent exemption from tax on electricity tariff.
- An interest subsidy of 5 percent is offered on technology upgrading loans for up to six years.

Following the National Logistics Policy, Karnataka is working on its comprehensive state logistics policy. Karnataka has been ranked in the achievers' category in the ranking of the Logistics Ease Across Different States (LEADS) across states.^{lviii} This implies that the state ranks amongst the top performers in terms of logistics performance according to various factors. The state is embarking on a new logistics policy and help the state can become a leading logistics hub through initiatives such as developing multi-modal logistics parks.

Karnataka initiated few reforms in early 2023 to make the state's labour laws more flexible and attractive for businesses. The key reforms include allowing for 12-hour shifts while keeping the weekly limit of 48 hours remained unchanged. This allows companies to operate with longer shifts and potentially increase productivity. Restrictions on women working night shifts has been removed. This will allow them to participate in 24-hour operations and increase employment opportunities for women, reducing the gender gap in the workforce in the long run.^{lix}

Karnataka has set up an expert committee to frame the Karnataka State Education Policy, which will focus on skilling students from secondary education onwards to ensure they are ready to cater to the industry's needs. The state government has also initiated its own Skill Development Policy in line with the national policy.

The Chief Minister's Kaushalya Karnataka Yojane is a flagship government scheme launched in 2019. Implemented by the Department of Skill Development, Entrepreneurship and Livelihood (DSDE&L), the scheme seeks to equip 0.5 million youth annually with the necessary skill sets so they can either be employed or start their own businesses. It focusses on vocational training, upskilling existing workforce, and preparing youth for jobs in emerging sectors, such as AI, robotics, and healthcare.





Contribution of the key sectors

As a part of India's Atmanirbhar Abhiyan, the central government has been undertaking favourable initiatives to boost domestic production and reduce import dependency for various manufacturing sectors. Keeping in view India's Atmanirbhar vision, the Karnataka government has also been strongly focussing on improving domestic manufacturing growth, identifying lucrative investment opportunities for attracting investors, and boosting creation of local jobs within the state.

The key 12 sectors that are anticipated to remain highly crucial for the state's US\$1 trillion economy target include aerospace and defence, agro and food processing, automobile and auto ancillaries, capital goods, clean energy, construction, education, IT/ITES, electronics, pharmaceuticals and biotech, start-ups, textile and garments, and tourism. While these sectors are largely identified from Karnataka's growth perspective, they are also important for India's overall economic development.

Aerospace and defence

India

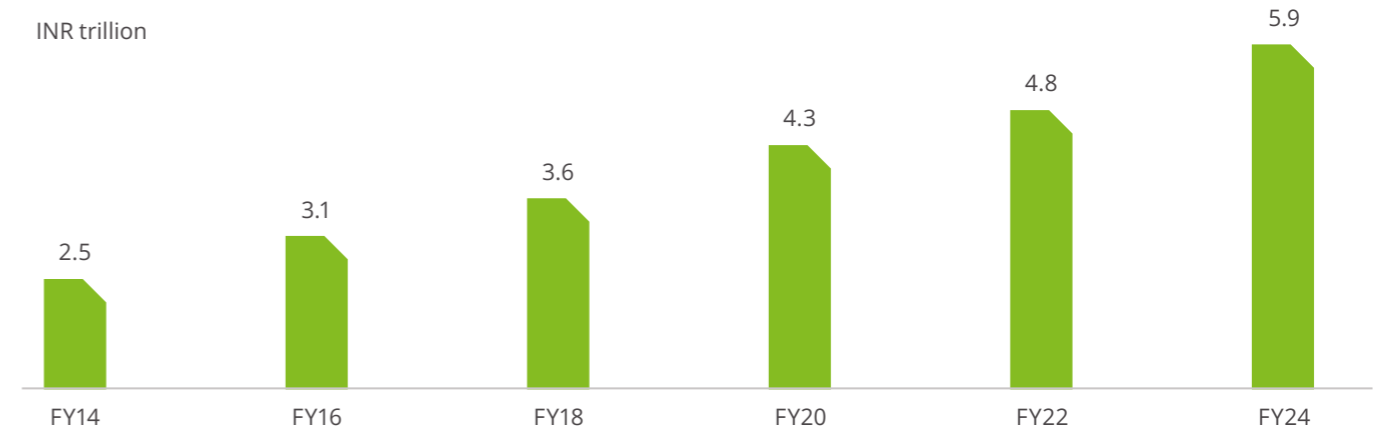
India's aerospace and defence sector plays a crucial role in the country's economic growth and national security. The demand for both military and commercial aircraft in the country is increasing rapidly due to rising defence spending and expanding passenger traffic. Favourable government initiatives are also being observed in the sector. These include the Make in India programme, which seeks to make India a global manufacturing hub, and the Defence Procurement Policy (DPP), which promotes the indigenisation of defence equipment manufacturing.^{lx}

INR350 billion in exports.^{lxiv} This periodic increase in defence budget outlay will continue to provide the country with the necessary funding to expand its defence manufacturing capabilities.

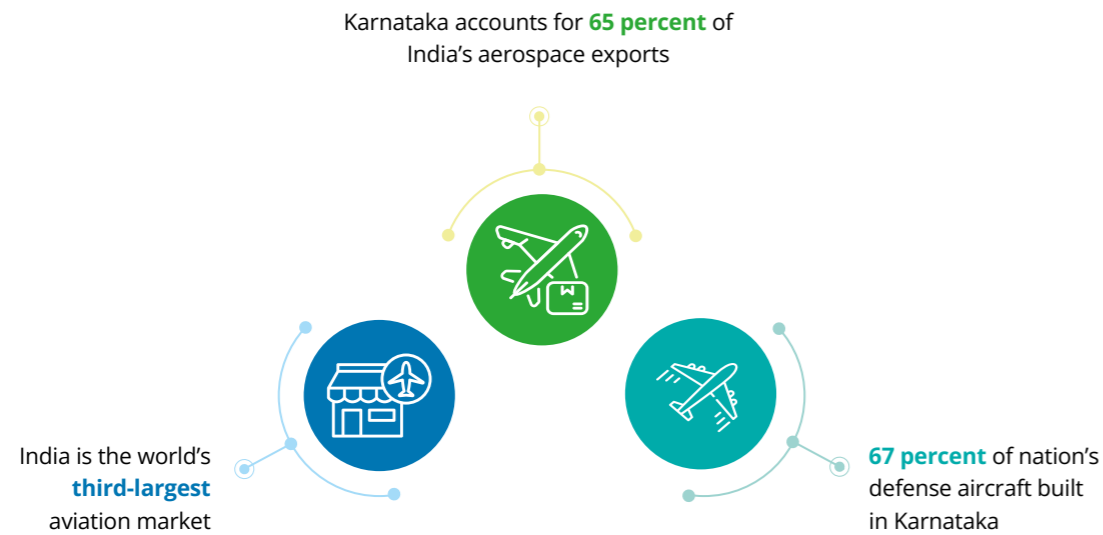
India's defence expenditure has registered more than a 9 percent CAGR over the last two decades.^{lxj} In the 2023-24 budget, the sector received a budget of INR5.9 trillion, a 13 percent yoy increase.^{lxii} Moreover, the government allocated INR1.6 trillion for the acquisition of new weaponry, aircraft, battleships, and other military gear.^{lxiii} The defence ministry has further set a goal of achieving a turnover of INR1.8 trillion in aerospace and defence manufacturing by 2025, including

India is currently the world's third-largest aviation market, after the US and China, by domestic traffic.^{lxv} The rising middle-class population with a growing travel inclination, coupled with favourable government initiatives (such as the UDAN Regional Connectivity Scheme), has increased the demand for new aircraft in the country.^{lxvi} Besides, the Indian aviation industry has now fully recovered from the COVID-19 pandemic-induced downturn, as evident by the air traffic movement, which stood at ~327 million in FY23, compared with 189 million in FY22.^{lxvii} India is expected to see ~500 million domestic and international air travellers by 2030 and can become the world's largest aviation market by 2047.^{lxviii}

Figure 9: Defence expenditure: Budget estimates



Source: CMIE, Deloitte Research



Karnataka

Karnataka has been a pioneer in manufacturing aircraft for defence and civilian use even before India gained independence.^{lxix} This early presence nurtured talent and expertise, creating a robust foundation. The state is home to several key defence Public Sector Undertakings (PSUs) and R&D institutions and is geographically well-positioned as a prime hub for India's aerospace and defence ecosystem, with proximity to Chennai (shipping, naval defence, and ammunition hub) and Coimbatore (small manufacturing and defence industries).^{lxx}

Due to Karnataka's expertise in aircraft manufacturing, many global aerospace players are entering into JVs with domestic companies to establish R&D and manufacturing facilities in the

state.^{lxxi} Moreover, Karnataka has one of India's fastest-growing airports, located in Bengaluru, for both cargo and passenger traffic, with a strong ecosystem for Maintenance, Repair and Overhaul (MRO) and ground support equipment.^{lxxii}

The state's contribution to India's space innovation goes beyond its role in aerospace and defence with key projects, including Chandrayaan (India's first mission to moon) and Mangalyaan (the Mars orbiter mission) being driven from the state.^{lxxiii} Karnataka's long-term commitment to space exploration has positioned the state as a key player in shaping the future of India's space programme.

Karnataka has more than 2,000 SMEs, and 70 percent of India's supplier base, that carry out specialised subcontracting work for defence PSUs.^{lxxiv} The state also has a robust ancillary support ecosystem for aerospace and defence manufacturing, with the presence of numerous capital goods companies.^{lxxv} Moreover, Karnataka has a strong IT/ITES, design, and engineering expertise and produces ~40 percent of defence electronics products/systems.^{lxxvi} Bengaluru is home to several leading IT and electronics hardware companies, many of which are in the supply chain for the aircraft industry.^{lxxvii} The state also benefits from the presence of several scientific and technical institutes, along with a sizable pool of engineering graduates that make up the majority of the human resource pool required for the sector.^{lxxviii} All these support ecosystems have been driving the aerospace and defence sector in the state.

Favourable government initiatives to boost the aerospace and defence sector:

- In 2013, Karnataka became the first Indian state to announce a dedicated aerospace and defence policy.^{lxxix} This early strategic move demonstrated the state's proactive approach to fostering the sector's growth and attracted significant investments.
- In 2016, the policy was amended to address industry feedback and broaden its scope to include MRO activities and civil aviation, further consolidating its appeal.^{lxxx}
- In August 2022, the policy was further updated with the launch of the Karnataka Aerospace & Defense Policy 2022-27. The policy aims to attract INR450 billion in investments to the state's aerospace and defence sector by 2027, establishing Karnataka as the preferred investment destination for aerospace and defense manufacturing.^{lxxxi}

Tax and policy incentives

Karnataka's Aerospace and Defence Policy 2022-27 aims to attract more investments, promote the development of indigenous and advanced technologies and manufacturing for space-related applications, and develop world-class skilled workforce. The policy exempts stamp duties and offers concessional registration charges on loan, lease, and sale transfer deeds to companies engaged in the aerospace sector. Further, the policy offers an electricity tax exemption for six years, and land conversion fees are reimbursed

by the government. The government also aims to provide up to 50 percent financial assistance for land, buildings, and plant/machinery with ceiling limits for the development of the aerospace ecosystem through a cluster approach. Other incentives offered under this policy include the following:^{lxxxii}

- Investment promotion subsidy for micro and small enterprises to an extent of 10 percent of the turnover in each financial year and spread over five financial years from the date of commercial production.
- Sustainability and responsible industrialisation by MSMEs, for instance, 50 percent of the cost of equipment (maximum INR0.2 million) for rainwater harvesting, 50 percent of the cost of ETP, etc.
- Incentives for large enterprises include:
 - Concessional registration charges at INR 1 per 1,000 sq. ft. of area
 - 100 percent reimbursement of land conversion fees
 - Production linked scheme based on annual sales turnover

The way forward

More dedicated testing facilities for advanced aerospace and defence equipment must be established to reduce the dependence on external facilities and delays in the development and approval processes. Moreover, streamlining complex clearance procedures will help in faster project execution. A uniform distribution of infrastructure and resources across all planned aerospace and defence hubs will be required to realise the sector's full potential. Attracting and retaining highly skilled professionals will be extremely important, with other Indian states and even foreign countries offering competitive salaries and opportunities. Increasing competition from other aerospace and defence hubs such as Tamil Nadu, Andhra Pradesh, and Telangana is something to watch out for.

Key aerospace and defence clusters in Karnataka



Special Economic Zones (SEZ)

Belagavi and Devanahalli



Manufacturing cluster

Belagavi and Dakshina Kannada



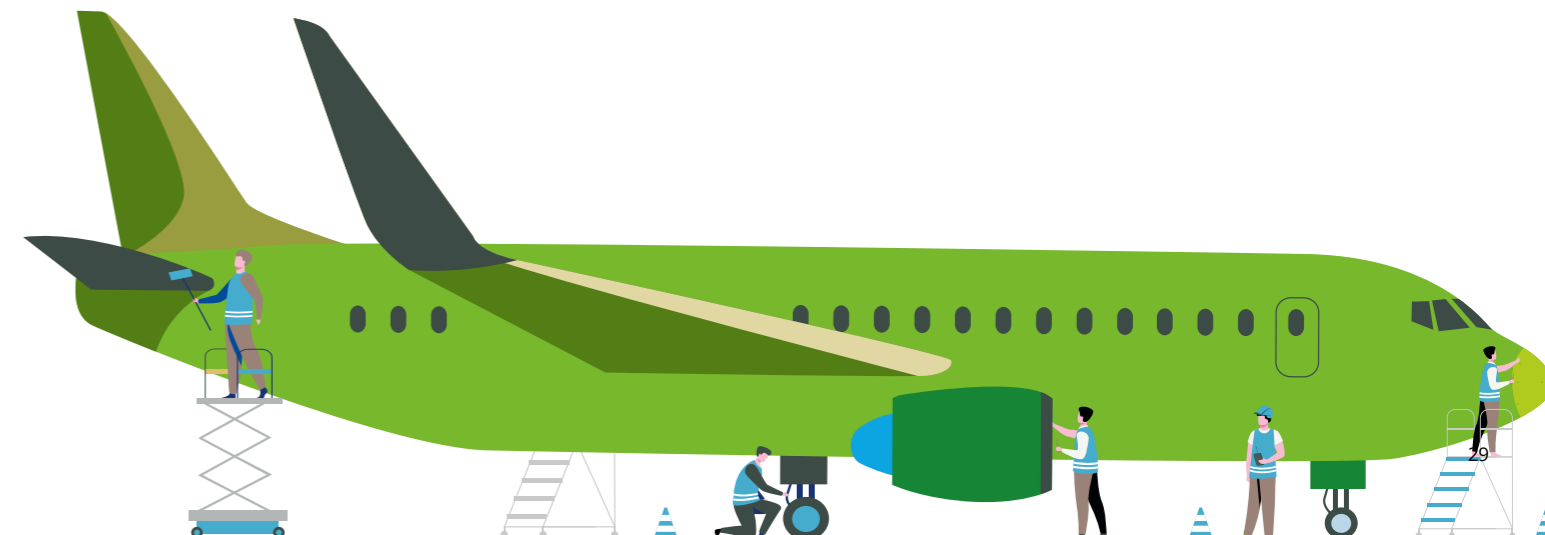
MRO

Kannur and Mysuru



Innovation centres

Bengaluru, Chitradurga, and Davanagere



Agro and food processing

India

India's agriculture industry employs over 50 percent of the workforce and contributes significantly to the nation's GDP (18 percent in FY23). India is the world's leading producer of spices, pulses, milk, tea, cashews, and jute.^{lxxxiii} It is also the second-largest producer of wheat, rice, fruits and vegetables,

sugarcane, cotton, and oilseeds. Additionally, India leads the world in the production, import, and export of spices and spice-related goods. To encourage the agricultural and food processing industries in India, the government has launched several schemes with incentives.

Ranked **first** in coffee, areca nut, coconut, coarse cereal, maize, green chillies, black pepper, and vanilla production

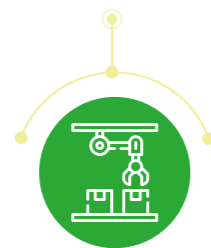


Ranked **second** in tamarind, cocoa, ginger, onion, grapes, and pomegranate production

The demand for Indian food is growing worldwide, and the country boasts a diversified food industry. In terms of production, consumption, exports, and projected growth, India's food processing sector ranks fifth and accounts for 32 percent of the country's overall food market.^{lxxxiv} Exports of processed foods made up a significant portion of agri-exports, growing from 13.7 percent in FY14-15 to 25.6 percent in FY22-23.^{lxxxv} India's exports of ready-to-eat and ready-to-cook food have increased by 12 percent and 7 percent, respectively, over the last 10 years.^{lxxxvi}

Dealing in agriculture activities is restricted by foreign exchange regulations, wherein FDI is permitted for agricultural activities under controlled climate conditions but allows 100 percent foreign investment for undertaking food processing activities and infrastructure associated with handling food.^{lxxxvii} In the past, the government has offered a turnover-linked incentive scheme for the food processing sector and supported more players entering this space. Additionally, dealing with food is subject to regulatory licences and permissions, including with the Food Safety and Standards Authority,^{lxxxviii} the Agriculture Produce Marketing Act,^{lxxxix} and other legislations.

17 percent of Karnataka's manufacturing output



3 percent of India's exports



4 percent of Karnataka exports



Karnataka

Karnataka has 10 agro-climatic zones and 6 types of soil. Accounting for 75 percent of India's flower production, 70 percent of its coffee production, and 47 percent of its silk production, the state plays a significant role in the country's agricultural landscape.^{xc} Karnataka's agricultural sector employs

more than 70 percent of the working population, with over 60 percent of the state's land devoted to agriculture. Karnataka has received 46 geographical indicator (GI) tags for its locally manufactured products, with a majority of them for agricultural goods.

Figure 10: Production of major crops in Karnataka (in million tonnes)

Crop/Group	FY22-23 (Second Advance Estimates)	FY21-22 (Final Estimates)
Cereals	11.5	12.4
Pulses	2.0	2.0
Total food grains	13.5	14.4
Oilseeds	1.2	1.1
Cotton	2.1	1.9
Sugarcane	56.3	61.1

Sources: Karnataka Economic Survey 2022-23, Deloitte Research

Karnataka has a strong ecosystem of the food processing industry and a well-established infrastructure of food parks and cold chain infrastructure. It has 2,361 food processing units. With the help of farmers, processors, and retailers, food parks in the state link agricultural output to the market to optimise value, lower waste, boost revenue, and create jobs in rural areas.

Key agro and food processing clusters in Karnataka



Existing food park clusters

Kalaburagi, Bagalkote, Hiriyr, Tumakuru, Malur, Mandya



Proposed food park clusters

Bidar, Vijayapura, Ballari, Byadgi, Karwar, Shivamogga, Chikkamagaluru, Mangaluru, Nandi Valley, Mandya



Karnataka's fertile lands and high agricultural productivity along its river basins have facilitated the growth of the agricultural and food processing industries in the state. The state aspires to be at the forefront of agriculture and to capture value-addition potential through agro-based industries, such as food processing.

The following are some of the policies and programmes implemented by the state government to support the expansion of this industry:^{xi}

- The Karnataka Start-up 2022-27 Policy was launched in 2022 with a specific focus on agritech, among other sectors.
- Farmer Producer Organisations (FPOs) and 162 Agricultural Produce Market Committees (APMCs) have been set up in the state to regulate farmers' produce and market it at a higher price.
- The Millet Mission was launched in 2017 to increase the production and marketing of millets in the state.
- The Indian government launched eBiz, a single window system, in 2013. This was further adopted by Karnataka and designed to streamline and simplify the process of starting and operating a business.
- The State Industrial Land Bank and Central Industrial Land Bank Portal provided information on land availability, connectivity, and other infrastructure information in the state using a geographic information system (GIS).
- The Rashtriya Krishi Vikas Yojana (RKVY) scheme was launched in 2019-20 to provide infrastructure for the trade of agricultural commodities in 17 rural markets in Karnataka.
- As part of its Industrial Policy for Large, Mega, Ultra Mega, and Super Mega Enterprises, launched on 13 August 2020, the state provided investment promotion subsidies to food processing entities in the state.
- Agri-Business and Food Processing Policy was launched in 2015 to attract investments and make Karnataka the preferred destination for food processing.

Tax and policy incentives

In a concerted effort to enhance agri-business in Karnataka, the government, under the Agribusiness and Food Processing Policy, has implemented several incentives. Notably, the most significant incentive involves reimbursement, extending up to 100 percent of the state GST component on the value of fixed assets for a period of up to five years. Other key incentives for the agro and food processing industry include the following:^{xii}

- Investment promotion subsidy of 35 percent of the value of fixed assets (maximum INR6.5 million for MSMEs only)
- A 50 percent subsidy on the cost of Effluent Treatment Plants (ETP) (maximum INR10 million) for large and mega industries and a 75 percent subsidy on the cost of ETP (maximum INR5 million) for MSMEs
- A 100 percent exemption on the market fee with respect to agri-procurement for 10 years
- A 100 percent exemption on entry tax for 3-5 years for MSMEs and a 6 percent interest subsidy on term loans for micro-enterprises
- Exemption from tax on electricity tariff for a duration of eight years
- A 100 percent exemption of stamp duties related to loan processing, registration of leases, or sale transactions

The way forward

Karnataka farmers will be able to manage extra output and sell it later, when prices are more favourable. This could be facilitated if more cold storage facilities are made accessible to extend the shelf life of perishable commodities. Agricultural produce gains value when processing facilities are available near the source of the produce, as they can be used to create processed foods, drinks, or other finished products while reducing wastage. FPOs can help small and marginal farmers market their agricultural produce and facilitate the mass distribution of millets to those who live below the poverty line.

A comprehensive regulatory framework/guideline for the implementation of emerging technologies such as drones in agriculture, logistics, and transportation can be implemented. The state government, in collaboration with FPOs and agritech companies, can drive specialised training/skilling programmes and demonstrations for drone operators, focussing on its benefits in the agriculture sector such as crop mapping, irrigation, pest management, and soil analysis. This may include educating farmers/FPOs on drone utilisation, maintenance, and integration with modern agriculture techniques to improve last-mile delivery, especially in remote areas.



Automobile and auto ancillaries

India

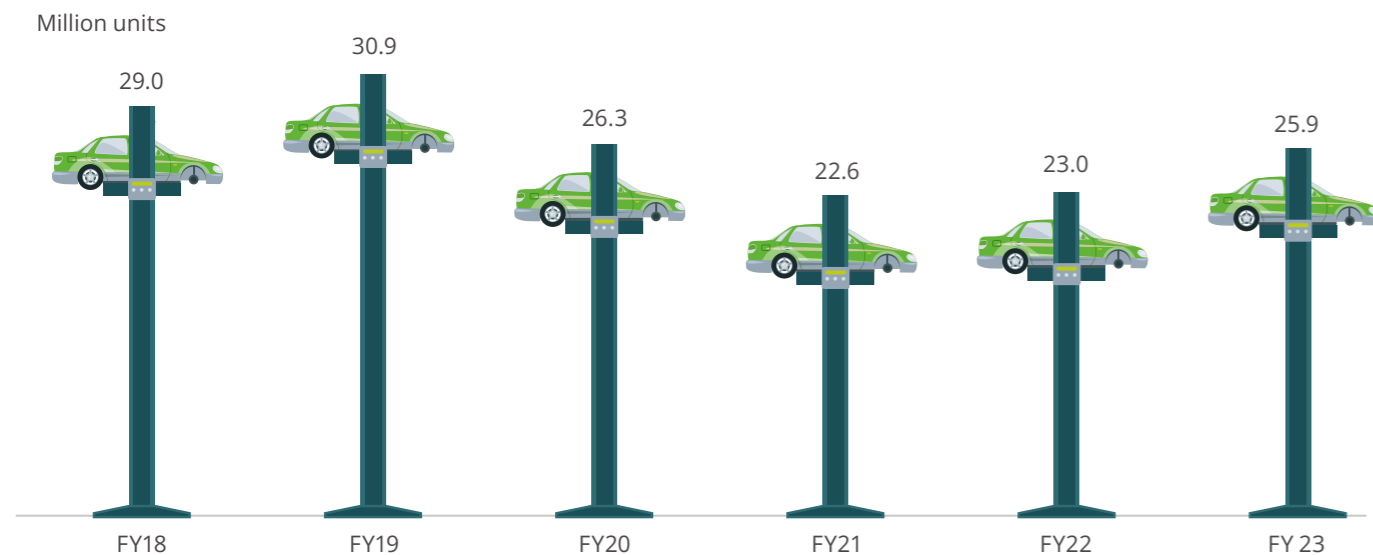
India has emerged as the world's third-largest automobile market, after China and the US, driven by strong domestic sales and exports.^{xciii} The sector accounts for 7.1 percent of the country's GDP and employs close to 40 million people.^{xciv}

India's overall vehicle production jumped 12.6 percent yoy to 25.9 million units in FY23.^{xcv} Two-wheelers accounted for the largest share (75 percent), followed by passenger vehicles (17.7 percent), commercial vehicles (4 percent), three-wheelers

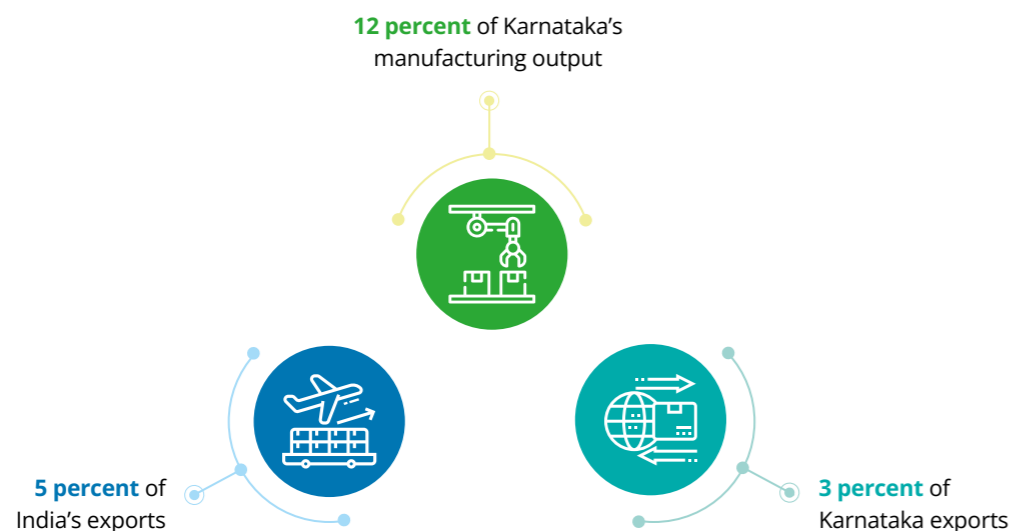
(3.3 percent), and quadricycles (0.01 percent).^{xcvi} Increasing automobile demand has also led to the growth of the auto component industry, which comprises players from large corporations to micro entities throughout the country.^{xcvii}

India's automobile industry is expected to grow from INR7.5 trillion in 2022 to INR15 trillion by the end of 2024, led by favourable government initiatives and private investments.^{xcviii}

Figure 11: India's automobile production



Source : Society of Indian Automobile Manufacturers (SIAM), Deloitte Research



Karnataka

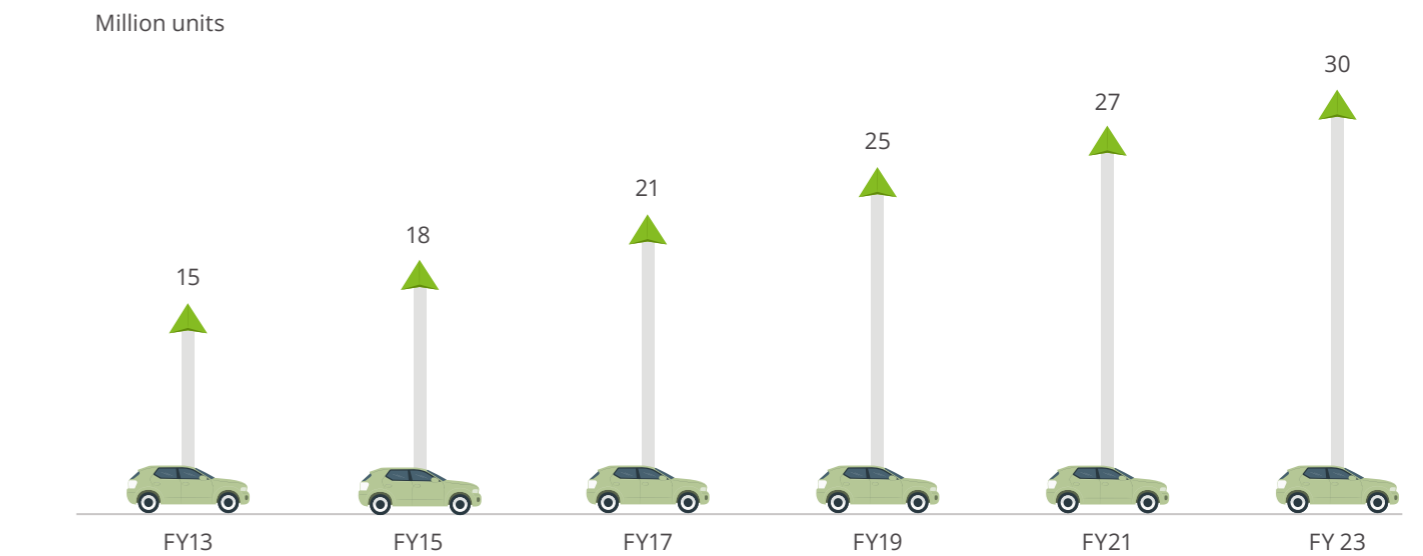
Karnataka contributes ~8.5 percent of India's total vehicle production, making it the fourth-largest automobile-producing state in the country.^{xcix} The total number of registered vehicles in the state increased from 15 million in FY13 to ~30 million in FY23, a whopping decadal growth of 100 percent.^c Two-wheelers accounted for the majority of the share of the vehicle numbers (nearly 70 percent), followed by passenger cars and auto-rickshaws.^{ci}

Moreover, Karnataka accounted for 10 percent of EVs sold in India, with ~152,508 EVs being registered in 2023.^{cii} Customer

confidence in the EV market has improved significantly, driven by technological advancements and favourable government initiatives.

While the overall vehicle population has grown at a faster rate in the rest of Karnataka compared with that in Bengaluru in the last decade, the city still has a higher number of vehicles than the rest of the state in per capita terms.^{ciii} There is approximately one vehicle for every resident in the state capital, whereas almost every three residents in the rest of Karnataka own a vehicle.^{civ}

Figure 12: Number of registered vehicles in Karnataka



Source : Karnataka Economic Survey 2022-23, Deloitte Research

Key auto and auto component clusters in Karnataka



Auto clusters

Bidadi, Hoskote and Bengaluru Rural, and Dharwad



Auto component clusters

Belagavi and Shivamogga



Manufacturing hubs

Narsapur and Vemagal in Kolar district



Industrial valve cluster

Hubballi-Dharwad

Factors driving the growth of the automobile sector in Karnataka^{cv}

- The presence of seven major OEMs and more than 50 auto component manufacturers
- A vast local market with a strong customer base
- Proximity to India's southern (Tamil Nadu, Karnataka, and Andhra Pradesh) and western (Gujarat and Maharashtra) auto clusters
- Easy connectivity to six ports in the country through national and state highways
- A highly skilled workforce and the presence of more than 1,400 ITIs, 350 R&D centres, and 200 engineering colleges in the state
- The existence of SEZs marked for the automobile industry has been promoting investment

State government initiatives supporting the growth of the automotive sector in Karnataka are as follows:^{cvii}

- Auto and auto components are considered one of the key focus sectors under the Karnataka Industrial Policy 2020-25 for attracting investments and fostering innovation.
- The state has a favourable R&D policy that aims to enhance connections between the automobile industry and academia for research and innovation.
- The state government introduced a registered vehicle scrapping policy in 2022 to scrap all government vehicles that are 15 years or older.
- The government announced a proposed EV policy (2023-28) in 2023 to attract investments worth INR500 billion over the next five years in the state.
- A proposed EV hub on the outskirts of Bengaluru will house 1,000 start-ups and five centres of excellence to be set up to facilitate training, R&D, and entrepreneurship.
- The government plans to establish a Karnataka Automobile Research & Innovation Centre based on a public-private partnership model.

Tax and policy incentives

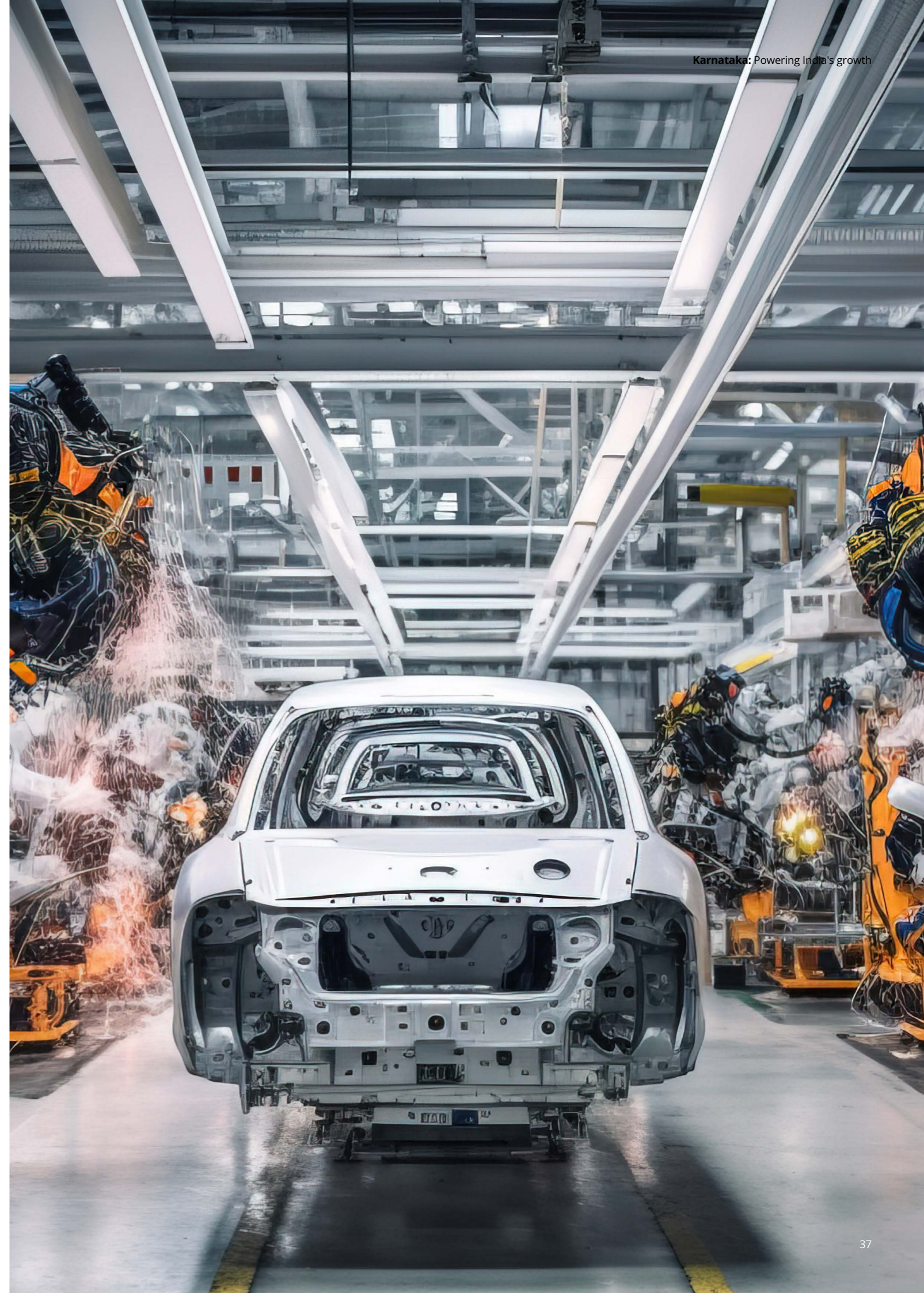
To promote the adoption of EVs, the government of Karnataka has already exempted road taxes on all electric non-transport and transport vehicles, including e-rickshaws and e-carts, under the Karnataka Motor Vehicles Taxation Act 1957. The extant EV Policy 2017 envisages certain benefits or incentives:^{cvii}

- Investment Promotion Subsidy – The state offers an investment promotion subsidy up to 25 percent of fixed capital investment (FCI) for EV battery manufacturing/assembly enterprises.
- The first 100 fast-charging stations, EV battery (2–3 wheelers) swapping/switching stations, respectively, are eligible for a capital subsidy up to 25 percent of the FCI.
- The first 50 EV car battery and bus battery swapping/switching stations, respectively, are eligible for a capital subsidy up to 25 percent of FCI.
- About 100 percent reimbursement of land conversion fee, SGST reimbursement, and stamp duty exemption are available for EV manufacturing units.

The way forward

Automotive manufacturers will benefit immensely if energy costs in Bengaluru come down and are at par with other auto hubs in the country such as Tamil Nadu, Maharashtra, and Delhi NCR. Moreover, improved planning of industrial parks/facilities will ensure proximity between OEMs and suppliers and reduce logistic costs. High operational investments in government-owned industrial estates will further prove beneficial for the sector's growth. Increased collaboration between the auto industry and the skilled ecosystem will result in industry-ready professionals.

Acceleration of EV adoption under Karnataka's proposed EV Policy (2023-28) would require a collaborative framework for multiple state government agencies across urban development, transportation, logistics, etc., to facilitate processes related to licensing, registration, and deployment of EV infrastructure. A comprehensive database repository will have to be developed on policy guidelines, incentives, EV models available for subsidies, benefits to end users, and an overview of charging infrastructure in the state. To elevate Bengaluru as the EV capital, the government needs to offer tailored incentives and concessions for Ultra Mega and Super Mega EV enterprises, as well as lithium-ion battery and EV charging equipment manufacturers.



Capital goods

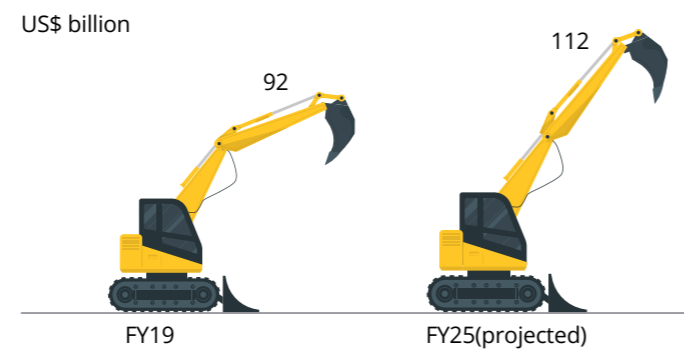
India

India's capital goods sector accounts for ~12 percent of the country's manufacturing output, which is 1.8 percent of GDP.^{cxvii} The sector serves a wide range of industries, including engineering, construction, infrastructure, and consumer goods. Heavy electrical equipment, mining and earthmoving machinery, and process plant equipment are the main export subsectors of the capital goods sector, accounting for ~85 percent of India's overall exports of capital goods.^{cxix}

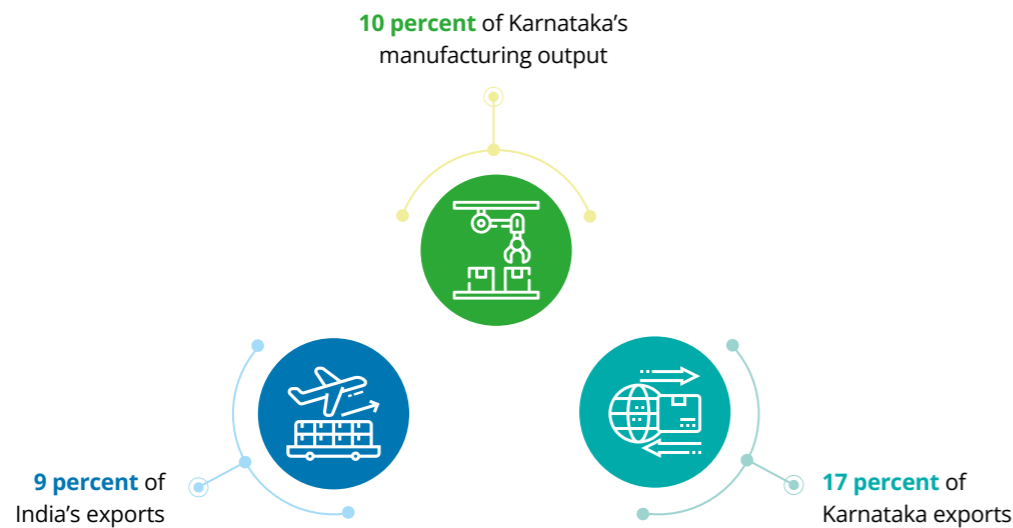
Share prices of capital goods companies witnessed a sharp increase in 2023, with the sectoral index surging 46 percent so far this year; combined order book surpassing past at an all-time high of INR8 trillion due to the government's strong focus on infrastructure development.^{cx} Moreover, firms are expected to post a 16-18 percent increase in revenue in FY24 led by improved execution amid rising orders.^{cxii} India's capital goods

market is likely to reach US\$112 billion by FY25 due to a surge in domestic manufacturing activities and heavy infrastructure investments in the country.^{cxii}

Figure 13: India's capital goods market



Source: Invest India, Deloitte Research



Karnataka

Karnataka is one of the leading capital goods-producing states in India, with Bengaluru alone producing 60 percent of the country's machine tools, by value.^{cxiii} The state's machine tool sector caters to various industries, including aerospace, automobile, and engineering.

In terms of value, Karnataka is also amongst the top five capital goods manufacturers in India to produce more special-

purpose machinery than general-purpose machinery, thereby focussing on the high-valued part of the value-chain.^{cxiv} It is the second-largest producer of special-purpose machinery (with a 16 percent share) and heavy electrical machinery (with a 12.5 percent share) in the country.^{cxv} Moreover, Karnataka offers a favourable environment for several heavy engineering manufacturers such as PSUs, MNCs, and MSMEs.

Key capital goods clusters in Karnataka



Heavy engineering clusters

Bengaluru, Mangaluru, Mysuru, Belagavi, and Shivamogga



Machine tools clusters

Bengaluru and Tumakuru



Foundry

Belagavi

Factors driving the capital goods sector in Karnataka^{cxvi}

- **Increased infrastructure spending:** The government of Karnataka has significantly increased its infrastructure spending in recent years to create a conducive environment for industrial development. This has led to a surge in demand for capital goods in the state.
- **Supportive government policies:** The state government has implemented various policies to attract investments and ease doing business, making it a favourable destination for capital goods companies. Moreover, as a part of the Karnataka Industrial Policy 2020-25 to develop the state's industrial landscape, engineering and machine tools are one of the key focus sectors.
- **Rise in manufacturing:** Karnataka has a thriving manufacturing sector, with major players in automobiles, aerospace, and engineering. These companies are investing in capacity expansion and technological upgrades, driving demand for capital goods.
- **Skilled workforce:** The state has a large pool of skilled engineers and technicians, catering to the needs of the capital goods sector.

Tax and policy incentives

The Karnataka Industrial Policy 2020-25^{cxvii} lays specific focus on the engineering and machine tool manufacturing sectors and exempts stamp duty and electricity tax for MSME export enterprises engaged in the manufacturing sector. The state offers the following incentives for the capital goods industries:

- Investment promotion subsidy of up to 10 percent of the turnover for five years for micro and small industries (maximum INR10 million) and up to 2.5 percent of turnover for medium enterprises for up to six years (maximum 40 percent of VFA)
- Investment promotion subsidy of 2.25 percent of the turnover for 5-10 years up to 45 percent of the fixed asset value for large, mega, ultra mega, and super mega enterprises
- Up to 100 percent exemption on stamp duty for all enterprises
- Reimbursement of cost of power paid at INR1/unit for three years and up to 100 percent exemption on electricity duty for eight years for MSMEs.

- Interest subsidy of 5 percent on technology upgradation loan for up to six years
- Subsidy of 50 percent on cost of setting up effluent treatment plant (cap INR5 million for MSMEs and INR50 million for large, mega, ultra mega, and super mega enterprises)

The way forward

Capital goods being an energy-intensive sector, a reduction in electricity tariffs will prove to be beneficial for the sector. Moreover, improvements in connectivity with industrial parks and reductions in congestion in ports and transportation networks can help reduce the logistics costs of capital goods companies. The development of industry-ready skills in ITIs and engineering colleges will remain highly essential to increasing the availability of professionals for specific requirements in the capital goods sector.

Clean energy

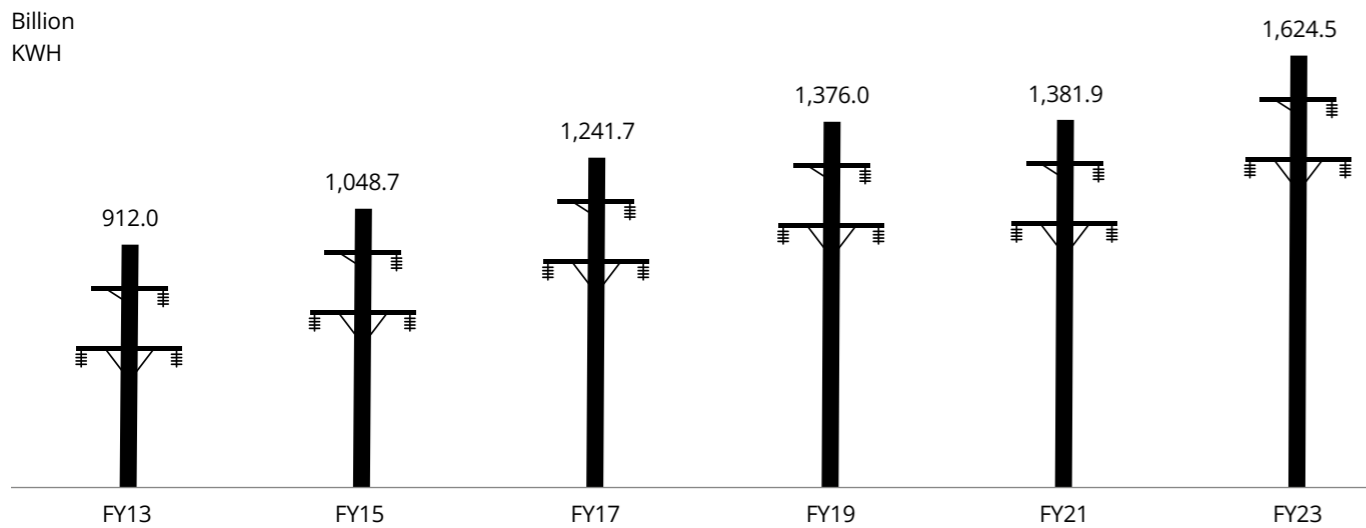
India

India is currently the world's third largest energy-consuming country, after China and the US.^{cxviii} Rising middle-income population, growing customer base, and improving living standards have led to strong growth in energy consumption in India. Total power generation in the country has almost doubled in the last decade, from 912 billion Kilowatt Hour (KWH) in FY13 to 1,624.5 billion KWH in FY23 due to the ever-increasing energy demand.^{cxix}

While fossil fuels continue to account for a sizable portion of India's primary energy demand, renewable energy deployment has increased dramatically in recent years due to significant cost

reductions aided by favourable government policies. India has become the fourth-largest renewable energy producer in the world, with ~188 Gigawatt (GW) (44 percent of the total energy installed capacity) coming from non-fossil fuel sources such as solar, wind, and large hydropower.^{cx} The country has set an ambitious target of achieving 500 GW of renewable energy by 2030. This would require an addition of ~50 GW of renewable energy capacity per annum over the next six years.^{cxii} Moreover, given the huge growth opportunity in the energy sector and the increasing focus on energy transition, an overall investment of ~US\$25 billion in renewable energy capacity additions could potentially come in over the next decade.^{cxiii}

Figure 14: India's power generation



Source: CMIE, Deloitte Research

Karnataka has a **56%** renewable share of the total energy mix



India is the world's **third-largest** energy-producing country



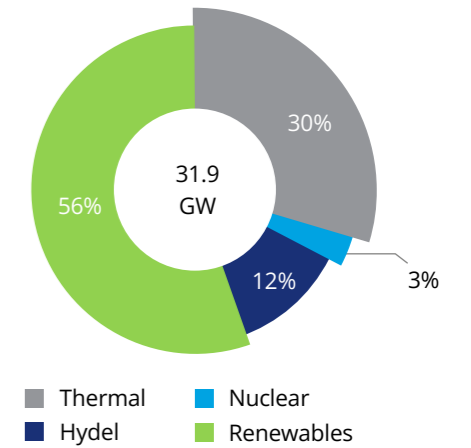
Karnataka **tops** clean energy transition efforts

Karnataka

Karnataka has been forging ahead of other states in the country in clean energy transition efforts through favourable open-access policies for green energy customers, massive solar energy park development, hybrid solar-wind development, and reduction of coal imports, amongst others.

The state's renewable installed capacity stands at ~56 percent of the total energy mix, the highest in the country, and includes solar, wind, hybrid (solar-wind), biofuel, and mini hydro projects.^{cxiii} Moreover, solar and wind account for more than 80 percent of the state's total installed renewable energy capacity.^{cxiv} Despite being a leader in green energy adoption, Karnataka still has a significant amount of renewable energy potential, with just 11 percent of the state's total potential being realised.^{cxv} This demonstrates the state's enormous opportunity to supply electricity to neighbouring states through green market mechanisms.

Figure 15: Installed power generation capacity, Karnataka (As of Oct 2023)



Source: National Power Portal, Deloitte Research

Key energy-generating clusters in Karnataka



Thermal

Raichur, Bellary, and Udupi



Hydro

Shimoga, Uttara Kanada, Tumkur, Mandya, Udupi, Koppal, Chikmagalur, Belgaum, and Bijapur



Nuclear

Karwar



Wind

Gadag, Belagavi, Koppal, Chitradurga, Davangere, Ballari, tumkur, Hassan, Shimoga, Haveri, Dharwad, Vijayputra, Raichur, and Bagalkot



Solar

Tumkur, Bagalkote, Koppal, Gadag, Shivamogga, Chitradurga, Mysore, Belagavi, Raichur, Davanagere, Ramanagara, Vijayapura, Chamarajanagara, Bellary, Bengaluru, Bidar, Kalaburgi, Haveri, Mandya, Dharawada, Chikkaballapura, and Raichur

Karnataka has emerged as a leader in India's green energy revolution, and the following are some factors driving this progress:

- **Abundant renewable resources:** The state boasts rich solar and wind potential, with vast land available for solar parks and wind farms. This makes renewable energy generation a viable and cost-effective option.
- **Government's focus on sustainability:** The state government has been a pioneer in recognising the long-term benefits of clean energy, including reduced dependence on fossil fuels, improved air quality, and mitigating climate change. This vision encourages various favourable green energy initiatives by the Karnataka government and attracts stakeholders committed to sustainability.
- **Technological advancements:** The falling costs of solar panels, wind turbines, and battery storage technologies make renewable energy increasingly affordable and competitive with conventional sources. Karnataka actively promotes these advancements and integrates them into its energy infrastructure.
- **Private sector participation:** The government actively encourages private sector participation in green energy projects. This helps mobilise additional investment, expertise, and innovation, accelerating the transition to a sustainable energy future.

Tax and policy incentives

Karnataka was the first state in Southern India to announce a renewable energy policy in 2009, valid for the period 2009-2014, to harness clean and renewable energy sources for ecological benefits and energy security. The state government recently released the Karnataka Renewable Energy Policy 2022-2027 to further promote renewable energy development, improve grid integration, and decarbonise transportation.^{xxvii} Karnataka aims to create 10 GW of new renewable projects, with or without energy storage systems, and 1 GW of rooftop solar installations over the policy period of five years. The policy further seeks to making the state a preferred investment destination for renewables and create a sustainable ecosystem for green energy development through public-private partnerships. Some of the other key incentives outlined in this policy are as follows:

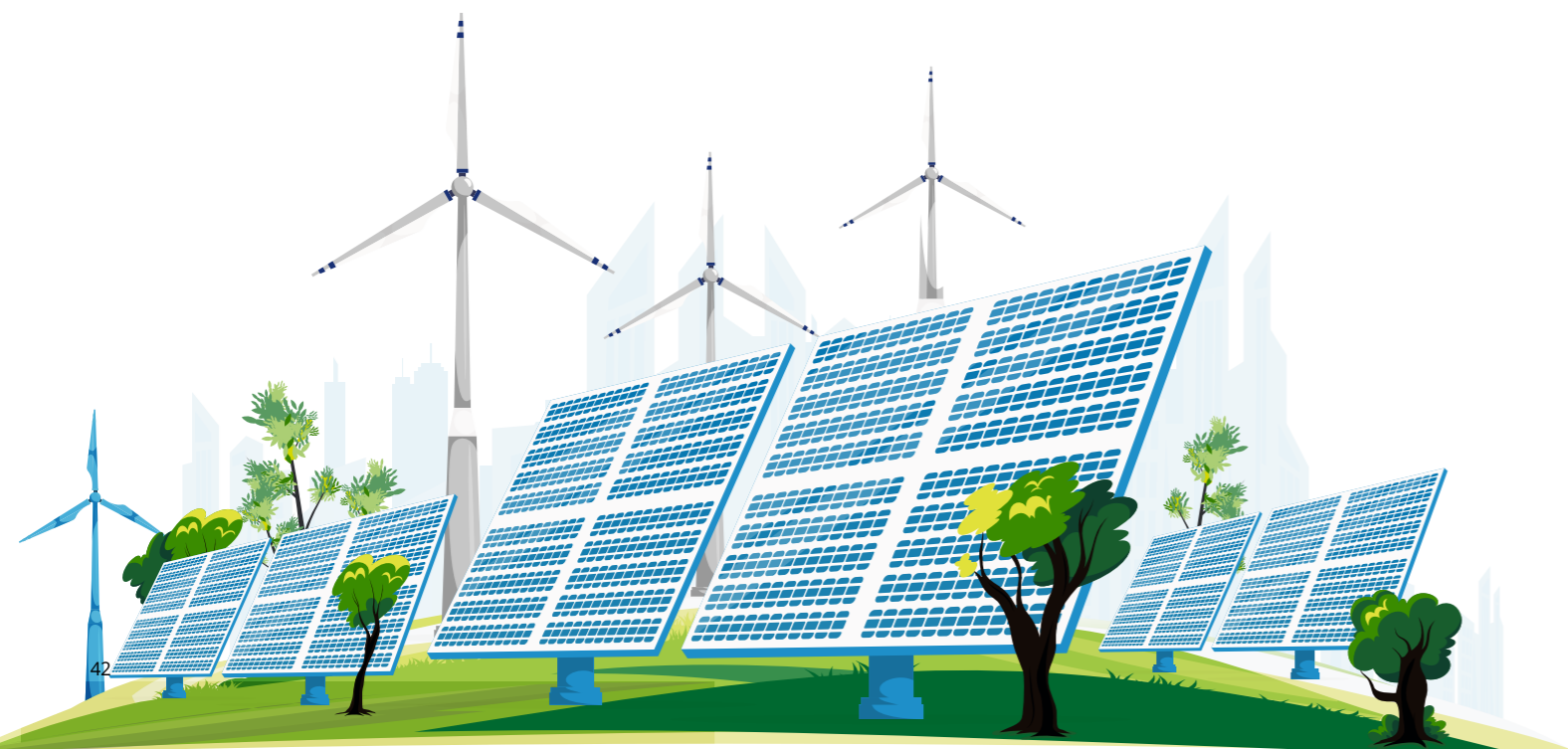
- Setting up green power corridors for evacuation of large-scale RE projects and encouraging private sector participation
- Developing renewable energy parks, including hybrid ones, with a minimum capacity of 25MW

- Promoting solar energy projects, wind energy projects, biomass, co-generation and waste to energy, energy storage projects, and mini and small hydro projects

Moreover, renewable energy is a focus area in the Karnataka Industrial Policy, and all tax benefits provided under the policy will equally apply to the renewable energy sector.

The way forward

Streamlining land procurement procedures for large-scale renewable energy projects can mitigate land acquisition hurdles in the state. There will be a continued focus on upgrading and expanding transmission infrastructure to integrate more renewable energy into the grid. Streamlining and simplifying approval processes for renewable energy projects can also expedite development. Additionally, ensuring policy stability and clarity is crucial for attracting investments. Balancing renewable energy development with potential social and environmental impacts such as land degradation, biodiversity loss, and displacement of communities is also equally important.

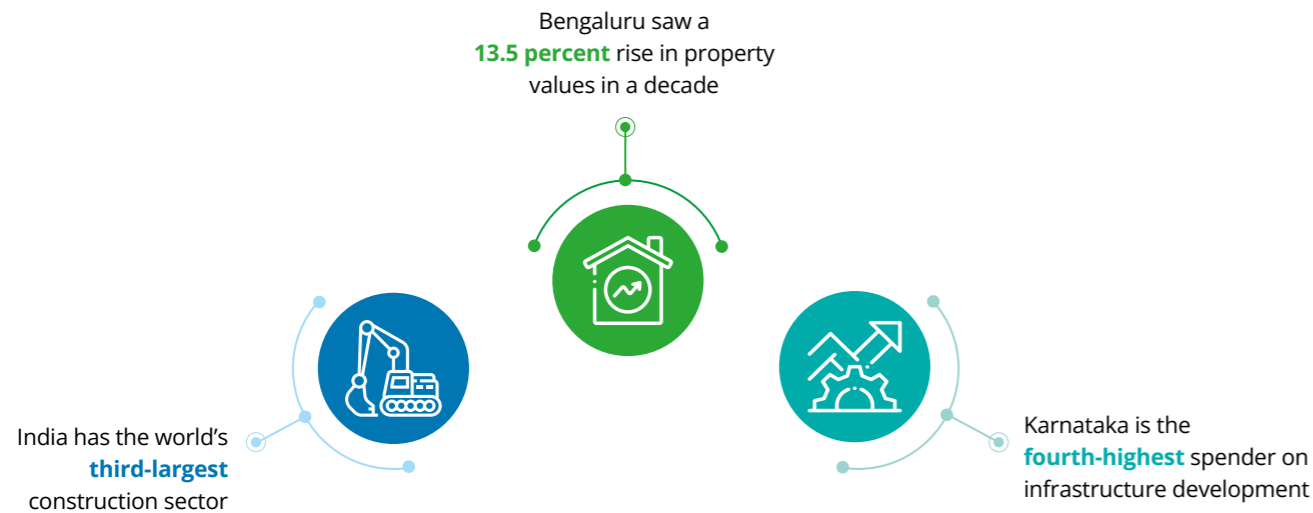


Construction

India

The Indian real estate industry has grown rapidly in recent years, driven by increased demand for both commercial and residential space. India jumped 18 points to 14th place in Knight Frank's global house price index in Q3 2023.^{xxxvii} The government increased its infrastructure budget by 33 percent in the 2023-24 budget, amounting to INR10 trillion, indicating its unwavering support for the sector's growth. About 11 industrial corridors, 272 SEZs, and 100 smart cities are being developed across the country. India's 13 major ports, 148 airports, and 126,366 km of railway tracks have enabled seamless transportation of goods across the country.

In terms of foreign investment, 100 percent FDI is permitted under the automatic route, subject to conditions, for undertaking construction development activity in India. However, the DPIIT has stated that FDI is not permitted in an entity engaged in or seeks to engage in real estate business, construction of farmhouses, and trading in transferable development rights.



Karnataka

The construction industry in Karnataka was valued at INR963.5 billion in FY22, contributing only 4.7 percent to GSDP in FY22.^{xxxviii} Karnataka has been one of the biggest states spending on infrastructure development over the last five years, with a capital expenditure of INR2.8 trillion.^{xxxix} At 13.5 percent, Bengaluru witnessed the second-largest yearly appreciation for two-bedroom properties in 2023.^{xxx} The city sold 54,046 residential units in 2023, the highest in nine years. The city maintained its lead in overall office leasing amongst the top eight markets in 2023, with 12.5 million square feet.^{xxxi} Karnataka ranks among India's top 10 most urbanised states.

The government has selected seven cities in Karnataka to be developed as smart cities for attracting companies, entrepreneurs, and investments, resulting in economic growth and employment creation.^{xxxii} According to the 2011 census, Karnataka was India's seventh-largest state, accounting for 31 percent of the urban population.^{xxxiii} In terms of urbanisation, the proportion of the state's population living in cities increased by 4.7 percent during the past decade. About 70 percent of the urban population lives in 10 percent of towns or urban centres, with Bengaluru being the principal city.^{xxxiv}

The state has a total road length of 3,58,300 km, making it the fifth-largest road network. It has a 3,836 km railway network and eight domestic airports. Karnataka has 13 ports, with New Mangalore being a major one. Karnataka's well-developed transportation network acts as a backbone for the state's economic and social prosperity. With 139 public-private partnerships (PPPs) projects, the state can complete infrastructure projects faster, accelerate economic growth, and improve the quality of life for its citizens.

Karnataka has 37 operating SEZs, of which 29 are in the IT/ITES sector. The state has sector-specific SEZs for key industries such as IT, biotechnology, engineering, defence, pharmaceuticals, and textiles.^{xxxv} Karnataka Industrial Areas Development Board (KIADB), the state governments' infrastructure agency, has built 199 industrial areas across the state with strong infrastructure and facilities to attract domestic and foreign investors, resulting in higher capital inflows and the development of adjacent towns and cities. Karnataka has 17,857 registered factories with 17,53,327 workers.

Key industrial corridors in Karnataka



Chennai Bengaluru Industrial Corridor (CBIC)

The CBIC is divided into three main nodes –Tumakuru in Karnataka, Krishnapatnam in Andhra Pradesh and Ponneri in Tamil Nadu



Bengaluru Mumbai Industrial Corridor (BMIC)

The BMIC is divided into two designated nodes – Dharwad in Karnataka and Satara in Maharashtra

Karnataka has well-developed social, physical, and industrial infrastructure. By leveraging public-private partnerships and attracting private sector investment, the government has accelerated the completion of infrastructure projects. Bengaluru's position as a global IT hub and the thriving start-up ecosystem has generated high demand for office spaces, co-working facilities, and commercial infrastructure. Rising consumer spending and changing shopping habits driving demand for shopping malls, high-street stores, and e-commerce fulfilment centres. By capitalising on these drivers, Karnataka can secure its position as a thriving industrial and trade hub in India.

The following are some of the key initiatives announced in the state budget 2023-2024 to promote the industry's growth:^{xxxvi}

- Allocation of INR24.5 billion for completing 0.3 million homes in Karnataka under various housing programmes that are in various phases of construction
- Expansion of the metro network in the state from 70 km to 176 km in the next three years
- Development of airstrips at Dharmasthala, Kodagu, and Chikkamagalur
- Allocation of INR40.8 billion for developing 2,000 km of state highways and 2,400 km of major district roads
- Allocation of INR2 million for constructing godowns
- Construction of multistoried/flatted factories by KIADB with plug-and-produce facilities near Bengaluru, Mysuru, Hubballi-Dharwad, Mangaluru, Belagavi, Tumakuru, and Kalaburagi
- Construction of 'D' and 'C' type sheds in potential reserved assembly constituencies in the state for micro and small enterprises promoted by scheduled caste and scheduled tribe entrepreneurs
- Construction of a mega Industrial township at Kolar Gold Fields

Tax and policy incentives

The state government realises the importance of MSMEs and other large enterprises. It is therefore committed to providing fiscal incentives to such enterprises through exemption of stamp duty and concessional charges, tax on electricity tariffs, and reimbursement of land conversion fees.

Furthermore, the government provides incentives for quality certification, technology upgradation loans, the establishment of ETPs, direct digital manufacturing, and export-oriented units. The policy has incentivised anchor industries (enterprises with a minimum investment INR1 billion) to be set up in talukas lacking developments by way of investment subsidies.

The way forward

Given the construction sector's strong multiplier effect, focussing on the construction industry will feed forward into other sectors such as manufacturing and production, exports, and trade. The government will have to invest in physical infrastructure in "Tier-2 cities" such as Mysore, Mangalore, Hubli-Dharwad, Belgaum, Bellary, Raichur, and Gulbarga to make them more attractive for investments and businesses. Building good-quality infrastructure could stimulate mass employment, generate taxes, promote exports, and increase the state's economic power.

The state can attract globally renowned private-sector industrial park developers by providing plug-and-play infrastructure and structuring incentives for investments in "industrial township areas," leading to increased investment, job creation, skill development, and overall economic development.

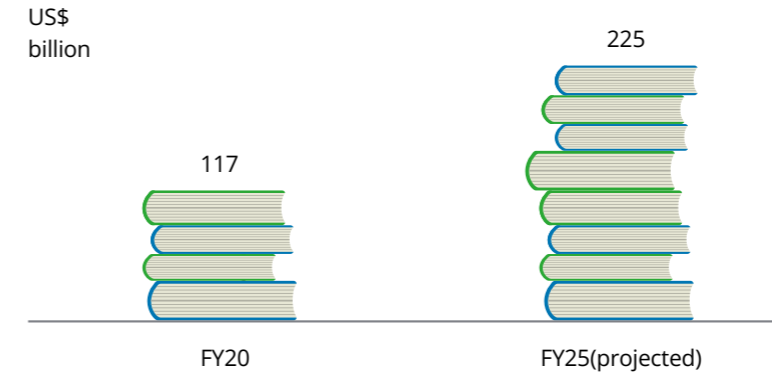
Education

India

India has one of the largest education systems in the world, with ~1.5 million schools, 50,000 colleges, and 1,200 universities.^{cxvii} Being the world's most populous country, India has a significant youth population, with nearly 580 million people in the 5-24 age group.^{cxviii} This gives the country a unique demographic edge and offers enormous opportunities for the education industry.

Moreover, the government's implementation of the National Education Policy (NEP), 2020, is a revolutionary step towards transforming the Indian education system over the next decade.^{cxvix} The NEP emphasises curriculum changes to create strong foundational skills and enhance the overall development of students. It also aims to establish India as a top choice for higher education, thereby encouraging partnerships and exchanges between Indian and foreign universities.

Figure 16: India's education sector



Source: India Brand Equity Foundation (IBEF), Deloitte Research

India's education market is expected to nearly double from US\$117 billion in FY20 to US\$225 billion in FY25.^{cxl} With human resources becoming increasingly important for the country's development, the expansion of education infrastructure is likely to remain the key focus area and will continue to attract investments from both public and private authorities.



What has happened

Internationalisation – collaborations (dual/ joint degrees, twinnings), foreign institutions setting up campus in India.

Digitisation – digitisation of content, online education by select institutions, Academic Bank of Credit, DigiLocker

Institutional Development Plan (IDP) for long term transformation journey



In Pipeline

National Digital University

Mandatory disclosures by HEIs to bring in transparency.

Operationalisation of National Research Foundation (NRF)

Karnataka accounts for **6 percent** of India's engineering colleges

India produces **10 million** graduates every year

Karnataka has a **75 percent** literacy rate

Karnataka

Karnataka is one of the most sought-after education destinations in India. The state is home to numerous esteemed research and educational institutes, earning it the title of knowledge hub. With 4,233 colleges, the state has the highest number of colleges per lakh population (62 colleges per lakh population) in India.^{cxli} The Bengaluru urban district is the largest centre for higher education both in the state and the country, with over 1,058 colleges.^{cxlii} Bengaluru has also emerged as the leading edtech hub in India, with start-ups raising a total of US\$8 billion as of August 2023, the highest in the country.^{cxliii}

Karnataka has also been the most popular destination for higher education in India amongst foreign students. With 8,137 international students enrolled in the state in FY21, the highest in the country, Karnataka accounted for 17 percent of all foreign students registered in India. Nepal makes up the largest percentage of international students in the state, with nearly 28 percent share, followed by Afghanistan (8.4 percent), Bangladesh (5.7 percent), the US (5.1 percent), and Bangladesh (5.4 percent).^{cxliv}

Figure 17: Literacy rate in Karnataka vs India (in percent)

	Karnataka	Karnataka (Urban)	Karnataka (Rural)	India
All persons	75.4	85.8	68.7	74.0
Male	82.5	90.0	77.6	82.1
Female	68.1	78.0	58.3	65.5

Source: 2011 Census, Deloitte Research



Key education clusters in Karnataka



Education hubs

Bengaluru, Mysuru, Mangalore, Udupi, and Hubballi-Dharwad



Edtech industry

Bengaluru

The education sector is driven by the following factors:

- **High literacy rate:** Karnataka has one of the highest literacy rates in India, creating a strong foundation for educational development and a supportive learning environment.^{cxvi}
- **Increased education budget allocation:** The Karnataka government has consistently increased its education budget, leading to improved infrastructure, teacher training, and access to quality education.
- **Emphasis on education in rural areas:** Government programmes are improving access to education in rural areas, closing the gap between urban and rural schooling opportunities.
- **Digital education push:** Initiatives such as "Namma WiFi," which provides free internet access, and the integration of technology into classrooms are enhancing learning experiences.
- **Rise of private schools and universities:** Numerous private schools and universities have emerged across Karnataka, offering diverse educational options and catering to different student segments. This has led to increased competition and quality improvement.
- **Focus on vocational and technical education:** Private institutions are actively involved in providing vocational and technical training programmes, addressing the skill gap, and preparing students for employment opportunities.
- **Industry collaborations:** Partnerships between educational institutions and industries are creating practical learning environments and enhancing the employability of graduates.

Tax and policy incentives

The Indian tax law exempts income from charitable work, which also includes educational activity. Therefore, not-for-profit educational institutions registered with tax authorities are tax-exempt with respect to their receipts. The exemption is conditional and requires 85 percent of receipts to be applied towards education and incidental expenses. The regime governing the registration of charitable institutions has been significantly overhauled to make it centralised and simplified.

At the state level, the Karnataka government has consistently prioritised the education sector, as evident through the augmented budget allocation for this purpose. Currently, all educational institutions officially recognised by the state government or local authority enjoy an exemption from property tax on buildings and lands utilised for educational purposes. Moreover, tax incentives are likely to be granted to promote the growth of the digital infrastructure to increase accessibility and facilitate the seamless implementation of learning solutions for students in remote areas.

The way forward

Variety and flexibility in coursework, as well as the smooth transfer of credits between colleges, are highly vital for an increased inflow of students seeking higher education. Moreover, increasing access to advanced technologies, high-end lab equipment, and better education infrastructure will be required to improve the quality of education. Continuous improvement in network connectivity will be essential in both urban and rural areas to increase the adoption of e-learning platforms. Increasing competition from other educational hubs in the country, such as Maharashtra, Punjab, Uttar Pradesh, Tamil Nadu, and Haryana, is something to watch out for. A more conducive regulatory environment would help the state attract a higher number of institutions. Dedicated educational zones will be required where land could be made available at subsidised prices, both on an ownership and a long-term lease basis. Clarity on the permissibility of long-term leases (as opposed to ownership) will be essential for land to set up educational institutions, as it helps reduce the capex requirements upfront.



IT, ITES, and electronics

India

India is the world's preferred IT service outsourcing hub, possessing one of the lowest data rates globally at INR13 per gigabyte (GB) and 759 million active internet users in 2022.

^{cxlvii cxlviii} Emerging technologies in India offer top IT firms new opportunities in the cost-effective, high-quality, and reliable Indian IT/software industry. In terms of FDI equity inflow, the computer software and hardware sectors attracted the highest FDI in FY22-23. ^{cxlix} India is a popular destination for setting up GCCs, with over 1,580 GCCs and 132 data centres across the country. ^{clxi}

With the government's "Make in India" push and the various PLI schemes, India has emerged as one of the largest markets for electronic products in the world and the second-largest mobile phone manufacturer. Through the Modified EMC (Electronic Manufacturing Clusters) 2.0 scheme, the government aims to establish world-class EMCs across the country and provide

vital infrastructure, common facilities, and amenities to attract electronics manufacturing units. India's manufacturing capacity is evident in four major segments: mobile phones, consumer electronics, IT hardware, and electronic components, which account for over 70 percent of its domestic manufacturing profile. The regulatory framework in the country is also continuously evolving to accommodate business needs through policy pronouncements in online gaming, digital content, manufacturing of semiconductors, time-bound grievance redressal for consumers, and user privacy norms.

The central government seeks to position India as the global hub for semiconductor exports by implementing the India Semiconductor Mission (ISM) with a specific policy termed 'Modified Programme for Semiconductor and Display Fab ecosystem'. ^{cliii cliiii}

India has a **57 percent** share in global sourcing



The IT & BPM sector accounts for **38 percent** of India's total service exports

Karnataka

In 1997, Karnataka introduced a ground-breaking Information Technology Policy, making it a cornerstone of India's economy. The state is:

- India's largest software exporter, with a 42 percent share of India's IT exports; ^{cliv}
- fourth-largest contributor to electronic industrial output (10 percent); ^{clv}
- home to more than 47 IT/ITES SEZs; and
- a talent hub with 1.8 million professionals employed across 8,785 IT firms. ^{clvi}

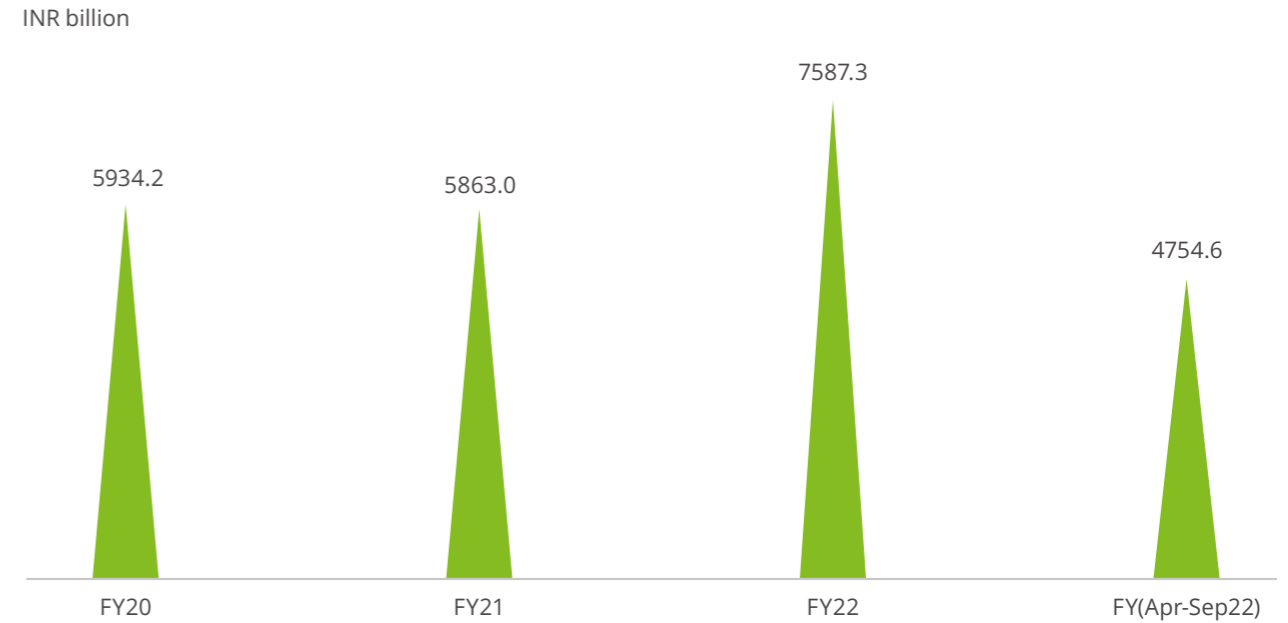
Besides IT/ITES, Karnataka is India's preferred destination for investing in Electronic System Design and Manufacturing (ESDM). The state has more than 100 chip-designing houses and has over 40 percent share in electronics design. ^{clvii} Housing 70 percent of

India's chip designers, the state is the second-largest chip design hub in India.

Bengaluru is the fourth-largest technology hub in the world after Silicon Valley, Boston, and London. It is a global hub for R&D activity in the software industry. ^{clviii} The city is constantly evolving and adapting to the changing needs of the tech industry. With its strong foundation, talented workforce, and supportive environment, Bengaluru is well-positioned to continue its growth as a leading global tech hub. ^{clix}

Software technology parks in Bengaluru, Hubli, Mangaluru, Manipal, Mysuru, and Davangere offer various financial incentives and foster a conducive environment for IT companies to thrive.

Figure 18: Electronics and computer software exports from Karnataka



Source : Karnataka Economic Survey 2022-23, Deloitte Research

Key IT and electronic clusters in Karnataka



Greenfield ESDM cluster

Shivamogga, Sira, Mangaluru



Brownfield ESDM cluster

Dharwad, Chikkaballapur, Devanahalli, Mysuru



IT Park/SEZs

Bengaluru, Hubballi, Shivamogga, Mangaluru, Mysuru

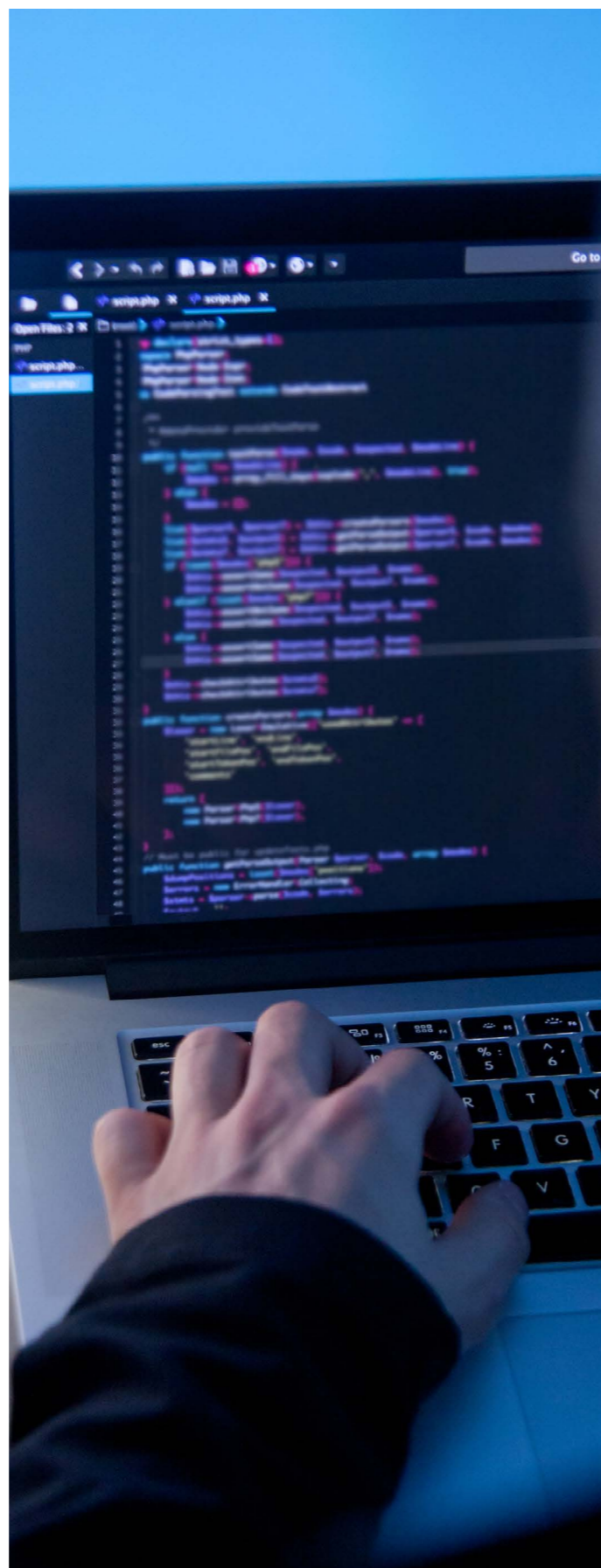


Through the “Beyond Bengaluru” campaign, the state government is inviting investors to invest outside of the IT hub. In areas outside of Bengaluru, this campaign concentrates on a cluster-based development strategy.^{ckx} The Mysuru cluster primarily consists of cybersecurity enterprises, whereas the Mangaluru cluster largely comprises fintech companies. The Hubballi-Dharwad-Belagavi cluster is an emerging cluster for AI, machine learning, IoT, and advanced manufacturing enterprises.

These government initiatives, coupled with Karnataka's strong talent pool, robust infrastructure, and proximity to major markets, have positioned the state as a frontrunner in India's IT, ITES, software, ESDM, hardware, and electronics sectors. With continued efforts to refine its policies and foster a supportive ecosystem, Karnataka is poised to attract further investments, create high-value jobs, and drive innovation in these critical sectors.

The state government has introduced multiple initiatives and policies that encourage the development of this sector:^{ckxi}

- Introduced in 2017-2022, ESDM policy provided subsidies, tax benefits, infrastructure support, and funding for skill development programmes, which helped increase investments in the state's ESDM sector. The ESDM Policy 2013 and its subsequent revisions have played a crucial role in solidifying Karnataka's position as a leader in India's ESDM sector.
- Karnataka IT Policy 2020-2025 focused on the continued development of infrastructure, markets, ecosystems, talents, and ease of doing business to support the IT industry's growth in the state.
- Several plug-and-play IT parks have been developed mainly in Bengaluru, which are equipped with world-class infrastructure, offering hassle-free entry and operation for IT companies.
- Centers of Excellence (CoEs) have been established in Bengaluru and Mysuru, in collaboration with leading academic institutions and industry partners to offer specialised training in niche areas, such as AI, robotics, and cyber security. Karnataka plans to set-up more than 6-8 centres by FY24.
- Karnataka launched its AVGC-XR (Animation, Visual Effects, Gaming, Comics, and Extended Reality) Policy 3.0 with the aim of becoming a global leader in AVGC-XR. The policy seeks to create a robust talent pool to facilitate the development of a complete ecosystem of hardware, software, innovators, and government on the same platform.
- The Karnataka Digital Economy Mission (KDEM) aims to establish an information exchange platform on fintech regulatory and technological developments between the state of Karnataka and the world. It also promulgates creating a “Single Window” access to connect with regulators and provide mentorship support to entrepreneurs.



Tax and policy incentives

In line with the National Electronics Policy, 2019, the state government introduced a special incentive scheme for the ESDM sector that provides a one percent of annual turnover benefit for a duration of five years. Additionally, the scheme facilitates complete reimbursement of stamp duty, registration charges, land conversion fees, and electricity duties (for a period of five years only). Some other notable incentives for enterprises employing at least 50 percent of its total workforce in Karnataka are as follows:^{ckxii ckxiii}

- A 10 percent capital subsidy, up to a maximum of INR100 million, applicable to the first two anchor units in each greenfield cluster
- Reimbursement of the cost of filing and securing patents, international marketing costs, and quality certification (for start-ups and MSMEs only)
- Concessional registration charges at INR1 per 1,000 square feet of area
- Reimbursement of PF/ESI for all start-ups and MSMEs at the rate of INR2,000 per employee per month for two years for all the new employment generated
- Interest subsidy of up to 6 percent per year on term loans for five years for start-ups and MSMEs

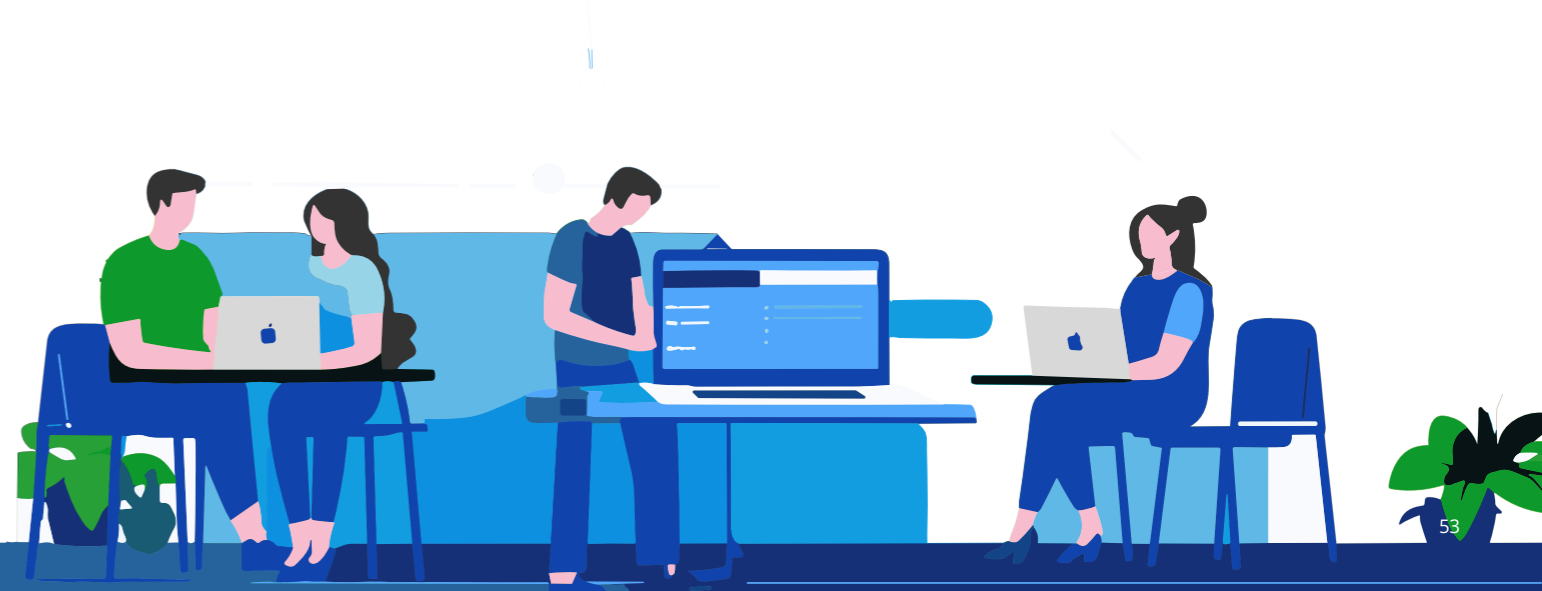
The scheme incentivises new investments in the ESDM sector by providing capital investment subsidies of up to 20 percent on land, plant, and machinery.

The way forward

With a growing number of ESDM manufacturers setting up operations in greenfield and brownfield ESDM clusters, more clusters can be identified so that companies can leverage financial incentives from the Modified EMC 2.0 scheme. By promoting high-value-added manufacturing, international companies can set up production facilities or source components from domestic manufacturers, which will increase exports and the trade balance. Specialised training programmes for youth on new-age exponential technologies are needed to bridge the skill gap and can help IT companies find the right mix of professionals with technical expertise and soft skills, preventing high attrition in the sector. Implementing policies that incentivise domestic production of electronics components will help reduce reliance on imports of raw materials and components as well as help create a robust supply chain ecosystem within India. It will also help India move up the global value chain and trade basket.

Other IT enterprises not specifically covered by the ESDM sector can also avail benefits under the Karnataka IT Policy 2020-2025.^{ckxiv} Other key incentives as part of the IT policy are as follows:

- Reimbursement of lease rental expenditure at INR10 per square feet for entities outside Bengaluru for one year (subject to a capping of INR0.3 million)
- Reimbursement at INR1,000/seat in a co-working space or plug-and-play infra for one year (Subject to a capping of INR0.6 million)
- Reimbursement of the cost of filing and securing patents, quality certification, and marketing costs
- Tailor-made lease and rental incentives for mega enterprises (investments of more than INR2.5 billion)
- Applicability of industrial power tariff instead of commercial power tariff
- Reimbursement of provident fund (PF)/ESI for all units outside Bengaluru at INR2,000 per employee per month for two years, for all the new employment generated
- The maximum reimbursement to a single entity under various incentives, excluding capex incentives, is capped at INR2 million per year and INR100 million during the entire policy period
- Exemption from stamp duties on registration of loan, lease, and sale transfer deeds



Pharmaceuticals and biotech

India

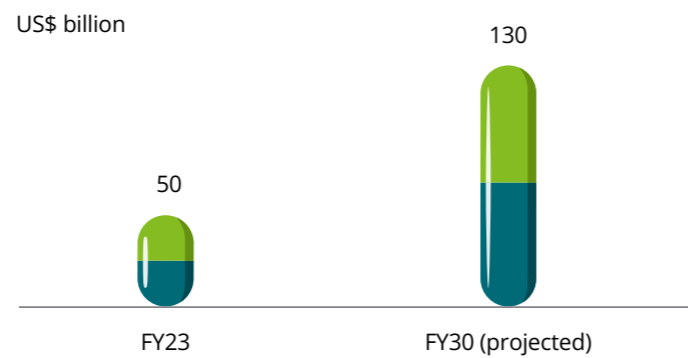
India, the world's largest provider of generic drugs, is immensely popular for its affordable generic medicines and vaccines. The domestic pharmaceutical industry comprises a network of ~3,000 drug companies and more than 10,000 manufacturing units.^{clxv} India is also home to the largest number of US Food and Drug Administration (FDA)-compliant pharmaceutical plants outside the US. Moreover, there are ~500 Active Pharmaceutical Ingredient (API) producers in the country that account for nearly 8 percent of the global API market.^{clxvi}

The Indian pharmaceutical sector contributes nearly 2 percent to India's GDP and around 8 percent of the country's merchandise exports.^{clxvii} The pharma market was valued at US\$50 billion in FY23 and is expected to reach US\$130 billion by FY30 at a CAGR of nearly 15 percent, driven by growing domestic demand and exports of generics, vaccines, biosimilars, and biologics.

India is the third-largest biotechnology destination in Asia Pacific and is ranked among the top 12 biotechnology locations

worldwide.^{clxviii} In 2022, India's biotechnology industry crossed US\$80 billion and is anticipated to reach US\$150 billion by 2025 and US\$300 billion by 2030, spearheaded by increasing demand for biopharmaceuticals for health treatment.^{clxix}

Figure 19: Indian pharmaceutical market



Source: IBEF, Deloitte Research

5 percent of Karnataka's manufacturing output



Karnataka

Karnataka contributes to nearly 10 percent of India's pharmaceutical sector revenue and ranks fifth in pharmaceutical exports, thereby accounting for 12 percent of the country's exports.^{clxx} The state is home to more than 221 formulation units and 74 bulk drug units, which account for 3 percent of India's pharma manufacturing units.^{clxxi} It also has 12 adverse drug reaction reporting centres and 35 clinical research organisations that offer extensive clinical trials and drug research.^{clxxii} Moreover, Karnataka has more than 230 pharmaceutical and biotech companies.^{clxxiii}

Karnataka is also known as the biotech capital of India and is home to 60 percent of the nation's biotech enterprises. It contributes to over 35 percent of the nation's biotech exports.^{clxxiv} It is the first state to have a specific biotech policy and also has a state-of-the-art bio innovation centre in Bengaluru. These measures highlight the state's commitment to creating the necessary innovation ecosystem for the growth of this critical sector. Bengaluru also ranks as the best place for innovative biotech start-ups in India, with some of the leading Indian biotech companies based in the city.^{clxxv}

Key pharma and biotech clusters in Karnataka



Pharmaceutical clusters

Bengaluru, Mangaluru, Hassan, Yadgiri, and Bidar



Biotech clusters

Bengaluru, Mangaluru, Mysuru, and Shivamogga



Biotech institution clusters

Belagavi, Dharwad, Davanagere



Key factors contributing to the growth of the pharma and biotech sector in Karnataka are as follows:

- **Growing domestic market:** India is one of the largest and fastest-growing pharmaceutical markets in the world, and Karnataka is well-positioned to tap into this market. The state's large and growing population, rising disposable incomes, and increasing awareness of healthcare are all driving the demand for pharmaceutical products.
- **Government support:** The Karnataka government has been actively promoting the growth of the pharma and biotech sectors through various initiatives such as the Karnataka Biotechnology Policy 2001, the Karnataka Bio IT Policy 2002, and the Karnataka Pharma Policy 2009. Moreover, as a part of the Karnataka Industrial Policy 2020-25 to develop the state's industrial landscape, pharma is considered one of the key focus sectors. The government has also recently unveiled the revised biotech policy with the goal of quadrupling the state's bioeconomy.^{clxxxvi}
- **Favourable infrastructure:** Karnataka has several well-developed industrial parks for the pharma and biotech sectors, providing companies with the necessary facilities and amenities. The state also has a good network of roads, airports, and seaports, which facilitate the movement of goods and people.
- **Strong focus on research and innovation:** Karnataka is home to several leading R&D institutions in the life sciences field, such as the Institute for Stem Cell Biology and Regenerative Medicine (inStem) and the National Centre for Biological Sciences (NCBS). These institutions conduct cutting-edge research in areas such as genomics, proteomics, and drug discovery, which is helping to attract pharma and biotech companies to the state.
- **Strong talent pool:** Karnataka has a large pool of educated and skilled professionals in the life sciences field, thanks to its renowned universities and research institutions such as the Indian Institute of Science (IISc) and the National Institute of Mental Health and Neurosciences (NIMHANS). This ready availability of talent makes Karnataka an attractive destination for pharma and biotech companies.

Tax and policy incentives

The Karnataka government offers a range of fiscal incentives and concessions to biotechnology companies, such as a rebate on stamp duty, exemption from entry tax, electricity duty, and industrial power tariff. Supplementary incentives comprise an investment promotion subsidy, subsidies for effluent treatment plants (ETPs), and financial support for patent registration, standardisation, and certification.

Furthermore, the National Medical Device Policy 2023 drives the state's initiatives. The policy aims to address challenges and promote domestic manufacturing in India. It entails provisions for subsidies, subsidisation of regulatory costs, incentives, and grants to enhance capacities and promote R&D in the

medical device sector. The pharmaceutical sector has also been incorporated into the profit-linked incentive scheme by the government, enabling companies to claim incentives of up to 20 percent of incremental sales for the production of specified drug intermediaries and medicines.^{clxxxvii} Additionally, the capital expenditure incurred on scientific research by companies in the sector (other than the cost of land and building) is provided as an accelerated deduction in the year of incurrence. Such expenses may include clinical drug trial expenditures, approval costs, and patent costs. Companies seeking to avail these benefits are subject to certain registration and audit requirements.

The way forward

Increased domestic production of APIs and intermediates will be needed to reduce the state's dependency on Chinese imports. The availability of quality utilities at prices comparable to those of other key pharmaceutical hubs such as Telangana and Andhra Pradesh will be a key requisite for this sector. Increasing economies of scale by investing in site infrastructure and utilities will also be required to improve cost competitiveness. Ease of business regulations will also be another key focus area for encouraging the sector's growth.

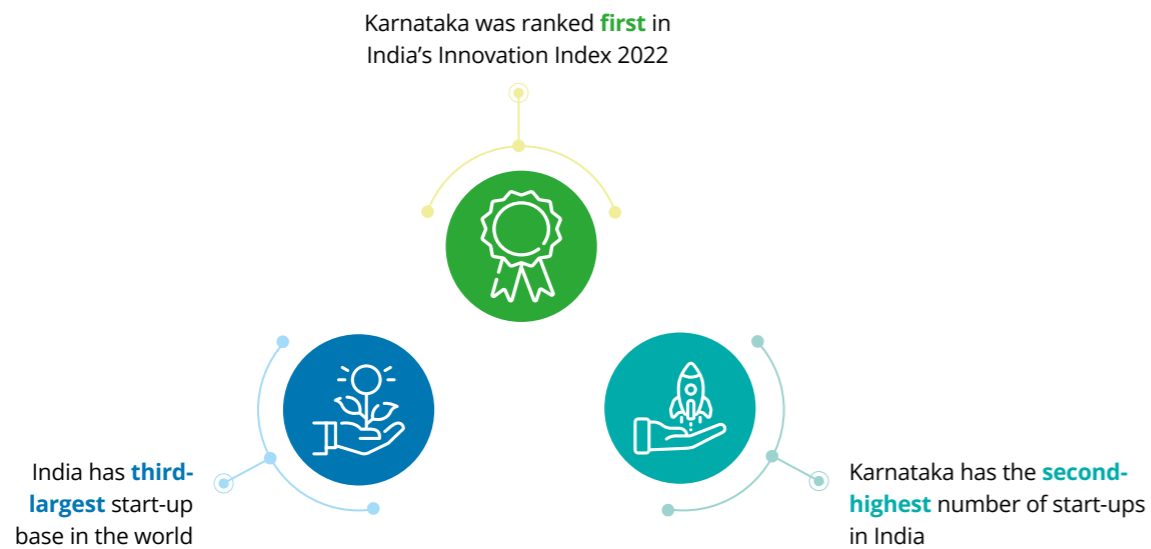
With the upcoming Biotechnology Policy, the state can focus on policy initiatives to streamline regulatory processes for biotech companies in the state, expedite approvals for industry setup, promote public-private partnerships for large-scale projects, and support biomanufacturing aligned with health, climate, and energy goals. Encouraging impactful research and skilling workshops in partnership with leading academia and incentivising cross-disciplinary collaboration for innovation would help Karnataka become a global biotech hub.



Start-ups

India

The country is home to the third-largest start-up hub in the world, after the US and the UK. Today, India has 119,611 DPIIT (Department for Promotion of Industry and Internal Trade)-recognised start-ups in 56 diverse industrial sectors, including IT services, healthcare and life sciences, education, professional and commercial services, agriculture, and food and beverages.^{cbxxviii} India is home to 111 unicorns and 5 decacorns. The number of accelerators and incubators increased drastically, from 20 in the early 2000s to 763 in 2023.^{cbxxix} The Indian government established the "Startup India" programme to cultivate a culture of entrepreneurship and creativity, supporting the development of high-quality, game-changing goods and services in a variety of areas while simultaneously fostering employment and economic growth.



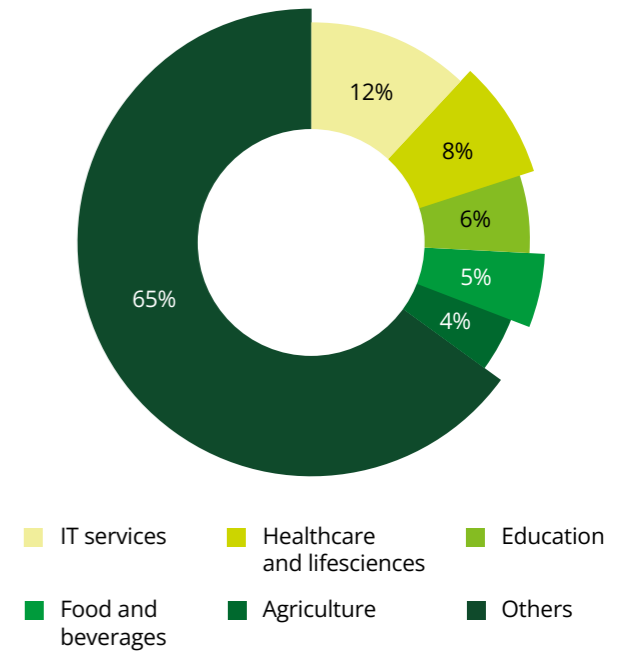
Karnataka

Karnataka has the second-fastest growing start-up ecosystem, with 12,851 DPIIT-recognised start-ups and 53 unicorns. The state also has 140 accelerators and incubators, which play crucial roles in supporting and propelling start-ups.^{cbxxx} Moreover, it has the largest number of IT service start-ups in the country. The state capital, Bengaluru, has emerged as "India's Start-Up Capital," with the third-highest number of start-ups globally. Bengaluru is the city with the highest number of women-led start-ups (1,783) in India.^{cbxxxi} The city is also the best place for innovative biotech start-ups and has emerged as an edtech hub in India.

Karnataka was one of the first states to announce a multisector start-up policy in 2015.^{cbxxxii} The Karnataka State Industrial & Infrastructure Development Corporation has supported over 135 start-ups in the state through equity participation and has provided debt to key industries, such as steel, cement, mining, and textiles, as well as new areas, such as IT, aerospace, and telecom.^{cbxxxiii} The state was ranked first in NITI Aayog's India Innovation Index 2022 and was awarded the Best Performer in DPIIT state rankings.^{cbxxxiv}

Karnataka is a pioneer in India's start-up ecosystem, with three main designated start-up clusters beyond its capital, Bengaluru. These clusters aim to create vibrant start-up ecosystems outside Bengaluru, fostering innovation, attracting investments, and generating employment opportunities. The Karnataka government provides dedicated support through the "Beyond Bengaluru" initiative to develop the areas of Mangaluru, Mysuru, and Hubballi-Dharwad-Belagavi.

Figure 20: Industry-wise start-ups in Karnataka (share, %)



Sources: Start-up India, Deloitte Research

Key start-up clusters in Karnataka

Mangaluru

Focus: Fintech, IT & ITES, engineering & manufacturing, pharma and biotech, automotive, healthcare, IT, tourism, and food processing

Mysuru

Focus: Cybersecurity, IT & ITES, engineering electrical & electronics, pharma and biotech, automotive, food processing, aerospace, defence, robotics, IoT, healthcare, and edutech

Hubballi-Dharwad-Belagavi

Focus: AI, ML, IoT, IT & ITES, engineering, electrical & electronics, pharma and biotech, automotive, manufacturing, food processing, and textiles

Karnataka's thriving start-up ecosystem is driven by a confluence of factors – a skilled workforce, supportive government policies, high-speed internet, robust infrastructure, a strong funding ecosystem, and a vibrant entrepreneurial culture. These factors continue to attract start-ups and investors, solidifying Karnataka's position as a leading start-up hub in India.

The state government has introduced the following programmes to support the sector's growth:

- Karnataka Start-up Policy 2015-20 made provisions to establish a Start-up Cell to address the needs of the fast-growing start-up ecosystem. The policy was further amended in 2022 with the launch of Karnataka Start-up Policy 2022-27, with an increased focus on promoting emerging start-ups.
- Strong policies, such as the i4 (IT, ITES, Innovation Incentives) Policy, BT (Biotech) Millennium Policy, ESDM Policy, and KAVGC Policy are giving the state ecosystem a strong foundation to flourish.
- The Global Innovation Alliance - Market Access Programme (GIA-MAP), which was launched in 2022, aims to connect mature and growth-stage companies in Karnataka with leading start-up ecosystems globally.
- The government announced in the 2023-24 state budget that it will set up a "world-class" incubation centre, 'INNOVERSE' with hi-tech facilities for entrepreneurs worth INR500 million.

Tax and policy incentives

Federal incentives

The Indian government has introduced a beneficial tax regime for start-ups aimed at promoting entrepreneurship, innovation, and the start-up ecosystem. As a part of the regime, the Indian tax laws provide a tax exemption for three consecutive years out of the first 10 years to eligible start-ups. In addition, start-ups enjoy a more liberalised loss limitation rule under the regime and limited scrutiny by tax authorities with respect to share premiums received from investors. Start-ups eligible for this benefit include those recognised by the Inter-Ministerial Board of Certification setup by the Indian government and whose turnover in the financial year of deduction does not exceed INR1 billion.

Incentives under Karnataka state policies

The Karnataka Start-up Policy 2022-27 allows 100 percent reimbursement of annual State GST (SGST) for start-ups incubated in Karnataka (excluding Bengaluru), subject to specified conditions. Additional incentives include:^{clxxxvi}

- Funding support for startups through the Idea2PoC Grant-in-aid Scheme – ELEVATE, which would provide a one-time Grant-in-Aid of up to INR5 million to help start-ups develop their ideas to a proof-of-concept stage.
- Funding through a venture capital fund of INR1 billion to support emerging innovative and deep tech start-ups, of which 25 percent is earmarked for women start-ups.
- Fiscal assistance in the form of reimbursement of 50 percent of processing fees for establishing a regulatory sandbox for sandbox operators that support a minimum number of five startups as per the provisions of the Karnataka Innovation Authority Act, 2020.
- Beyond Bengaluru Cluster Seed Fund to support growth-stage start-ups established outside Bengaluru urban district.

- Facilitation support for setting up new incubation centres by private entities through a one-time capital grant of a maximum of 50 percent or INR5 million (whichever is less) for Fixed Cost Investment (excluding land and building).
- Marketing cost reimbursement of 30 percent of actual costs, including travel incurred in international marketing through trade show participation, with a capping of INR0.5 million per year per start-up.
- Patent filing cost reimbursements for start-ups incubated in Government of Karnataka-supported incubators subject to a limit of INR0.2 million per Indian patent and INR1 million for foreign patent awarded.
- Quality certification cost reimbursement of 50 percent with an overall ceiling of INR0.6 million for start-ups outside Bengaluru urban district.

The way forward

Karnataka will have to incentivise research and start-ups in specialised industries, such as fintech, IT, enterprise tech, deep science, and logistics to position Karnataka as a hub for innovation and technological advancement. The government will need to collaborate with start-ups and industry associations to improve industrial infrastructure and stimulate innovation among entrepreneurs.^{clxxxvii} Karnataka will have to boost skill development in specialist fields to retain and attract talent.

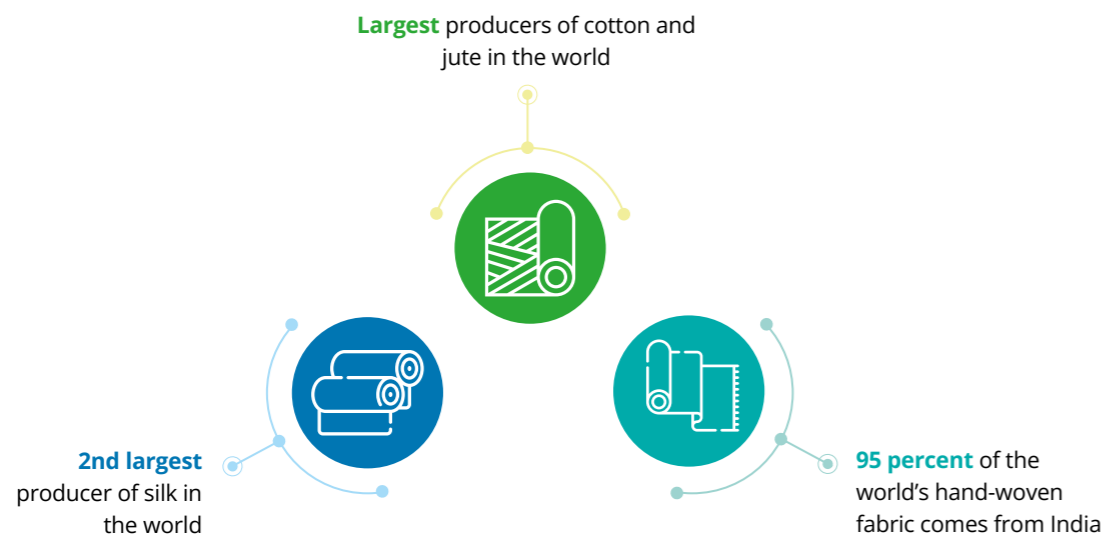
The government can focus on improving the state's physical infrastructure to create a more conducive environment for start-ups to thrive, attract investment, and contribute to the state's economic growth. The Karnataka government can provide more tax incentives, streamline regulations, and improve access to capital to encourage businesses to establish their base outside of Bengaluru. This will foster inclusive and distributed growth throughout the state and reduce congestion in one city.^{clxxxviii}



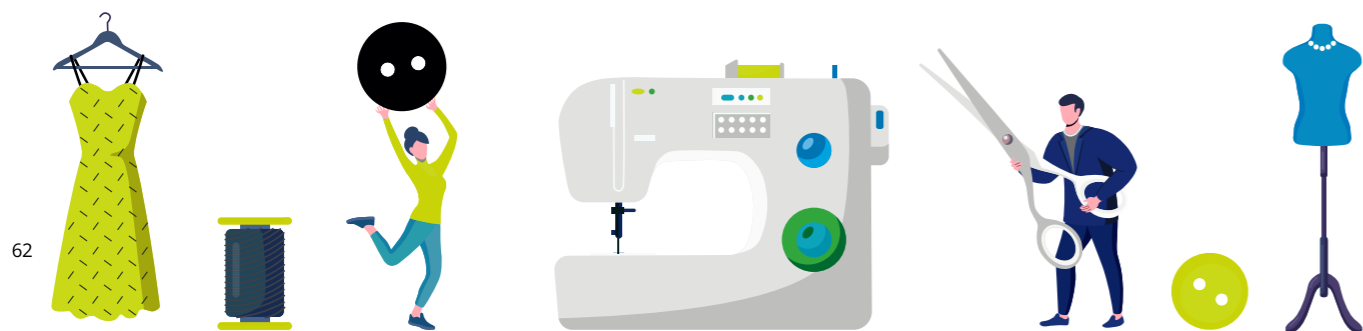
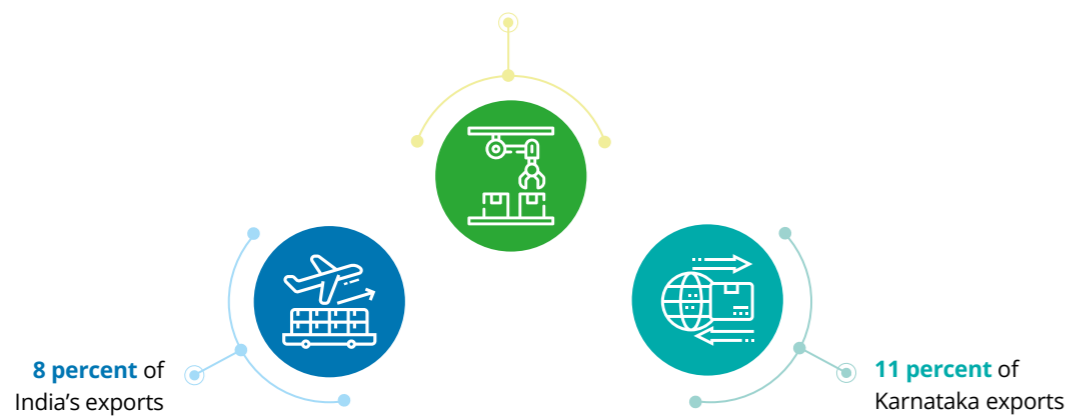
Textile and garments

India

India ranks amongst the world's largest producers of textiles and apparel. It accounts for 4.6 percent of world trade in textiles and clothing.^{cxvix} After the COVID-19 pandemic, India became the second-largest manufacturer of personal protective equipment (PPE) in the world.^{cxv} The domestic industry accounts for around 2.3 percent of the country's GDP.^{cxvi} The industry is highly diversified, with a range of segments ranging from traditional handloom, handicrafts, wool, and silk products to the organised textile industry. After agriculture, the textiles and apparel industry employs 45 million people directly and another 100 million in related sectors, making it the second-largest employer in the country.^{cxvii} The Indian government has approved a PLI scheme for textiles, outlining INR106.8 billion over five years to boost the production of man-made fibre (MMF) apparel, MMF fabrics, and technical textiles.^{cxviii} India, the world's fifth-largest producer of technical textiles, has launched the National Technical Textiles Mission with an INR14.8 billion outlay to promote the use of technical textiles in flagship missions and strategic sectors.^{cxix}



4 percent of Karnataka's manufacturing output



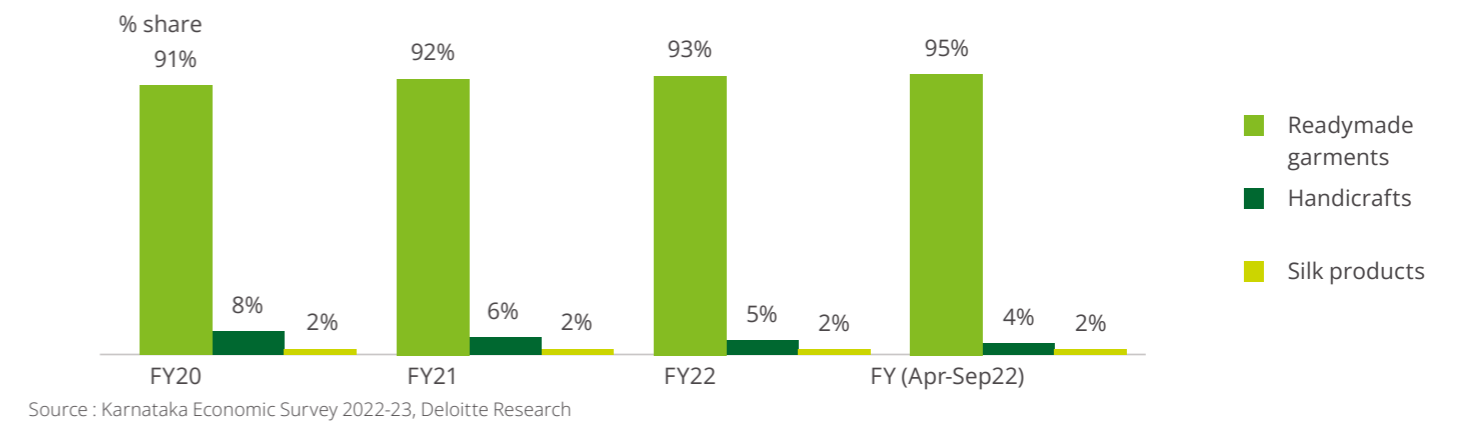
Karnataka

Karnataka, known as the garment capital of India, contributes 20 percent to India's garment production.^{cxv}

- It is one of the leading producers of silk (65 percent), ready-made garments (20 percent), wool (12 percent), and cotton (6 percent).
- The state is the second-largest garment exporter in the country.
- With more than 2,000 apparel units, Bengaluru is one of India's biggest export-oriented clusters.

The presence of more than 20 handloom clusters, 6 textile parks, 10 garment training design centres, a Fashion Technology Centre by the National Institute of Fashion Technology, 144 skill development centres, and 168 private training centres in Karnataka signifies a strong ecosystem supporting the textile and apparel industries.^{cxvi}

Figure 21: Textile exports from Karnataka



Key textile and garments clusters in Karnataka



Existing apparel parks

Bidar, Belagavi, Dharwad, Kolar, Tumakuru, Bengaluru, Mandya



Proposed apparel parks

Bagalkote, Ballari, Chitradurga, Ramanagara

Government schemes and incentives have improved the quality and variety of textile and apparel products. Karnataka can capitalise on its rich textile heritage and skilled artisans to produce premium, value-added garments and textiles with unique designs and craftsmanship. It can promote sustainable production methods and organic materials. With continued efforts and strategic initiatives, the state is well-positioned to further strengthen its position as a leading player in the Indian textile and apparel industry.

The state government has implemented the following regulations and programmes to encourage the growth of this sector:^{cxcvii}

- The new Textile and Garment Policy 2019-24 offers various incentives and aims to position Karnataka as a leading destination for textile and apparel manufacturing.
- Karnataka Handlooms Development Corporation offers financial assistance to handloom weavers and runs retail outlets and online platforms to showcase and sell handloom products.
- The Fashion Technology Centre in Bengaluru offers advanced design and technology training to professionals.
- Handloom clusters and garment training design centres in the state provide training, infrastructure, and market access to artisans and entrepreneurs.
- The government aims to develop Bengaluru as a smart and technical textile centre.
- The government offers attractive incentives to enterprises to set up or expand textile industries in Karnataka.

Tax and policy incentives

Karnataka is one of the leading producers of textiles and garments in India. The new Textile and Garment Policy envisages an investment of INR100 billion during 2019-2024.^{cxcviii} In line with the vision, the Karnataka government focuses on promoting ginning, spinning, weaving, processing, garments, and technical textiles as thrust sectors. This commitment is underscored by the provision of segment-wise incentives offered, along with the cluster development initiatives offered in the New Textile and Garment Policy 2019-24.^{cxcix} In line with this strategic approach, Karnataka offers the following incentives:

- A capital subsidy of up to 30 percent provided for thrust sectors, and up to 25 percent for other sectors.
- In the garments segment, all enterprises are eligible for a 25 percent capital subsidy.
- Large enterprises in thrust sectors to receive a 5 percent interest subsidy per annum on term loans for the first five years.
- MSMEs and large enterprises can benefit from stamp duty exemption and concessional registration charge rates of INR1.0 per INR1,000.
- All new units in both the garment and textile segments to receive a 75 percent reimbursement of employers' contributions of the wage rate per employee per month for a period of five years. This is provided as an Employees Provident

The way forward

Through skill development and workforce training programmes, Karnataka can equip its artisans and workers to produce high-quality products with modern machinery that competes with premium goods to survive the stiff competition from local power looms and imported textiles. By setting up more large-scale integrated textile parks with adequate port infrastructure, Karnataka textile manufacturers can help reduce logistics cost.^{cc} To create a thriving ecosystem for technical textiles and to emerge as a leader, the state can offer attractive incentives and develop targeted marketing materials for investors.

Fund (EPF) and Employees' State Insurance Scheme of India (ESI) subsidy for MSMEs.

- Medium and large enterprises in the garment segment are eligible for wage subsidies of up to INR3,000 per employee.
- A 50 percent subsidy is available for the cost of setting up an effluent treatment plant, capped at INR50 million.
- An individual legal entity or special purpose vehicle (SPV) to receive one-time grant support for the development of common infrastructure for greenfield parks, up to 40 percent of the project cost or INR400 million per park project.
- One-time grant support is available to individual SPVs for brownfield clusters, up to 40 percent of the project cost or INR120 million per industrial estate project.
- One-time grant support is provided to individual SPVs for up to 50 percent of the Common Effluent Treatment Plant and Hazardous Waste Disposal Facility project cost. In the case of handloom projects, the subsidy is limited to 80 percent of the project cost.
- Enterprises under the scheme to receive skill and infrastructure upgradation support, as well as capacity building support.
- Mega enterprises, which have investments above INR3 billion in fixed assets, to be offered a special package on a case-to-case basis.

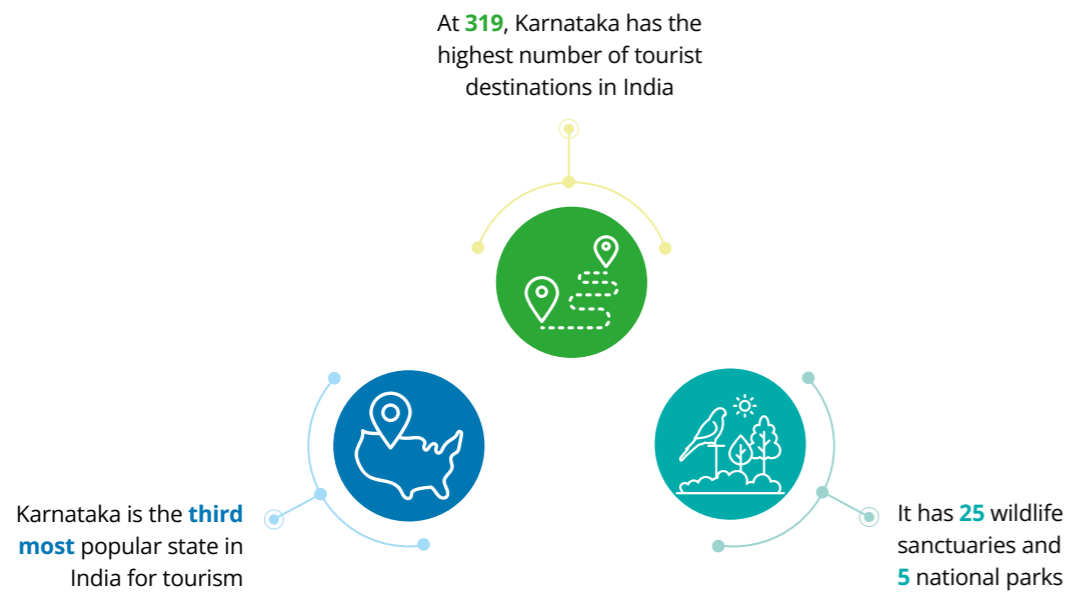
Given the wide scale of traders/MSMEs that operate within the textile industry, a unified informative portal can be launched to generate awareness amongst weavers and artisans about various policy incentives and schemes launched by the state government. Special incentives and promotional opportunities will have to be launched to promote traditional art forms and designs at both national and global levels. Skilling and apprenticeship schemes in the identified thrust sectors will have to be deployed to encourage the involvement of youth, in consultation with the larger industry.



Tourism

India

Travellers from all over the world find India a fascinating destination because of its rich history, varied landscapes, and vibrant culture. However, the Indian tourism industry is still largely driven by domestic travel. In 2022, over 1,731 million domestic tourists travelled across India. India reported 8 million overseas visitors in FY23.^{ccv} Over 4.7 million foreign visitors came to the nation in FY24 (until October 2023). India earned US\$11.2 million in foreign exchange earnings in FY23, which rose to US\$16 million in FY24 (until October 2023). India's state-of-the-art medical facilities and affordable treatments are expected to have drawn 1.4 million medical tourists in FY23.^{ccvi} To promote India as a travel destination and promote tourism, the Indian government launched various measures, including the "Incredible India 2.0" campaign and simplified visa procedures.

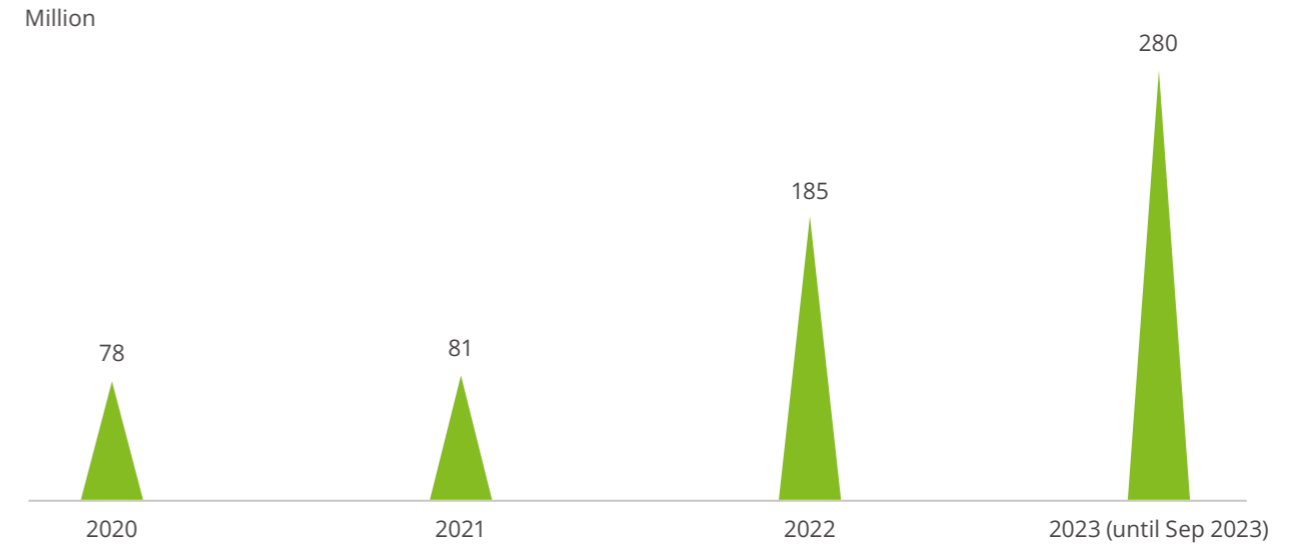


Karnataka

Karnataka, 'One State, Many Worlds', is primarily known for its heritage destinations, wildlife sanctuaries, and national parks. It is also well-known for its beautiful hill towns, world heritage sites, waterfalls, pilgrimage sites, and pristine beaches along its 320-km coastline. The state has more golf courses than any

other southern state. Tourism is a significant GDP driver (around 8 percent).^{ccvii} In 2019, Karnataka's tourism sector contributed 14.8 percent of the state's GSDP.^{ccviii} In October 2023, there were ~25 golf courses across the state, catering to golfers of all levels and preferences.^{ccv}

Figure 22: Number of tourists in Karnataka



Source : Karnataka Economic Survey 2022-23, Deloitte Research

In 2022, 185 million tourists visited Karnataka, accounting for ~10.5 percent of India's total tourist footfall.^{ccvi} During January-September 2023, 280 million domestic tourists and 0.3 million foreign tourists visited the state.^{ccvii} Karnataka also has a flourishing medical tourism business, attracting an estimated 8,000 health tourists each year.^{ccviii} It has the maximum number of authorised health systems and alternative therapies in India. Investments in expanding private medical facilities in Bengaluru could further drive medical tourism in the state. Wellness clusters are being created in Mysuru, Bengaluru, and Shivamogga.

Key tourism destinations in Karnataka



Heritage

Hampi, Badami, Aihole, Pattadakal, Somanthpur, Gol Gumbaz, Chitradurga, Banavasi, Barkur, Halebidu, Halasi, Kalvedurga, Srirangapatha



Nature

Shimoga, Uttara Kanada, Tumkur, Mandya, Udupi, Koppal, Chikmagalur, Belgaum, and Bijapur



Adventure

Dandeli, Nandi Hills, Mulliyana Giri, Kumara Parvatha, Bheemashwari, Devarayanadurga, Kalavara Durga, Shivaganga Hill, Kabini, Kemmanagundi, Yana



Wildlife

Bandipur, Mudumalai, Dubare, Nagarhole, Dandeli, Bannerghatta, Ranganathittu, Bhadra, Adichunchangiri



Pilgrimage

Gokarna, Murudeshwar, Udupi, Dharmasthala, Sringeri, Melukote, Kollur Mookambika, Kukke Subrahmanya Temple, Horanadu Annapoorneshari, Ghati Subramanya, Kotilingeshwara, Shravanabelagola Gommatagiri, Jama Masjid, Karkala, Venur



Overall, the growth of tourism in Karnataka is driven by a combination of its natural beauty, rich cultural legacy, supportive government efforts, and improved infrastructure. By leveraging these elements, Karnataka can maintain its status as a thriving tourist destination in the future by leveraging eco-tourism, adventure tourism, heritage tourism, and rural tourism.

The state government has introduced a number of initiatives to foster the growth of this sector:^{COX}

- The Karnataka Tourism Policy 2020-2026 aims to position Karnataka as a global tourism brand for visitors and investors. The policy seeks to promote sustainable tourism, develop tourism-related infrastructure, and enhance the overall tourist experience.
- In the state budget 2023-2024, the Karnataka government announced the following:
 - Promotion of beach tourism at Karavali and surfing events at the Sasihitlu beach
 - Development and upgradation of historical and cultural sites in the state
 - Promotion of heli tourism to improve connectivity through airstrips in Kodagu, Chikkamagaluru, and Dharmasthala
 - Upgradation of government museums in Kalaburagi, Gadag, Bengaluru, and Vijayapura
 - Introduction of AR and VR technologies at the Karnataka Archaeological Museum and Art Gallery, Mysuru
 - Organisation of 3D projection and multi-media sound/light shows in Vijayavithala temple in Hampi, Bidar fort, Bhoganandishwara temple near Nandibetta, Golgumbaz in Vijayapura, Kitturu fort, and Badami caves.

Tax and policy incentives

The Karnataka State Tourism Policy 2020-2026^{COX} has identified eligible tourism projects to provide exemptions, incentives, and subsidies. Both new tourism projects and expansion projects qualify for subsidies of up to 30 percent of the anticipated project cost, along with interest subsidies of 5 percent per annum on loans acquired for fixed capital investment.

Additionally, the state has waived registration charges, stamp duties, and land conversion fees for such projects. A noteworthy provision is the exemption from motor tax, which is extended to tourism service providers for the purchase of up to 10 vehicles, including coaches, caravans, and campervans, by way of reimbursement by the Department of Tourism.

Some of the other key incentives offered under the tourism policy include the following:^{COX}

- Special recognition for sustainability measures and assistance for sustainability initiatives in the form of financial assistance of 50 percent of the capital cost (up to INR0.1 million per tourism project) for undertaking measures such as water conservation and harvesting, adopting renewable energy sources, and undertaking pollution control measures.
- Support for homestays through payment of electricity and water charges at domestic tariffs, and property tax rates as prescribed for residential purposes.
- Marketing development support for promotional activities such as production of publicity material, participation in national-level domestic and international events, and participation in roadshows organised/sponsored by Karnataka Tourism. The support is to be in the form of financial assistance, covering 50 percent of the cost of printing, 50 percent of the cost of the rental stall, with a capping amount defined per tourism service provider.

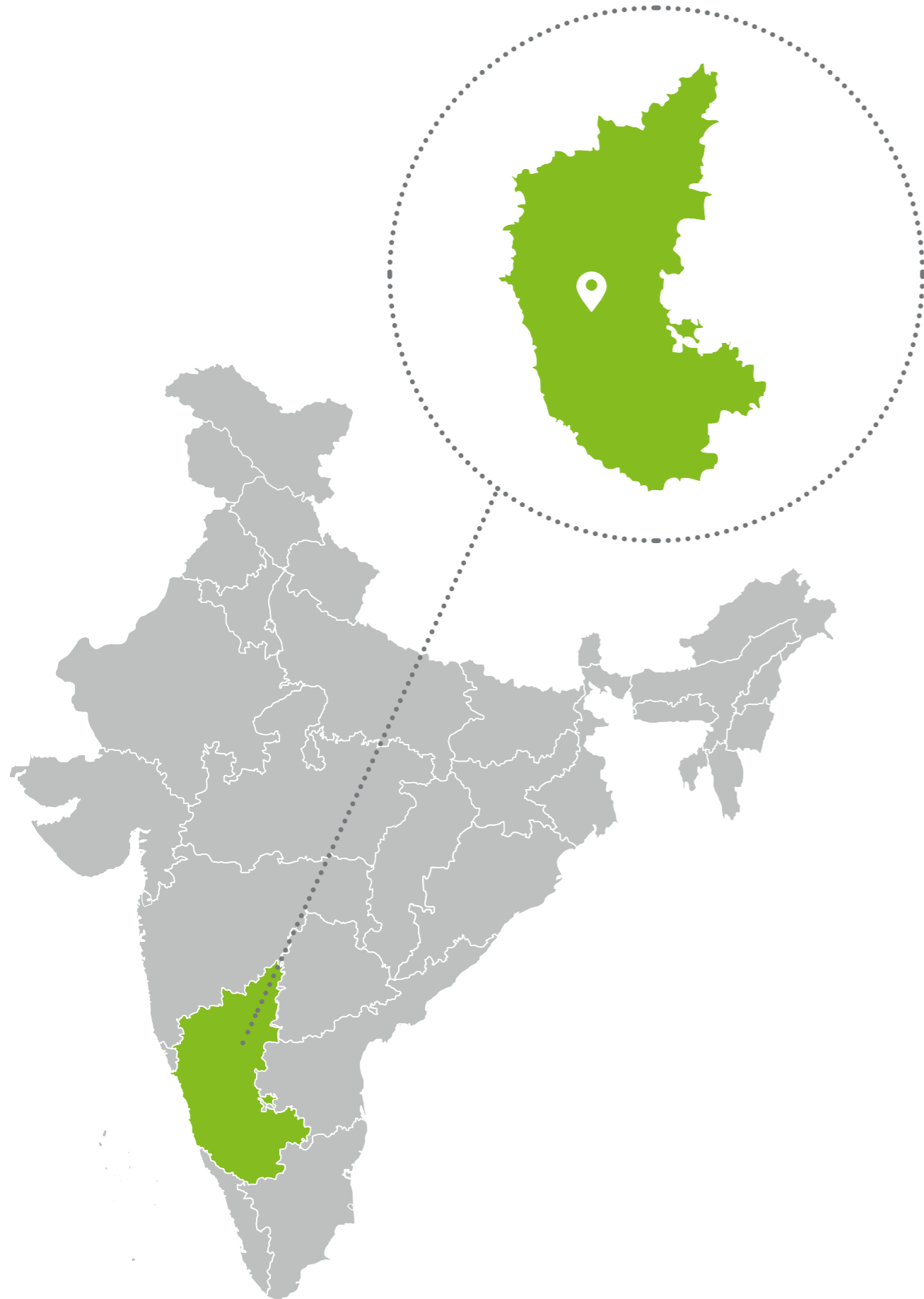
Fiscal incentives are also offered under the Karnataka Film Tourism Policy to encourage leading film producers and directors to shoot in picturesque tourism destinations in Karnataka and thereby showcase the destinations on national and international platforms.

The way forward

Kodagu (Coorg) district is the largest coffee-producing region of Karnataka. The state's tourism business can profit from upgrading tourist amenities and improving transit options to the huge coffee plantation areas. Better eco-tourism infrastructure in less-visited protected regions, such as Biligiri Rangaswamy Temple Tiger Reserve, Bhadra, and Dandeli, can help the state attract more tourists. Upgrading amenities in government hospitals in Bengaluru, Mangaluru, and Manipal can help promote Karnataka as a medical tourism destination in India

and globally. With the growing relevance of yoga and its appeal among foreign tourists, more yoga retreats and resorts in scenic locations such as Mysuru and Gokarna can be established. The state's enormous tourism potential will be realised through better marketing and the development of new seaside resorts, farmstays, homestays, and adventure camps, as well as the creation of heritage trails, forest safaris, birdwatching treks, and improved pilgrimage site amenities.





Recommendations and the way forward for Karnataka

This report provides a comprehensive analysis of the economies and sectors of India and Karnataka while taking into account their respective aspirations. It also provides a snapshot of the current trends of the economy and the sectors, as well as action plans for each sector as a way forward. To become a US\$1 trillion economy, a comprehensive strategy and the right mix of economic and social policies would be needed to spur growth and create catalysts for future progress.

The Karnataka government will need to focus on 12 key sectors to reach its target of becoming a US\$1 trillion economy. These sectors will enable the state to follow a path of rapid growth and development. However, as industrialisation picks up speed, the government will have to allocate resources and land in a way that balances the needs of farmland and industry. In addition, the state must ensure improved ease and cost of doing business and address infrastructure issues, such as traffic congestion in Bengaluru.

Karnataka will have to prioritise implementing the right policy frameworks, attracting the right investments in growth areas, and ensuring an improved tax and regulatory environment in key growth areas. It will be important to focus on regionally balanced growth, and the state will have to rely on technology for better governance and policy-making. These must unavoidably address Karnataka's challenges while maximising its comparative advantages. Public-private partnerships will be vital for mobilising resources and expertise. Following the measures and recommendations suggested throughout the document, the state government will be able to address economic and social challenges such as poverty, inequality, and environmental degradation and unleash the potential for sustainable growth.

References

- i. Centre for Monitoring Indian Economy (CMIE)
- ii. <https://des.karnataka.gov.in/storage/pdf-files/Economic%20Survey%202022-23%20English.pdf>
- iii. <https://des.karnataka.gov.in/storage/pdf-files/Economic%20Survey%202022-23%20English.pdf>
- iv. https://investkarnataka.co.in/wp-content/uploads/2020/07/Auto_and_Electric_Vehicle2019.pdf
- v. <https://investkarnataka.co.in/wp-content/uploads/2020/07/Machine-Tools.pdf>
- vi. <https://www.census2011.co.in/literacy.php>
- vii. <https://economictimes.indiatimes.com/industry/healthcare/biotech/pharmaceuticals/karnataka-will-tap-pbi-to-build-its-bio-pharma-medical-devices-sector-says-ashwath-narayan/articleshow/90381168.cms?from=mdr>
- viii. <https://www.iadb.in/2022/08/31/karnataka-the-aero-space-hub-of-india/>
- ix. <https://www.ibef.org/industry/textiles>
- x. FY2012 refers to FY2011-12 starting from April 2011 and ending on March 2012
- xi. CMIE
- xii. https://www.mospi.gov.in/sites/default/files/press_release/PressNoteFAE2023-24N.pdf
- xiii. <https://www.imf.org/en/Publications/WEO/Issues/2022/01/25/world-economic-outlook-update-january-2022>
- xiv. <https://dpiit.gov.in/publications/fdi-statistics>
- xv. https://www.indiabudget.gov.in/doc/Budget_at_Glance/bag1.pdf
- xvi. <https://pib.gov.in/PressReleasePage.aspx?PRID=1990377>
- xvii. <https://economictimes.indiatimes.com/news/economy/policy/6-years-of-gst-indias-unprecedented-indirect-tax-reform-that-dared-to-revolutionise-the-economic-landscape/articleshow/101411150.cms?from=mdr>
- xviii. Haver Analytics
- xix. https://www.indiabudget.gov.in/doc/Budget_Speech.pdf
- xx. https://www.indiabudget.gov.in/doc/Budget_Speech.pdf
- xxi. <https://www.nsws.gov.in/>
- xxii. <https://pib.gov.in/PressReleasePage.aspx?PRID=1888936>
- xxiii. <https://www.indiabudget.gov.in/budget2023-24/economic-survey/doc/echapter.pdf>
- xxiv. <https://ibbi.gov.in/en/legal-framework/act>
- xxv. <https://www.startupindia.gov.in/>
- xxvi. <https://ltdashboard.legislative.gov.in/sites/default/files/A2013-30.pdf>
- xxvii. <https://www.nsws.gov.in/>
- xxviii. <https://rbidocs.rbi.org.in/rdocs/Bulletin/PDFs/0R-BIBULLETINDECEMBER2022839AD8E8AE-984FA7AE5F6EE71569DEF.PDF>
- xxix. Deloitte, <https://www2.deloitte.com/in/en/pages/public-sector/articles/the-digital-dominance-catalysing-india-as-rise-as-a-global-digital-leader.html>
- xxx. <https://www.imf.org/en/Publications/fandd/issues/2023/03/data-by-people-for-people-tiwari-packer-matthan>
- xxxi. <https://www.gsma.com/asia-pacific/wp-content/uploads/2022/09/India-report-FINAL-WEB.pdf>
- xxxii. <https://www.nasscom.in/knowledge-center/publications/future-cloud-and-its-economic-impact-opportunity-india>
- xxxiii. <https://www2.deloitte.com/content/dam/Deloitte/global/Documents/Energy-and-Resources/gx-eri-smart-factory-regional-profiles.pdf>
- xxxiv. <https://www.india-briefing.com/news/setting-up-a-semiconductor-fabrication-plant-in-india-what-foreign-investors-should-know-22009.html/>
- xxxv. <https://www.ibef.org/research/newstrends/electric-vehicle-market-likely-to-be-rs-50-000-crore-opportunity-in-india-by-2025-report>
- xxxvi. <https://www.businesstoday.in/technology/news/story/ev-charger-market-to-grow-at-cagr-of-47-till-2030-report-399930-2023-09-27>
- xxxvii. <https://pib.gov.in/PressReleasePage.aspx?PRID=1884817>
- xxxviii. <https://www2.deloitte.com/in/en/pages/about-deloitte/articles/the-trade-landscape.html>
- xxxix. <https://deloitte.wsj.com/cfo/2024-india-outlook-small-and-midsized-businesses-on-the-rise-88cb2611>
- xl. <https://www2.deloitte.com/us/en/insights/economy/asia-pacific/india-economic-outlook-10-2023.html>
- xli. <https://www.adb.org/sites/default/files/publication/665781/sawp-79-enhancing-participation-gvcs-india.pdf>
- xlii. Deloitte estimate, Deloitte, India's energy-transition pathways; A net-zero perspective, September 2023
- xliii. <https://des.karnataka.gov.in/storage/pdf-files/Economic%20Survey%202022-23%20English.pdf>
- xliv. https://mospi.gov.in/sites/default/files/asi_results/Asi.pdf
- xlv. <https://pib.gov.in/PressReleasePage.aspx?PRID=1838178>
- xlvi. <https://ebiz.karnataka.gov.in/ebiz/Public/AboutKUM>
- xlvii. <https://des.karnataka.gov.in/storage/pdf-files/Economic%20Survey%202022-23%20English.pdf>
- xlviii. <https://www.ibef.org/states/karnataka-presentation>
- xlix. <https://www.ibef.org/states/karnataka-presentation>
- l. <https://www.ibef.org/states/karnataka-presentation>
- li. <https://www.ibef.org/states/karnataka-presentation>
- lii. <https://www.ibef.org/states/karnataka-presentation>
- liii. [https://prsendia.org/budgets/states/karnataka-budget-analysis-2023-24#:~:text=Total%20expenditure%20\(excluding%20debt%20repayment,borrowings%20of%20Rs%2063%2C377%20crore.](https://prsendia.org/budgets/states/karnataka-budget-analysis-2023-24#:~:text=Total%20expenditure%20(excluding%20debt%20repayment,borrowings%20of%20Rs%2063%2C377%20crore.)
- liv. https://des.karnataka.gov.in/storage/pdf-files/KARNATAKA%20ECONOMIC%20SURVEY%202021-22-M2_ENG_FINAL.pdf
- lv. <https://industries.karnataka.gov.in/storage/pdf-files/Industry%20Policy%202020-25%20English.pdf>
- lvi. <https://des.karnataka.gov.in/storage/pdf-files/Economic%20Survey%202022-23%20English.pdf>
- lvii. <https://investkarnataka.co.in/wp-content/uploads/2020/11/Booklet-final-.pdf>
- lviii. <https://pib.gov.in/PressReleaseFramePage.aspx?PRID=1987132>
- lix. https://www.americanbar.org/groups/labor_law/publications/ilelc_newsletters/issue-spring-2023/india/#:~:text=Share:,145%20hours%20in%20three%20months.
- lx. <https://www.icicilombard.com/docs/default-source/ciri/2022/aerospace-defense-sector-risk-report-2022.pdf>
- lxi. <https://economictimes.indiatimes.com/industry/transportation/airlines/-aviation/india-to-be-worlds-most-significant-new-aircraft-mkt-barclays/articleshow/100682903.cms?from=mdr>
- lxii. <https://www.investindia.gov.in/sector/defence-manufacturing#:~:text=The%20industry%20gets%20INR%205.94,exports%20of%20INR%2035%2C000%20crore.>
- lxiii. <https://economictimes.indiatimes.com/news/defence/budget-2023-indias-defence-sector-gets-rs-5-94-lakh-crore-for-2023-24/articleshow/97511172.cms?from=mdr>
- lxiv. <https://www.investindia.gov.in/sector/defence-manufacturing#:~:text=The%20industry%20gets%20INR%205.94,exports%20of%20INR%2035%2C000%20crore.>
- lxv. https://www.business-standard.com/industry/news/india-to-be-world-s-most-significant-new-aircraft-market-barclays-123060100998_1.html
- lxvi. Ibid
- lxvii. <https://www.ibef.org/industry/indian-aviation>
- lxviii. <https://www.trade.gov/country-commercial-guides/india-aerospace-and-defense#:~:text=India%20is%20projected%20to%20have,traffic%20grew%20by%20over%20150%25.>
- lxix. <https://www.indconosaka.gov.in/pdf/Aerospace%20and%20Defence.pdf>
- lxx. https://investkarnataka.co.in/wp-content/uploads/2023/02/8Feb_AD_Brochure_V7_print.pdf
- lxxi. Ibid
- lxxii. https://ebiz.karnataka.gov.in/eBiz/pdf/Karnataka_Aerospace_Defence_Policy-2022-27.pdf
- lxxiii. Ibid
- lxxiv. https://investkarnataka.co.in/wp-content/uploads/2023/02/8Feb_AD_Brochure_V7_print.pdf
- lxxv. Ibid
- lxxvi. Ibid
- lxxvii. Ibid
- lxxviii. <https://www.indconosaka.gov.in/pdf/Aerospace%20and%20Defence.pdf>
- lxxix. https://ebiz.karnataka.gov.in/eBiz/pdf/Karnataka_Aerospace_Defence_Policy-2022-27.pdf
- lxxx. Ibid
- lxxxi. Ibid
- lxxxii. https://ebiz.karnataka.gov.in/eBiz/pdf/Karnataka_Aerospace_Defence_Policy-2022-27.pdf
- lxxxiii. <https://www.investindia.gov.in/sector/food-processing>
- lxxxiv. <https://beta.ficci.in/sector-details.asp?sectorid=15#:~:text=Food%20Processing%20Newsletter-,Sector%20Overview,consumption%2C%20export%20and%20expected%20growth.>
- lxxxv. <https://www.investindia.gov.in/sector/food-processing#:~:text=The%20share%20of%20processed%20food,the%20total%20FDI%20Equity%20inflow>
- lxxxvi. https://worldfoodindia.gov.in/public/pdf/1691752912_1095741203.pdf
- lxxxvii. <https://dpiit.gov.in/sites/default/files/FDI-PolicyCircular-2020-29October2020.pdf>
- lxxxviii. <https://fssai.gov.in/>
- lxxxix. [https://damb.delhi.gov.in/damb/delhi-agricultural-produce-marketing-regulation-general-rules-2000#:~:text=\(1\)%20All%20agricultural%20produce%20brought,bye%20laws%20of%20the%20committee.](https://damb.delhi.gov.in/damb/delhi-agricultural-produce-marketing-regulation-general-rules-2000#:~:text=(1)%20All%20agricultural%20produce%20brought,bye%20laws%20of%20the%20committee.)
- xc. Karnataka Food Processing Report - MOFPI
- xc. <https://investkarnataka.co.in/wp-content/uploads/2020/07/Agri-and-food-processing.pdf>

- clxxi. [https://vtpc.karnataka.gov.in/storage/pdf-files/News-letters/NEWSLETTER percent20EDITION percent2003 percent20July percent20to percent20Sept'21 .pdf](https://vtpc.karnataka.gov.in/storage/pdf-files/News-letters/NEWSLETTER%20EDITION%202003%20July%20to%20Sept'21.pdf)
- clxxii. https://investkarnataka.co.in/wp-content/uploads/2020/07/Biotech_Pharmaceutical_and_medicaldevices.pdf
- clxxiii. <https://www.karnataka.com/industry/pharmaceutical-industry/>
- clxxiv. <https://economictimes.indiatimes.com/industry/healthcare/biotech/pharmaceuticals/karnataka-will-tap-qli-to-build-its-bio-pharma-medical-devices-sector-says-ashwath-narayan/articleshow/90381168.cms?from=mdr>
- clxxv. [https://www.labiotech.eu/best-biotech/biotech-companies-bangalore/#:~:text=Not percent20only percent20has percent20this percent20made,incl%20more percent20than percent204 percent20C000 percent20startups.](https://www.labiotech.eu/best-biotech/biotech-companies-bangalore/#:~:text=Not%20only%20has%20this%20made,incl%20more%20than%204%20C000%20startups.)
- clxxvi. <https://economictimes.indiatimes.com/tech/technology/bangalore-tech-summit-karnataka-unveils-revised-biotech-policy-aims-to-quadruple-states-bioeconomy/articleshow/105598141.cms?from=mdr>
- clxxvii. https://pharmaceuticals.gov.in/sites/default/files/Gazette%20Notification%20of%20PLI%20scheme%20for%20Pharmaceuticals_0_0.pdf
- clxxviii. <https://www.startupindia.gov.in/content/sih/en/search.html?roles=Startup&page=0>
- clxxix. <https://www.tice.news/enticing-angle/from-seed-to-success-the-evolution-of-startup-incubators-in-india-1682053>
- clxxx. <https://yourstory.com/2023/09/karnataka-leads-from-the-front-as-an-innovation-hub-priyank-kharge>
- clxxxii. <https://timesofindia.indiatimes.com/city/bengaluru/bluru-home-to-1783-women-led-startups/article-show/105341526.cms>
- clxxxiii. <https://investkarnataka.co.in/sectors/innovation-and-startup/>
- clxxxiv. <https://idd.karnataka.gov.in/storage/pdf-files/43.NIMZ-Tumkur.pdf>
- clxxxv. <https://investkarnataka.co.in/sectors/innovation-and-startup/>, [https://finance.karnataka.gov.in/storage/pdf-files/1_BUDGET%20SPEECH\(Eng\).pdf](https://finance.karnataka.gov.in/storage/pdf-files/1_BUDGET%20SPEECH(Eng).pdf)
- clxxxvi. https://startup.karnataka.gov.in/docs/Startup_Policy_Karnataka.pdf
- clxxxvii. <https://www.thenewsminute.com/karnataka/startup-capital-bengaluru-hopes-new-government-will-address-industry-s-complaints-176835>
- clxxxviii. <https://yourstory.com/2023/05/bengaluru-based-startups-challenges-government-infrastructure>
- clxxxix. <https://www.icis.com/explore/resources/news/2023/08/24/10918580/india-mulls-fiscal-incentives-to-boost-ailing-textile-industry>
- cxc. <https://pib.gov.in/PressReleaseIframePage.aspx?PRID=1957224#:~:text=From%20being%20a%20non%20producer,covid%20times%20she%20highlighted%20further.>
- cxcii. <https://www.investindia.gov.in/sector/textiles-apparel>
- cxciii. <https://theprint.in/macrosutra/why-indias-critical-textile-sector-employing-4-5-crore-people-is-facing-challenges/1299489/>
- cxciv. https://www.business-standard.com/india-news/govt-may-tweak-textile-qli-scheme-to-attract-more-private-players-123111300904_1.html
- cxcv. <https://www.ibef.org/industry/textiles>
- cxcvi. <https://karnatakadht.org/english/policies.php>
- cxcvii. <https://investkarnataka.co.in/sectors/textile-and-apparel/>
- cxcviii. https://www.karnatakadht.org/pdf/order_new_textile_and_garment_policy_2019-24.pdf
- cxcix. <https://karnatakadht.org/english/pdf/NJN-%20Policy-%20English%20version%202019-24%20.pdf>
- cc. <https://www2.deloitte.com/content/dam/Deloitte/in/Documents/about-deloitte/in-about-deloitte-opportunity-in-the-times-of-covid-bcic-noexp.pdf>
- cci. CMIE database
- ccii. https://bottindia.com/wp-content/uploads/2023/09/BOTT_Magazine_OCTOBER_2023.pdf
- cciii. [https://www.deccanherald.com/opinion/revisit-karnataka-tourism-policy-1230346.html#:~:text=Tourism%20is%20a%20significant%20GDP,for%20India%20\(around%206.2%25\).](https://www.deccanherald.com/opinion/revisit-karnataka-tourism-policy-1230346.html#:~:text=Tourism%20is%20a%20significant%20GDP,for%20India%20(around%206.2%25).)
- cciv. Ibid
- ccv. <https://www.deccanherald.com/sports/other-sports/asian-games-karnataka-golf-anirban-lahiri-2698435>
- ccvi. [https://travel.economictimes.indiatimes.com/news/destination/states/tourist-footfall-records-surge-in-karnataka/103464372#:~:text=This%20is%20a%20huge%20increase,footfall%20in%20India%20in%202022.&text=Karnataka%20appears%20to%20be%20the,'revenge%20travel%20tourism'.](https://travel.economictimes.indiatimes.com/news/destination/states/tourist-footfall-records-surge-in-karnataka/103464372#:~:text=This%20is%20a%20huge%20increase,footfall%20in%20India%20in%202022.&text=Karnataka%20appears%20to%20be%20the,'revenge%20travel%20tourism')
- ccvii. <https://travel.economictimes.indiatimes.com/news/destination/states/tourist-footfall-records-surge-in-karnataka/103464372>
- ccviii. <https://hospaccxconsulting.com/healthcare-scenario-of-karnataka-2023/>
- ccix. <https://investkarnataka.co.in/sectors/tourism-wellness/>
- ccx. <https://www.karnatakaturism.org/department/wp-content/uploads/2022/06/Karnataka-Tourism-Policy-2020-26-v63-final-print.pdf>
- ccxi. <https://www.karnatakaturism.org/department/wp-content/uploads/2022/06/Karnataka-Tourism-Policy-2020-26-v63-final-print.pdf>

Connect with us

Debasish Mishra

Partner, Chief Growth Officer,
Deloitte India
debmishra@deloitte.com

K R Sekar

Partner, Leader - Deloitte Private
krsekar@deloitte.com

KR Vijay

Partner, Deloitte India
vijaykr@deloitte.com

Santosh Kumar

Partner, Deloitte India
santoshkumar@deloitte.com

Contributors

Dr. Moumita Paul

Goldie Dhama

Sayantana Sengupta

Mamatha Anand

Meryl Fernandes

Gaurav Bhauwala

Acknowledgements

Dr. Rumki Majumdar

Ankita M

Sahil Gupta

Shivam Pathak

Neha Aggarwal Jain

Payal Sharma Arora

Rahul Dhuria

Guncha Prakash

Sangita Prakash

Rajiv Nitish Palagummi

Rahul Agarwal



World Trade Center Bengaluru, hereafter referred to as "WTC Bengaluru," operates as an independent entity within the World Trade Centers Association network. WTC Bengaluru is not a legal representative of and cannot bind or obligate, other World Trade Center entities or their affiliated organizations.

WTC Bengaluru functions autonomously, and each World Trade Center is a separate legal entity registered as WTC Trades & Projects Pvt Ltd. The information provided by WTC Bengaluru is intended for general knowledge and informational purposes only.

WTC Bengaluru does not provide professional advice or services through this communication. Before making any financial or business decisions based on the information obtained from WTC Bengaluru, individuals or entities are advised to seek the counsel of qualified professional advisers.

While WTC Bengaluru strives for accuracy and completeness, no representations or warranties, whether express or implied, are made regarding the information's accuracy or completeness. WTC Bengaluru, its affiliates, employees, or agents shall not be liable for any direct or indirect loss or damage arising from reliance on the information provided.

© 2024 World Trade Center Bengaluru. Member of the World Trade Centers Association.

Deloitte.

Deloitte refers to one or more of Deloitte Touche Tohmatsu Limited ("DTTL"), its global network of member firms, and their related entities (collectively, the "Deloitte organization"). DTTL (also referred to as "Deloitte Global") and each of its member firms and related entities are legally separate and independent entities, which cannot obligate or bind each other in respect of third parties. DTTL and each DTTL member firm and related entity is liable only for its own acts and omissions, and not those of each other. DTTL does not provide services to clients. Please see www.deloitte.com/about to learn more.

Deloitte Asia Pacific Limited is a company limited by guarantee and a member firm of DTTL. Members of Deloitte Asia Pacific Limited and their related entities, each of which is a separate and independent legal entity, provide services from more than 100 cities across the region, including Auckland, Bangkok, Beijing, Bengaluru, Hanoi, Hong Kong, Jakarta, Kuala Lumpur, Manila, Melbourne, Mumbai, New Delhi, Osaka, Seoul, Shanghai, Singapore, Sydney, Taipei and Tokyo.

This communication contains general information only, and none of DTTL, its global network of member firms or their related entities is, by means of this communication, rendering professional advice or services. Before making any decision or taking any action that may affect your finances or your business, you should consult a qualified professional adviser.

No representations, warranties or undertakings (express or implied) are given as to the accuracy or completeness of the information in this communication, and none of DTTL, its member firms, related entities, employees or agents shall be liable or responsible for any loss or damage whatsoever arising directly or indirectly in connection with any person relying on this communication.

© 2024 Deloitte Touche Tohmatsu India LLP. Member of Deloitte Touche Tohmatsu Limited.