

India Soars high

KPMG in India

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India's GDP grew by more than 7% in 1H FY2015-16, becoming the world's fastest-growing large economy. The International Monetary Fund (IMF) predicts that India would retain this status until 2020. Presenting the...

Opportunities in India



Make in India Enhancing manufacturing through investments,

innovation, and by building a leading manufacturing infrastructure.

Competitive federalism

A system to rank states based on the 98-point action plan launched to enhance business conditions.

Smart Cities Combined outlay of about USD22.5 billion to create 100

Smart Cities and rejuvenate 500 cities (through AMRUT).

Regulatory framework



FDI norms in 15 sectors liberalised

Distinction between Foreign Direct Investment and Foreign Portfolio Investment eliminated.

Housing for All

India would require 110 million houses by 2022



Digital India

A digitally empowered society and knowledge economy with an outlay of about USD17.5 billion

Wi-Fi services to all cities with populations greater than one million, broadband internet access for 250,000 village clusters and 400,000 internet access points by 2019.



Ease of Doing Business

Launched to enhance business conduciveness, through streamlining regulatory structures, investor-friendly measures and cutting through red tape.

Hygiene infrastructure

Combined outlay of USD10 billion for Clean India Mission and Clean Ganga.

USD6.5 billion investments towards construction of solid waste management plants, individual and community toilets.



Automobile sector

Accounts for 7% of the nation's GDP, now allows 100% FDI (under the automatic approval route)



Roads and Highways

Account for over 90% of India's PPP infrastructure projects.

USD 1 trillion investments from 2012 to 2017.

Government aims to develop 66,117km of roads from 2016.

of the 9 Asian Highway projects pass through India

Renewable energy

Annual renewable energy target of 175GW by 2020. Ultra Mega Solar Power Projects and Solar Parks to be developed, with investments worth USD156 million.

100% FDI now permitted under the automatic route.

100% FDI allowed under the automatic approval route for railway infrastructure

Projects worth USD1000 billion through PPP by 2020

Efforts underway to increase daily passenger carrying capacity from 21 million to 30 million.

Estimated to be the third-largest construction



Financial inclusion

JAM number trinity envisages linking India's 900 million mobile users to bank accounts and identification numbers (Aadhar); Digitisation of user payments, digital wallets, computerisation of ration shops and payment banks set to script the next phase of financial inclusivity.



Construction

market in the world by 2020.



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Foreword

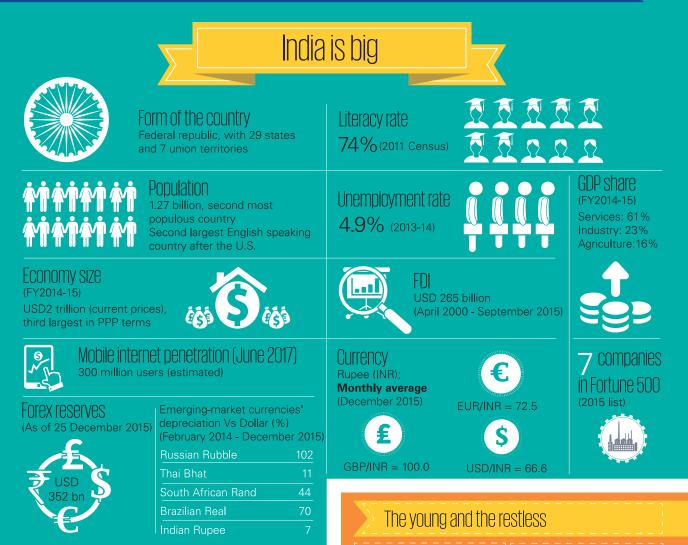


Reforms at the state



Overview of the Indian economy

India - at a glance



(in million)

India

India

2020 (in million)

China

China

New age entrepreneursFavourable ecosystem to spur innovation

• Fourth largest base for young businesses

• Rising rural and middle class market

l Statistics, FICCI, Labor Bureau Survey, External Affairs Ministry, ARC Research (IPO ivity in India -2014), 2011 census (literacy rate), Economist Intelligence Unit

In recovery mode, an emerging economy

GDP forecast (%) for 2016	Brazil -1.0	Russia -0.6	India 7.5	China 6.3	South Africa 1.3
Private Consumption est, 2030 (USD billion)	2,240	1,172	5,989	16,571	426
Population 2015 persons (million)	205	142	1,274	1,361	54
Land km ² (million)	8.5	17.0	3.3	9.6	1.2

Source: IMF World Economic Outlook (October 2015) and Economist Intelligence Unit

- India's GDP grew 7.3 per cent in 2014
- India has several/various dynamics to create value for investors

• Approximately 1.5 million engineering graduates every year

Projected population in 2030 U Projected median age in 2030

Labour force surplus/deficit by | | Economic prospects during

billion) 45 000

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Real

36,000

27,000 18,000~13,000

9,000

0

11 (in years)

India

6.7

India

(FY2012-30) CAGR growth (in%)

China

 \square

China

000

25

Foreword

India has long been viewed as a potential economic tiger that is yet to achieve its potential. Myriad regulations and the intricate federal structure of the government inhibited business growth and held back India from achieving its expected economic potential.

However, that appears to be changing gradually. The state governments, in lockstep with the central government, have unveiled several reforms and changes that have made it comparatively easier to do business in India, than ever before. And this is not a one off process by the state governments. The process has been institutionalised by the Department of Industrial Policy and Promotion, Government of India, under the ranking mechanism on adoption of business reforms, supported by the World Bank and various industry associations. This mechanism has been widely acknowledged as a game changer in transforming India in terms of ease of doing business.

The Indian economy itself has shown resilience in the face of global downturns, and has stood up to be one of the fastest growing economies in the world. The performance of the USD2 trillion-economy at current price is being keenly observed by the world. During FY2014-15, India's domestic consumption and investment contributed a growth of 57 per cent and 33.1 per cent, respectively, to the Gross Domestic Product (GDP). In itself, that played a significant role in keeping India's economic sentiments charged up. And now that India's GDP growth forecast for 2016 is slated to be 7.5 per cent, India is firmly on its way to catapult into a global growth engine. This growth rate also makes India one of the fastest growing large economy in the world.

I am happy to note that the growth of over 7 per cent GDP in 1H FY2015-16 presents India's case strongly to the global investors. One of the world's fastest-growing economies, India is opening up a world of opportunities for investments, in a significantly conducive and supportive environment. In 1H FY2015-16, India received FDI of USD16.63 billion, an increase of about 13 per cent to the corresponding period in the previous fiscal year. Investments into India are accelerating, demonstrating increased investor confidence on what India has to offer. And the government is working hard to significantly reduce the red tape.

In addition, Government of India has launched various ambitious national programmes that present significant opportunities for investors to be part of one of the largest infrastructure programmes in the world. These programmes are expected to transform not only the cities and the country as a whole, but also the way business is done in India. Some of the infrastructure plans are trans-national and would help India economically integrate more firmly and rapidly with the regional economies. Proactive policy reforms along with several campaigns and initiatives, such as Make in India, Digital India, Skill India, Start-up India and Swachh Bharat Abhiyan (Clean India Mission), are likely to transform the extent and the quality of rural and urban infrastructure.

These steps are expected to bring forth a number of investment opportunities. For example, the initial corpus of USD6.2 billion by the National Investment and Infrastructure Fund (NIIF) is expected to bridge the investment gap in infrastructure, which would be addressed by FDI and private investments. Further, the investments planned for the Indian Railways, as an example, is USD133.5 billion over the next five years ending 2019. And, for roads, the investments planned is USD32.4 billion during the twelfth Five Year Plan (FYP) during 2012-17. In a scenario, where the nominal GDP is expected to reach USD3.4 trillion by FY2019-20 and further, to USD7 trillion by FY2024-25, the stakes for the return on investments is expected to be significantly high. It is certainly the right time to invest in India.

This positive sentiment is reflected by the International Monetary Fund (IMF) forecast for India's economic growth at 7.3 per cent for 2015 and 7.5 per cent for 2016.

This report 'India soars high' by KPMG in India, gives an insight about the state of the Indian economy from an investor's perspective and I am positive that it would help investors in their decision-making process while strategising their investments in India.

I hope this report gives you a better understanding of the rapidly changing business outlook for India and I take this opportunity to wish you the best for the New Year 2016.



Richard Rekhy Chief Executive Officer KPMG in India

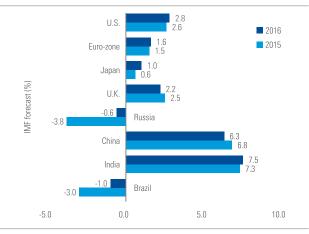
Overview of the Indian economy



Stable macroeconomic conditions

In the Fiscal Year (FY)2014-15, India's GDP grew by 7.3 per cent following a 6.9 per cent growth rate in the previous year. With a growth of over 7 per cent in 1H FY2015-16, India is considered the world's fastest-growing large economy. The International Monetary Fund (IMF) predicted that India would retain the status of fastest growing economy until 2020.⁰¹ Domestic consumption and investment were major contributors to growth in FY2014-15, accounting for 57 per cent and 33.1 per cent of GDP, respectively. Both manufacturing and electricity outputs experienced strong growth (4.4 per cent and 4.6 per cent respectively) in 1H FY2015-16, boosting overall industry performance.

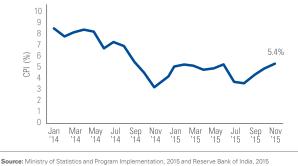
Following the downward trend in global commodity prices, the retail inflation averaged 4.5 per cent in 1H FY2015-16⁰³, and is expected to remain below the Reserve Bank of India (RBI) inflation target of 6 per cent by January 2016. This has allowed RBI to cut its policy rate by 125 basis points in 2015, which is expected to underpin the domestic demand.04



India - world's fastest-growing large economy

Source: IMF World Economic Outlook, October 2015

Retail inflation is likely to remain below RBI's target of 6 per cent by January



01. International Monetary Fund's World Economic Outlook (October 2015).

02. Ministry of Statistics and Programme Implementation (May 2015)

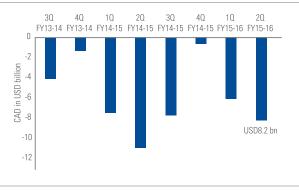
03. Ministry of Programme Implementation (October 2015)

04. Ministry of Statistics and Programme Implementation (November 2015)

To scale up investments in infrastructure, the Indian government during the Union Budget FY2015-16 earmarked USD11 billion.⁰⁵ This increase in public spending is also likely to support economic growth. To ensure that increased infrastructure spending does not exert upside pressure on inflation, the government and the RBI have come to an agreement that the latter would target to maintain inflation in the range of 2 to 6 per cent from FY2016-17 onward⁰⁶. This arrangement is expected to keep inflation expectations anchored.

Benefitting from softer oil prices (the Brent crude has declined more than 55 per cent since June 2014)⁰⁷. India's current account deficit has continued to narrow, enabling the RBI to increase the foreign exchange reserves. This could safeguard the economy against potential disruptions in global financial markets caused by a change in monetary policy stance in advanced countries.

Narrowing CAD strengthens macroeconomic stability



Source: Reserve Bank of India. December 2015

India's strong economic fundamentals limit the rupee's depreciation against the dollar (per cent)

Currency	February 2014 to December 2015
Dollar index	24
Russian Rubble	102
Thai Baht	11
South African Rand	44
Brazilian Real	70
Indian Rupee	7

Source: Forex rates, www.investing.com, accessed 8 January 2016

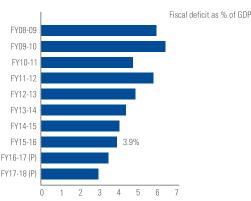
05. Union Budget 2015-16

06. Monetary Policy Framework Agreement, Press Information Bureau, 07 August 2015 07. Federal Reserve Bank of St. Louis accessed 19 December 2015

Fiscal consolidation on track

The falling oil prices have been a major boost to India's public finance, by helping the government save about USD1.7 billion⁰⁸ in subsidy bills. It has also allowed the Indian government to increase revenue buoyancy by imposing excise duty on oil products. Going forward, strong economic growth prospects together with the implementation of the unified tax system would increase the fiscal headspace for infrastructure investment. This would be further strengthened by the measures to rationalise subsidy. For example, the direct benefit scheme for LPG subsidy, that transfers subsidies directly to beneficiaries through bank accounts, could help the government save about USD2.3 billion⁰⁹ every year. A similar approach is likely to be followed for disbursing food subsidy. As per the government estimates, as much as 40 per cent of food subsidies (approximately USD7.8 billion annually) could be saved through a direct benefit transfer system.⁰⁹

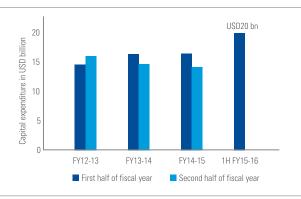
The savings from subsidies and higher tax revenues would enable the government to fund its capital expenditure plan while sticking to the fiscal discipline.



Fiscal consolidation path

Source: Reserve Bank of India and Controller General of Accounts, October 2015

Greater emphasis on capital expenditure

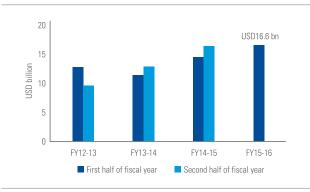


Source: RReserve Bank of India and Controller General of Accounts. October 2015

Foreign Direct Investment (FDI) policy

Government of India has introduced key reforms to the FDI policy, to help attract further investments. To achieve this goal, some measures such as the introduction of the composite cap that does away with the distinction between FDI and Foreign Portfolio Investment (FPI) and liberalising FDI norms in 15 major sectors (refer to chapter: Key policies of the Indian government and their impact on business) have been taken. FDI in India has started picking up, which stood at USD16.63 billion in 1H FY2015-16, about 13 per cent higher than 14.69 billion in 1H FY2014-1510.

Upward trend in FDI



Source: Department of Industrial Policy and Promotion, FDI Statistics, April 2000 to September 2015 (AP1)

India witnessed strong merger and acquisition (M&A) activities during the January to November 2015 period, with 532 M&A transactions worth USD31.16 billion, following 525 M&A deals worth USD34.63 billion in the previous year.1 The momentum of PE investment has continued, with deal activity increasing 74 per cent in volume terms and 42 per cent in value terms in January to November 2015. Maximum PE deals were noted in sectors such as information technology and information technology-enabled services (which includes e-commerce), banking and financial services and media and entertainment¹¹. With the government's reform agenda aimed at strengthening business as well as economic conditions, the domestic deals are expected to accelerate further; sectors related to e-commerce, internet and mobile technology would continue to remain attractive. As for the outbound flows, Indian firms have invested USD2.28 billion¹² overseas in October 2015, with pharmaceuticals, IT and telecom sectors accounting for a majority of that investment.

12. Reserve Bank of India's database on Indian economy

05

^{08.} Weak crude oil may bring Rs 88,800-cr gains this year, Business Standard, 08 August 2015

^{09.} Govt expects DBT to plug 35-40% leakage in PDS, Mint, 25 September 2015

^{10.} Department of Industrial Policy and Promotion's statistics on FDI

^{11.} Dealtracker, Grant Thornton, November 2015

Adoption of greater capital account convertibility

A greater capital account convertibility has its pros and cons. For instance, while it would bring in stable long-term investments, it would also lead to volatile short-term money. India, as an emerging economic power, would need to adopt greater capital account convertibility at some point in the future, as sticking to the capital control policy for a longer time would have its own consequence. Thus, RBI is making a nuanced and gradual progress toward greater capital account convertibility. The government's structural reforms could prepare the economy to withstand the effects associated with withdrawal of capital controls.

As part of capital account liberalisation initiatives, the central bank has eased the External Commercial Borrowing (ECB) framework, allowing the domestic firms to raise long-term foreign capital and increase the borrowing limit. The RBI has also extended the list of lenders from whom Indian firms could borrow. The list now includes sovereign wealth funds, pension funds and insurance companies. Also, in a bid to encourage rupee internationalisation, the central bank has allowed domestic companies to issue rupee-denominated bonds abroad.

Critical challenges

While the Indian economy is on a strong growth trajectory, there are some risks to the recovery. A few of such cases are discussed below:

- Projects worth USD160 billion¹³ were stalled as of December 2015, due to delays in project approvals and raw material non-availability issues.
- The delay in restarting stalled projects has strained infrastructure companies' ability to meet their debt obligations, leading to a surge in banks' gross nonperforming assets (5.1 per cent as of September 2015). With banks making higher provisioning against bad loans, their profitability has come under pressure.
- India confronts a situation wherein the utilisation rate of power generating firms continues to remain low despite a sharp increase in coal output. This is because the poor financial health of power distribution companies (DISCOMs), which have accumulated USD67 billion debt¹⁴, and impedes them from buying power, thereby reducing demand.
- 4. India's exports declined for the twelfth month in a row in November 2015.¹⁵The exports need to remain stronger for India to grow at 8 to 10 per cent¹⁶. Thus, the continuous decline in exports remains a cause for concern.
- 5. The labour reform progress has been slow. Flexible labour reform is key to making India a global manufacturing hub.

6. Rupee depreciation could impact Indian firms with exposure to overseas debt by increasing their liabilities. As of September 2015, non-government sector held USD394 billion worth of external debt.¹⁷

To an extent, e-auction of coal blocks and fast tracking of clearances have resolved fuel supply issues. In order to encourage road developers to invest in fresh projects, the government eased exit clause for completed highway projects, and one-time financial assistance was given to developers facing temporary financial problems. Also, a new framework - Hybrid Annuity Model (HAM) - that reduces the upfront contribution from road developers was unveiled¹⁸. However, through these initiatives, the government could only make gradual headway on this issue, especially as addressing the cause for stalled projects, such as land acquisitions and environment clearances, requires consensus from various stakeholders.

The government along with the RBI has been taking initiatives to address the NPA problem. The government's recent reform package for DISCOMs, which involves transferring the latter's debt to state governments, is expected to reduce banks' stressed assets by 10 per cent¹⁹. The RBI on its part unveiled new norms for Strategic Debt Restructuring (SDR)²⁰, which allow lenders to convert debt into equity if the borrower fails to meet the milestones embedded in a restructuring plan. These measures would be complemented by the government's move towards creating an ecosystem that makes it easier for troubled businesses to exit while ensuring that banks can recover a significant part of their loans. The RBI expects that the NPA problem would cease to exist by March 2017²¹.

Weakness in external demand is blamed for India's subdued exports. As such, recent government measures, such as subsidised loans and extended duty incentives, could provide only a temporary relief to exporters. Nevertheless, weak exports are unlikely to derail India's above 7 per cent growth prospects, especially when the domestic demand is expected to remain robust.

The government has launched a system to rank states based on the 98-point action plan of business reforms, with an aim to promote competitive federalism. States have implemented key business reform measures in a bid to make it significantly easier to do business and hence attract investments.

The RBI is unlikely to allow excessive depreciation in rupee and has indicated that it will intervene in the market if needed. Domestic firms on their part increased their protection against currency volatility by increasing the hedging of their foreign currency loans.

In conclusion, India's macroeconomic conditions have relatively improved in the recent past. Challenges remain, however, the government is working towards enhancing the country's long-term growth potential.

19. Banks to blame for Amtek Auto's bloated debt, Mint, 07 December 2015

^{13.} No progress on stalled projects while new announcements plunge, Livemint, 5 January 2016

^{14.} Cabinet to consider Rs4.3 trillion loan recast of power distribution companies, Mint, 05 October 2015

^{15.} Exports fall for 12th straight month, down 24% in Nov, Business Standard, 16 December 2015

^{16.} CEA Arvind Subramanian pegs growth at 8-10%, with exports rider, Economic Times, 27 July 2015

^{17.} Ministry of Finance, External Debt Statistics (December 2015)

^{18.} Govt's hybrid annuity model paves way for road projects, Business Standard, 09 July 2015

^{20.} Strategic Debt Restructuring Scheme, RBI, 08 June 2015

^{21.} RBI, government steps to help banks end NPA woes by March '17: Raghuram Rajan, Economic Times, 01 December 2015

Key policies of the Indian government and their impact on business





India's macro-economic conditions saw an upswing in FY2014-15 and there have been early signs that investments are picking up, primarily due to a rise in public sector expenditure and an upturn in the capital replacement cycle.⁰¹

As the country paces itself for the next phase of growth in its domestic market, consequent increase in consumer confidence and greater stability in its macroeconomic fundamentals, the structural reforms and flagship initiatives introduced by the Indian government, in the recent past, have started gaining momentum. The reforms and initiatives are multi-pronged, cutting across sectors, with the prime objective of amplifying the collective growth impact.

This report focuses on the major flagship initiatives that hold the potential to have a transformational impact on the Indian economy and accelerate India's growth rate. In the report, the initiatives have been categorised, under the following broad focus areas:

Infrastructure investments

As per NITI Ayog's directional framework released in 2015, the government plans to focus on 5 major areas of infrastructure in order to augment overall infrastructure, attract investments and facilitate overall growth.⁰²

- 1. Railways
- 2. Roads
- 3. Sagarmala project (for ports and coastal development)
- 4. Inland waterways
- 5. Housing for All by 2022.

Make in India initiative

It has been launched with an aim to boost industrial growth and make the country a global manufacturing hub. The programme aims to enhance manufacturing through initiatives designed to facilitate investment, foster innovation, protect intellectual property and build best-in-class manufacturing infrastructure.

Urban development - transforming Indian cities

Smart Cities Mission

This mission is expected to improve the efficiency of cities and enable local area development, thereby driving economic growth and improving the quality of life. This urban transformation is expected to be driven by adopting technology-based interventions.

Atal Mission for Rejuvenation and Urban Transformation (AMRUT)⁰³

AMRUT envisages urban India's transformation, by aiming:

 To ensure that every household has access to a tap with assured supply of water and a sewerage connection;

- To increase the amenity value of cities by developing greenery and well-maintained open spaces (e.g., parks); and
- To reduce pollution by switching to public transport or constructing facilities for non-motorised transport (e.g., cycling).

Universal energy access and reviving power sector⁰⁴

Power for All programme

The programme aims at providing quality, reliable and affordable power supply 24x7 to all Indian citizens by March 2019.

Ujwal DISCOM Assurance Yojana (UDAY)

This scheme has been launched to provide a financial turnaround for the state-owned power distribution companies (DISCOMs), by helping overcome outstanding debt of USD64.8 billion as on March 2015.

Digital India initiative

This initiative aims to transform India into a digitally empowered society and knowledge economy. This umbrella programme lays emphasis on the national e-governance plan.

Financial and communications inclusivity

The JAM Number Trinity, or the Jan Dhan Yojana – Aadhar – Mobile Number Trinity, aims at enabling direct subsidy transfers in order to enable the government to provide targeted subsidies, reducing distortion and subsidy leakages while expanding financial inclusion.

Revitalising public sector banks

Indradhanush or the Rainbow initiative spells out a seven-point reform plan to strengthen governance in the public sector banks to address their concerns about rising non-performing assets (NPA).

Skill and entrepreneurship development

Skill India

Skill India seeks to provide the institutional capacity to train a minimum of 300 million skilled workforce by 2022.

Start-Up India Stand-Up India

This initiative aims at creating an optimal environment to enable both existing and prospective entrepreneurs to carry out business effectively and seamlessly.

The Start-Up India framework is expected to be launched in January 2016.05

02. NITI Ayog website, accessed on 3 December 2015

- Atal Mission For Rejuvenation And Urban Transformation (AMRUT), http://amrut.gov.in/
 Government of India, Ministry of Power, http://powermin.nic.in/PowerAll
- 05. Govt. to launch Start-Up India's framework on Jan. 16: PM Modi, Business Standard, 27 December 2015

 ^{&#}x27;Inside India', Moody's Investors Service, 1 December 2015, https://www.moodys.com/research/Moodys-Indian-investment-levels-showing-nascent-signs-of-recovery-PR_340076

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Hygiene infrastructure

Swachh Bharat Abhiyan (Clean India Mission)⁰⁶

This mission aims at eliminating open defecation, eradicate manual scavenging, adopt modern and scientific municipal solid waste management, effect behavioural change for healthy sanitation practices, generate awareness about sanitation and its linkage with public health, augment capacity of Urban Local Bodies (ULBs) and to allow an open environment for private sector participation in capex (capital expenditure) and opex (operational expenditure).

National Mission for Clean Ganga (NMCG)

This mission is expected to ensure effective abatement of pollution and rejuvenation of the river Ganga by adopting a river basin approach to promote coordination within different sectors for comprehensive planning and management. Additionally, it aims at maintaining minimum ecological flows in the river to ensure better water quality and environmentally sustainable development along its entire course.

Ease of Doing Business (EoDB)

The initiative has been launched with an aim to create a conducive business environment by streamlining regulatory structures and to create an investor-friendly business climate by cutting through red tape.



Infrastructure investments foundation for economic development

Economic growth of a country is directly proportional to the development of its infrastructure. Following that principle, the Indian Government allocates funds to sectors and encourages private participation through the PPP route to push for infrastructure developments. It has announced a National Investment and Infrastructure Fund (NIIF) with an expected initial corpus of USD6.2 billion to bridge the investment gap. Additionally, to make the infrastructure sector investor-friendly and easier to administer, the government, through the Kelkar Committee, is reviewing the overall PPP policy.⁰¹

The government plans to focus on the following 5 major areas for infrastructure developments – Railways, Roads, Sagarmala project (for ports and coastal development), Housing for All and Inland waterways.



Railways connecting India

Objective

The Indian government is aiming to target higher investments through resource mobilisation, prioritise decongestion of heavy haul routes and speed up trains. Providing better passenger amenities and safety, and improving railway systems through sustainable measures would also be the focus areas.⁰¹

Project outlay

The railway ministry has earmarked an investment of USD133.5 billion toward development of the railways sector over the next 5 years ending 2019.⁰¹



India has the largest rail network in Asia and the second largest in the world.⁰³ It covers a track-length of around 114,000 kms,⁰² running 12,500 trains to carry more than 20 million passengers daily.⁰³ Additionally, it runs more than 7,400 freight trains carrying 3 million tonnes (MT) of freight every day⁰³. Some of its significant characteristics are:

- Accounts for India's 15 per cent of public transport and about 30 per cent of total freight ⁰⁴
- Employs over 1.4 million people, the world's seventh-largest employer⁰⁵
- Generated revenues of USD25 billion during FY2014-15.⁰⁶



02. 'Indian Railways - lifeline of the nation', Railway Ministry, February 2015

03. '18 interesting facts about India Railways', Business Standard, February 2015

04. 'India's great Metro-Rail opportunity', The Business Standard, 20 January 2015

05. 'Indian Railways, Army among world's biggest employers', The EconomicTimes, June 2015

 'Railways' Revenue Earnings up by 12.16 Per Cent During Financial Year 2014-15', Press Information Bureau Gol, 8 April 2015



Steps taken so far

Foreign Direct Investments (FDI)

The sector allows for 100 per cent FDI under the automatic route. This includes construction, operation and maintenance of suburban corridor projects, high-speed train projects, dedicated freight lines, railway electrification and signalling systems, freight and passenger terminals and Mass Rapid Transit Systems (MRTS).⁰⁷

FDI worth USD12 billion have already been received (major projects include Mumbai–Ahmedabad high-speed corridor project and CSTM–Panvel suburban corridor development project).⁰⁸

Multi-lateral partnerships

The government has signed MoUs with China, France, Czech Republic and Republic of Korea for technology transfer and technical cooperation in High Speed Rail, modernisation of infrastructure and maintenance.⁰⁹ Japan is expected to sign an MoU to develop 400 stations and assist in zero-accident mission of the Indian Government.¹⁰

Locomotive and wagon manufacturing

- Indian railways awarded a 10-year contract to GE and Alstom for diesel and electric locomotive factories, respectively, in Bihar, at a cost of about USD6.2 billion (to manufacture 1,000 diesel locomotives and 800 electric locomotives over the next decade). The Indian Railways would have a 24 per cent stake, while the companies would own 74 per cent in each of the plants.¹¹
- The Indian railways also signed agreements worth USD400 million for the SAIL–RITES Bengal Wagon Industry JV (SRBWIPL) to supply 1,200 stainless steel wagons and refurbish the existing 300 wagons over the next 10 years.¹²

Metro rail projects

Various metro rail projects are currently being developed across the cities of Delhi, Mumbai, Bengaluru, Chennai, Hyderabad, Kolkata, Kochi and Jaipur. Other cities where metro projects have been approved include Ahmedabad, Nagpur, Pune and Lucknow.¹³

Canada's Bombardier has been awarded a USD1.2 billion contract for vehicles and signalling network. The company won a contract of supplying 162 additional metro cars in 2015.¹⁴ Similarly, Alstom would supply about 20 Metropolis train sets, each comprising 4 metro cars.¹⁴

Project Nilgiri (Wi-Fi services at stations)

Indian railways has partnered with Google to set-up Wi-Fi hotspots in 400 stations in its first phase, while the second phase would involve providing Wi-Fi connection on running trains. $^{\rm 15}$

- 07. Railways, Make in India, accessed on 3 December 2015
- Railways opens up more than Rs 90,000 cr of FDI opportunity, The Business Standard, 12 December 2014
 "Do you know the achievements of ministry of railway in One Year of NDA Government ?, India Post, 3 November 2015
- 10. 'Japan and Google invest in India to help upgrade Indian Railways', IndiaToday, 22 September 2015
- 11. 'Railways awards Rs.40,000 crore of projects in Bihar to GE, Alstom', LiveMint, 10 November 2015
- 12. 'Indian Railways signs 12 000 wagon deal', Railway Gazette, 27 November 2015
- 13. 'India's great Metro-Rail opportunity', The Business Standard, 20 January 2015

Dedicated freight corridor (DFC)

Being implemented in phases, the USD12.5 billion project is expected to be completed in 2019.¹⁶

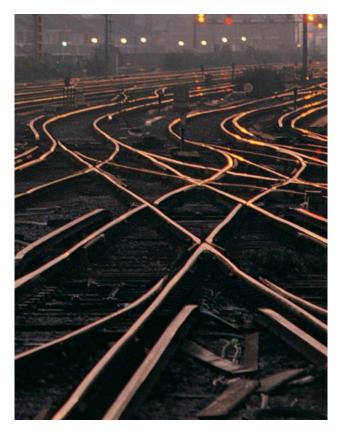
World's highest railway bridge

The 110km railway line in Jammu and Kashmir, which is under construction, would comprise the world's highest railway bridge (359 metre high). It is expected to be completed by 2017, while the rail-line would be operational by 2020.¹⁷

Others

The following initiatives taken by the government have helped deliver better services¹⁸:

- Launch of e-catering services in 240 trains currently
- Launch of Go-India Smart Card on a pilot-basis to enable passengers to pay for reserved and unreserved tickets
- Launching 24x7 helpline and Short Messaging Service (SMS)-alerts for customers.



- 'Boom in metro rail projects help India to move forward', The National, 21 November 2015
 'Google to provide free WiFi across 400 railway stations in India'. Indian Bailway Catering and Tourism
- Corporation, 13 September 2015 16. 'Progress in Dedicated Freight Corridor', Press Information Bureau Gol, 7 August 2015
- Hogress in Dedicated Height control, Hess information Bureau Gol, 7 August 2013
 Kashmir Rail Link to be completed by 2020. Will Have World's Highest Railway Bridge', NDTV, 4 July 2015
- Tassmmir Hall Link to be completed by 2020. Will Have World S Highest Hallway Bridge, NDTV, 4 July 20
 "Do you know the achievements of ministry of railway in One Year of NDA Government?", India Post, 3 November 2015

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Expected next steps¹⁹

Expanding the network

The government is working towards the following targets through various projects:

- Increasing the track-length by 20 per cent from 114,000 km to 138,000 km
- Increasing daily passenger carrying capacity from 21 million to 30 million
- Increasing the annual freight carrying capacity from 1 billion to 1.5 billion tonnes
- Approximately 920 under and over-bridges construction to replace approximately 3,450 railway crossings at a cost of USD1 billion
- About 400 railway stations (category A and A1) would be redeveloped/modernised in FY2016-17 through PPP model expected to be one of the largest PPP railway projects in the world.²⁰

Revamping of railways

The following key projects are being pursued:

- Increasing the speed of 9 railway corridors from 110-130kmph to 160-200kmph
- Increasing the average speed of freight trains to 100kmph (unloaded trains) and 75kmph (loaded trains)
- Diamond Quadrilateral network of high-speed rail to connect major metro cities
- Introduction of bullet trains (350kmph speed) and semihigh speed trains (160-200kmph speed).²¹

Environmental initiatives

Environment-friendly initiatives such as waste to energy conversion plants, bio-toilets and airplane-type vacuum toilets, conducting energy audits, etc., are a few of the measures planned during 2015-19.²²

Technology

Upgrade of identified stations to international standards with modern facilities and passenger amenities is being envisaged.

- Centrally managed Railway Display Network in over 2,000 stations is planned by 2017²²
- Satellite railway terminals for major cities²²
- Technology infrastructure enabling unreserved passengers to purchase tickets within 5 minutes under the government's Operation 5 mins plan.²²

Safety

Train Protection Warning System (TPWS) and Train Collision Avoidance System (TCAS) would be installed on select routes. Installation of surveillance cameras in trains and stations has also been proposed.²²



^{19. &#}x27;Highlights of the Railway Budget 2015-16', Indian Railways, 25 February 2015

20. Fresh push for PPP projects likely in Union Budget 2016, LiveMint, 9 December 2015

21. 'Govt announces quadrilateral rail project to connect metros', Business Today, 29 April 2015

22. Indian Rail Budget, Railway Ministry, accessed on 3 December 2015



Logistics development

Railways connect the industrial production centres with markets and with sources of raw material. It facilitates industrial development by providing rapid, reliable and cost-effective bulk transportation to various sectors like power, agriculture, energy, etc. Development of railway infrastructure would lead to development in logistics. It would allow easy and quick transport of coal to the power market, thus helping in meeting the country's electricity needs.

Providing connectivity to masses

Railways link places and enable large-scale, rapid and lowcost movement of people. In the process, it has become a symbol of national integration and has made it feasible for large number of people to travel across the country for work related and personal reasons. Metros in urban towns and cities have helped curb traffic and pollutionrelated problems and provide convenient and hassle-free connectivity.

The sector provides employment opportunities accounting for 6 per cent of total employment in the organised sector directly and additional 2.5 per cent employment indirectly through its dependent organisations. With its vast network of investments in healthcare, education, housing, etc., it plays an important role in the country's human resource development.

Human resources development

The sector accounts for 6 per cent of the total employment in the organised sector directly and an additional 2.5 per cent indirectly through its dependent organisations.

Business opportunities^{24,25}

FDI

Higher FDI limits would encourage more investment. Countries such as China, France and Japan have shown interest in the sector, to assist in the development of modern infrastructure and high-speed rail network.

Private investment in logistics

The government has proposed to set-up logistics parks to provide warehousing, packaging, labelling, distribution, door-to-door delivery, consignment tracking, etc.

Mass Rapid Transit System (MRTS)

The government expects the share of private investments toward MRTS development to grow from 13 per cent during 2007-12 to 42 per cent during 2012-17.

Others

Other areas with potential investment opportunities are:

- Dedicated Freight Corridors (DFC)
- Railway lines to and from coal mines and ports
- Development of high-speed tracks and suburban corridors
- Re-development of railway stations and freight terminals
- Power generation and energy saving
- Setting up wagon, coaches and locomotive units
- Gauge conversion
- Network expansion.

 ^{&#}x27;Indian Railways -The Catalyst of Socio-Economic Development', Press Information Bureau Gol, accessed on 3 December 2015
 Railways, Make in India, accessed on 3 December 2015, KPMG in India's analysis

Railways, Investment and Technology Promotion Division, Ministry of External Affairs, accessed on 21 December 2015

Roads - arteries of the Indian logistics network

Objective(s)

To develop new road infrastructure and modernise the existing road network, in addition to developing interstate highways/expressways.

Project outlay

The government earmarked an investment of USD32.4 billion during the twelfth Five Year Plan (FYP) for the development of roads in the period 2012-17.01



Globally, India ranks second in roads network, spanning a total of 4.7 million kms. Roads offer a logistics lifeline to the economy, accounting for 60 per cent of total goods movement and 85 per cent of total passenger traffic in the country. According to the National Highways Authority of India (NHAI), national highways make up about 2 per cent of the network but account for 40 per cent of road traffic.⁰²

02. 'Roads and Highways', Investment and Technology Promotion Division, Ministry of External Affairs



Steps taken so far

- NHAI and the Ministry of RoadTransport & Highways have sanctioned projects for 3,161km in FY2013-14 and 2,337km in FY2014-15.⁰³
- Over 90 per cent of PPP projects in India are in the road sector. During FY2014-15 (up to 31 January 2015), projects with a road length of 5,384km have been awarded. Several of these projects have been awarded on Engineering Procurement and Construction (EPC) mode.⁰⁴

• Industrial corridors

A pentagon of corridors is being envisaged to facilitate manufacturing and to project India as a global manufacturing destination. The following table lists the corridors and their respective status.⁰⁴

Corridor	Project status	
Amritsar Kolkata Industrial Corridor (AKIC)	Delhi Mumbai Industrial Corridor Development Corporation (DMICDC) would prepare a feasibility report, for which consultant have been appointed. ⁰⁴	
Bengaluru Mumbai Economic Corridor (BMEC)	 The draft perspective plan has been prepared⁰⁴ Nodes are being identified alongside preparation of a master plan and finalisation of the perspective plan.⁰⁴ 	
Chennai Bangalore Industrial Corridor (CBIC)	 The perspective plan has been finalised⁰⁴ The Phase II Study is in progress and the draft final report of master planning for industrial nodes is under consideration in consultation with stakeholders.⁰⁴ 	
Delhi Mumbai Industrial Corridor (DMIC)	 The first node/city level Special Purpose Vehicle (SPV) under DMIC Project has been incorporated⁰⁴ Work on 5 smart industrial townships in Delhi Mumbai Industrial Corridor has been initiated (Dholera in Gujarat, Shendra-Bidkin in Maharashtra, Greater Noida in UP, Ujjain in MP and Gurgaon in Haryana⁰⁵ Detailed project report for MRTS between Ahmedabad–Dholera has been finalised⁰⁴ Model solar power project at Neemrana in Rajasthan is being implemented as an Indo–Japan partnership project⁰⁴ Logistic data bank project in partnership with the Government of Japan is being taken forward, in partnership with NEC Corporation of Japan.⁰⁴ 	
Vizag Chennai Industrial Corridor IVCIC)	 Four nodes have been finalised; Asian Development Bank has agreed to prepare the master plans for 2 identified nodes^{D4} The parcels of land have been identified and the master planning would also be shortly initiated^{D4} Preparation of the regional perspective plan of VCIC area is in progress.^{D4} 	

^{03.} NHAI website, accessed 15 December 2015, http://www.nhai.org/projectawarded201516.asp

^{04. &#}x27;Investment in Infrastructure: Strengthening PPP Policy framework', NITI Aayog, 13 May 2015

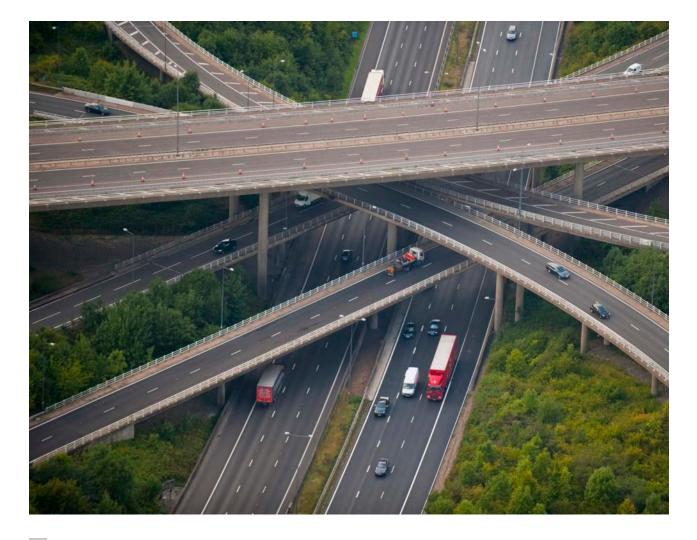
^{05. &#}x27;Five new smart cities to be developed under DMIC project', DNA India, accessed on 21 December 2015

Trans-border initiatives

- Six of the 9 Asian Highway (AH) project (also known as the Great Asian Highway) — a cooperative project among countries in Asia and Europe and the United Nations Economic and Social Commission for Asia and the Pacific (ESCAP), to improve the highway systems in Asia — pass through India.⁰⁶
- Under the Bangladesh, Bhutan, India and Nepal (BBIN) initiative, India signed a road connectivity pact on June 15 to pave way for greater trade and economic co-operation in the subcontinent. The BBIN agreement is expected to facilitate efficient road transport, to increase exports and imports and translate into new opportunities for trade and business among the countries.⁰⁷

Expected next steps

- Fifteen identified road projects for FY2015-16 would be bid under the PPP model with an investment of USD1.9 billion.⁰⁸
- NITI Aayog (Policy and Planning Think tank of the government) has allocated about 20 per cent of the total investment of USD1 trillion envisaged during the twelfth Five Year Plan (2012-17) to develop roads. The target is to achieve 85,000 km road network from 79,116 km in FY2012-13 by the end of plan period.⁰⁹
- The government announced plans for completion of 100,000 km of roads under construction and further approved 100,000 km to connect remote locations.¹⁰
- The government aims at building 30km road stretch per day from 2016, to develop 66,117km of roads.¹¹



^{06. &#}x27;6 Asian highways in India you probably don't know about', India Today Education, accessed 21 December 2015

- 09. 'Report of the Working Group on Central Roads Sector', Ministry of Road Transport & Highways, 2011
- 'Budget 2015: Infrastructure investment to be raised by Rs70,000 crore', Live Mint, March 2015
 Investment and Technology Promotion Division website, Ministry of External Affairs, accessed 20 December

17

India, Nepal, Bhutan and Bangladesh Sign a landmark Motor Vehicles Agreement for seamless movement of road traffic among Four SAARC Countries in Thimpu', MoRTH Gol, 15 June 2015

^{08. &#}x27;Fresh push for PPP projects likely in Union Budget 2016', Live Mint, December 2015



Impact¹²

- The government has announced several incentives such as declaring the road sector as an industry, providing 100 per cent tax exemptions in any consecutive 10 years out of 20 years, duty free imports of certain identified equipment for construction plants, FDI of up to 100 per cent and increased concession periods of up to 30 years.¹²
- Increased demand for goods and commodities are expected in view of the completion of the National Highway Development Project (NHDP), which aims at developing 50,000km of national highways by 2015 in 7 phases with an investment of USD55.1 billion.¹²
- At least 50 lakh (5 million) jobs expected to be created in the highways and shipping sectors by 2020.¹³
- The trans-border initiatives within the subcontinent would foster intra-regional trade and enhance regional cooperation, leading to an increase in imports, exports and new opportunities for trade and business.¹⁴
- Positive impact on social development and inclusion of distant regions that are still unconnected.

Business opportunities

- Significant rise in new investment options, particularly in many of the projects under Phase III (approximately 9,100km, USD19.41 billion) of the NHDP, which are expected to be awarded on a BOT basis.¹⁵
- As FDI of up to 100 per cent under the automatic route is allowed for support services to road transport, cargo handling, construction and maintenance of roads, bridges, and construction and maintenance of roads and highways could benefit.
- Major initiatives to upgrade and strengthen highways and expressways are:
 - The Eastern Peripheral Expressway a 135kmlong, six-lane expressway with a total project cost of USD750 million would decongest Delhi traffic. An agreement has been signed; expected project cost (EPC) is — USD3.7 billion.¹⁶
 - The Delhi–Meerut Expressway (a 150km project with a total project cost of USD1 billion).¹⁶
 - The Vadodara–Mumbai Expressway, a 473km expressway with a total project cost of USD4.3 billion would provide faster access to the economic hubs of Mumbai, Vadodara and Ahmedabad. The Vadodara–Mumbai Expressway, a 473km expressway with a total project cost of USD4.3 billion would provide faster access to the economic hubs of Mumbai, Vadodara and Ahmedabad.¹⁶
- The value of roadways and bridge infrastructure in India is expected to grow at 17.4 per cent CAGR until 2017, to reach USD10 billion.¹⁶

18

12. 'Logistics game changers – Transforming India's logistics industry', KPMG in India, 2013

 'New economic corridors: India on road to redefine trade ties with South Asian neighbours', The Indian Express, 18 November 2015

- 15. Investing in India, KPMG in India, January 2015
- Roads and Highways, http://www.makeinindia.com/sector/roads-and-highways, accessed on 21 December 2015

^{13. &#}x27;Govt to create 50 lakh jobs in highways, shipping sectors', The Economic Times, July 2015

Sagarmala (coastline development)

Objective

This project aims at transforming the existing ports and creating new ones with world-class technology and infrastructure. This project is also expected to integrate them with industrial clusters and the hinterland through rail, road, inland and coastal waterways.^{01,02}

Programme outlay

The government is expected to invest USD16 billion for its completion. $^{\rm 01,02}$



The Sagarmala initiative is expected to tackle underutilised ports by focussing on port modernisation, efficient evacuation and coastal economic development.⁰²

Sagarmala would also complement the Golden Quadrilateral project and would provide sea connectivity to major industrial centres approachable through sea route.⁰³

 'Press Information Bureau website, accessed, 15 December 2015, http://pib.nic.in/newsite/PrintRelease. aspx?relid=117691

^{01. &#}x27;Sagarmala - Building Gateways of Growth', Ministry of Shipping, 5 October 2015

^{02. &#}x27;Modi's Sagarmala Initiative for Development of Coastal and Port Cities', Maps of India, 5 July 2015



Steps taken so far

Funding for ports

An estimated USD10.9 billion shall be required for the development of 12 major ports. While a major part of the investment would be made by the government, some projects would be developed through the PPP model.⁰⁴

An estimated initial investment of USD108 million for the first phase of development in FY2014-15 will be required. $^{\rm 05}$

National study

The government is expected to carry out an extensive study for thorough and integrated planning for Sagarmala.⁰⁵

Submission of investment proposals

Andhra Pradesh has submitted investment proposals worth USD625 million to develop ports and connectivity infrastructure along its coastline.⁰⁶

JNPT SEZ sent for approval

- The master plan of the Jawaharlal Nehru Port Trust Special Economic Zone (JNPT SEZ) of approximately 275 hectares had been sent for approval to the Ministry of Shipping, and its construction is expected to commence in early 2016.⁰⁷
- The government expects to attract an investment of USD500 million from Indian and global industrialists. The Port Trust would invest USD73 million.⁰⁷

Expected next steps

Port based city development

Developing twelve smart cities near ports at an investment of USD7.8 billion. $^{\mbox{\tiny O8}}$

Redevelopment of existing infrastructure

Port handling equipment would be upgraded, and monitoring and operations of port activity would be improved. The government plans to extensively use Information Technology enabled Services (ITeS) for modernising ports.⁰⁸

Development of CEZ

Ten Coastal Economic Zones (CEZ) would be established.09



 Sagarmala project: Government to spend Rs 70,000 crore on 12 major ports, says Nitin Gadkari, The Economic Times, 6 October 2015
 Sagarmala: Concept and implementation towards Blue Revolution', Government of India, 25 March 2015

06. 'State submits Rs. 4,000 cr. worth proposals under Sagarmala', The Hindu, 18 July 2015

- JNPT SEZ moves ahead, master plan sent for nod', The Times of India, 14 July 2015
 Modi's Sagarmala Initiative for Development of Coastal and Port Cities', Maps of India, 5 July 2015
- 09. '10 coastal economic zones to be developed', The Times of India, November 2014



Impact¹⁰

Economic boost

The development of CEZs would lead to increased economic activity, aiding 2 per cent boost to GDP growth.¹¹

Increased traffic and capacity

The coastal and inland waterways traffic is expected to increase 15 times over the next 20 years. Similarly, capacity augmentation would lead to 5 times their current traffic capacity over the mentioned period from the existing 350 million tonnes.¹²

Urbanisation and development

The project would lead to the urbanisation of coasts and development of cities/states along the coastline.

Renewable energy development

Offshore wind power generation is expected to be tapped along the coastline development, for offering viable offshore wind power generation.

Business opportunities

Development of ports

The government is expected to invest USD10.9 billion on the development of 12 major ports involving large-scale construction projects.¹³

Development of CEZs and townships

To establish CEZs along the coastline and develop areas in the vicinity of the ports, the government is expected to push development of townships to provide extensive opportunities for real estate developments.

Development of national and inland waterways

The project would lead to the development of fully integrated coastline through inland and mega waterways. The World Bank has provided USD655 million for the development of 5 existing national waterways.¹⁴

Logistics parks

Port development will facilitate new logistic parks and lead to development of road and rail connectivity around the region.

Dredging business

The Sagarmala project aims to involve the widening and deepening of channels to accommodate large vessels. Considering that dredging activities constitute at least 5 per cent of the port development costs, the sector is expected to add an additional revenue of USD78 million every year.¹⁵

Tourism

The development of marinas and modern jetties, along with coastal tourist circuits, along the coastline is expected to increase the scope of tourism activities, such as luxury yachting and holiday cruises.¹⁶

Ship building and repair

Coastline development will boost ship building and related MRO activities across the country. Foreign participation would play a key role here.

Skilling infrastructure

Skill development centers such as maritime institutes would benefit from this programme; there will be greater need for skilled manpower to operate modern infrastructure.

10. 'Sagarmala – Building Gateways of Growth', Ministry of Shipping, 5 October 2015

11. 'Modi's Sagarmala Initiative for Development of Coastal and Port Cities', Maps of India, 5 July 2015

12. Ministry of Shipping, accessed 18 December 2015

13. 'Government to spend Rs 7000 crore on 12 major ports', The Economic Times, October 2015

14. 'India's Sagarmala Project: An Idea Whose Time Has Come', NexusNovus, 13 April 2015

- 15. 'Sagarmala project to up DCI revenue', The Business Standard, 25 February 2004
 - 16. 'Policy Watch: Sagarmala- Port of call', DNA India, 1 June 2015

Inland waterways developing an alternate mode of transportation

Objective(s)

Developing Inland Waterways Transport (IWT) to help enhance an alternative mode for transportation of goods, to decongest existing models as well as realising advantages in terms of fuel and cost savings.⁰¹

Investment

The proposed 101 inland water ways would require an estimated investment of USD5.5 billion over the next 2 years.⁰¹



Within the scope of 14,500km navigable inland waterways, 5 National Waterways (NWs) — NWs 1, 2, 3, 4 and 5 — spanning approximately 4,400km have been outlined as potential inland waterways, which are the Ganges river, the Brahmaputra river, the West Coast Canal, Godavari and Krishna river, and the East Coast Canal, respectively. Also proposed is NW 6, which stretches along 121km of the Barak river.⁰²

Inland water ways account for only 3 per cent of India's total transport, compared with 47 per cent in China and 44 per cent in the European Union. 01

02. Presentation on Indian Inland Waterways, 13 March 2012, IWAI; KPMG in India's analysis

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^{01. &#}x27;Inland waterways policy: Dredging through the silt', The Indian Express, 19 August 2015



Steps taken so far

- The Union Cabinet has decided to approve 101 additional inland waterways as NW for navigation.⁰³
- IWT has its advantage over road and rail, especially for bulk transportation (coal and cement) and over dimension cargo. The following are among some flagship examples that employ IWT as a cost-effective transport option:
 - Food grains from Kolkata to Tripura via Ashuganj and within Assam⁰⁴
 - Transportation of coal for National Thermal Power Station (NTPC) — Farakka project⁰⁵
 - Transportation of fly ash from West Bengal to $Bangladesh^{\rm 06}$
 - Hot-rolled (HR) coils from Kolkata to Tripura via Ashuganj.⁰⁷
- According to the Inland Waterways Authority of India (IWAI), 16 waterway projects have already been completed at a cost of USD2.3 million.⁰⁷
- Construction of 17-metre-long floating terminals has been completed at 20 places on the Brahmaputra river. Further such projects have been initiated at 15 places by the Assam government, scheduled to be completed by December 2016.⁰⁶

Trans-border initiatives

- India and Bangladesh inked an agreement on coastal shipping for two-way trade through ports in June 2015, renewing the 1972 Protocol on Inland Waterways Transit and Trade (PIWTT) for using their waterways for commerce.⁰⁹
- The Kaladan Multi-Modal Transit Transport Project was jointly identified by India and Myanmar to create multimodal transport for shipment of cargo between the nations. The project includes construction of an integrated port and inland water transport (IWT) terminal, development of a navigational channel, and construction of a highway transhipment terminal.¹⁰

Expected next steps

Infrastructure and capacity¹⁰

- Incentives to develop additional smaller berths for domestic cargo ships (which use 55 per cent of total voyage time in port delays) at ports
- Increasing vessel capacity
- Domestic cargo corridors for first and last mile connectivity with ports.

Policy initiatives¹⁰

- Co-loading of domestic and EXIM cargo is expected on coastal vessels; while co-loading is already allowed for Indian flag vessels, decision is awaited for foreign flag vessels.
- Policies around subsidies for capital investments in coastal shipping could be revisited, similar to roads, rails and air sectors.
- IWT governance could be centralised under a single body (e.g. IWAI), which is, at present, carried out under multiple authorities such as CIWTC, port authorities and state governments.

08. 'After Myanmar, New Waterways in Offing to Link India, Bangladesh', The New Indian Express, October 2015

^{03. &#}x27;Inland waterways policy: Dredging through the silt', The Indian Express, 19 August 2015

^{04. &#}x27;Rice-ferrying to Tripura starts via Kolkata-Bangladesh route', Business Standard, March 2015

^{05. &#}x27;NTPC takes river route to ship coal', The Telegraph, October 2013

^{06. &#}x27;Bilateral water transport deal favours Bangladesh', BusinessLine, July 2012

^{07. &#}x27;New waterways in offing to link India, Bangladesh', Business Today, 27 October 2015

Undian Bangladesh business set to grow through ports, waterways', The Economic Times, June 2015
 Logistics game changers – Transforming India's logistics industry, KPMG in India, February 2013

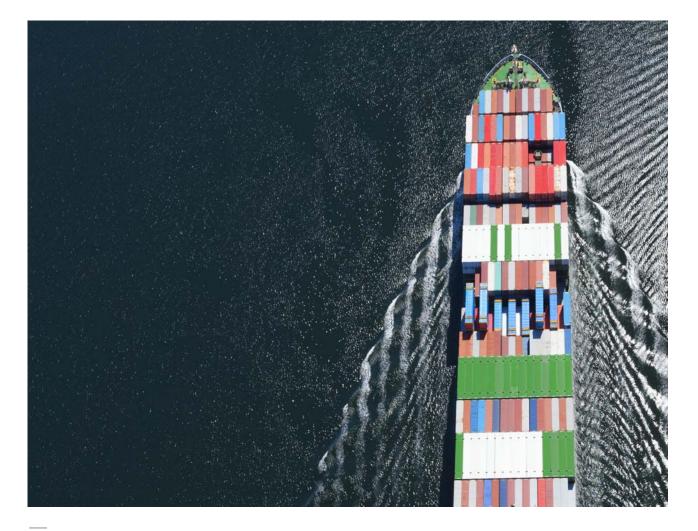


Impact¹¹

- Developments in power projects in the north eastern region are expected to generate cargo movements of about 50 to100 million metric tonnes over a period of 20 years, where IWT could complement the cargo transportation needs.
- Domestic shipping is advantageous over road and rail transport, as fuel consumption for every tonne-km of freight shipped is only 15 per cent and 54 per cent of fuel consumed by road and by rail, respectively, with comparable less emissions.
- For bulky consignments, coast-to-coast and inland carriage of goods by shipping costs merely 21 per cent and 42 per cent by road and by rail, respectively.

Business opportunities

- Several investments would be channelised towards infrastructure development.¹²
- NW 4 and NW 5 would span 1,078km and 588km, respectively, and are expected to be developed at approximately USD1 billion and USD2.7 billion, respectively; commercially viable stretches would be developed through the PPP route.¹¹
- Specialised modernisation and technological knowledge would be significant considerations for the participating companies.



11. Logistics game changers – Transforming India's logistics industry, KPMG in India, February 2013

^{12. &#}x27;Inland waterways policy: Dredging through the silt', The Indian Express, 19 August 2015

Housing for All by 2022 a home for every family

Objective

Launched in June 2015, Housing for All by 2022 (HFA) aims at providing a home for all Indian families by 2022, by promoting affordable housing for the weaker sections through credit-linked subsidy and providing affordable housing through public and private stakeholder collaborations. It also seeks to provide subsidy for beneficiary-led individual house construction or betterment.⁰¹

Investment/outlay⁰¹

- The central government would grant USD1,505 per house, on an average, under the slum rehabilitation programme. The state governments could also deploy the slum rehabilitation grant to applicable projects.
- Subsidy pay-out on Net Present Value (NPV) basis would be about USD3,400 per house for Economically Weaker Sections (EWS) and Low Income Groups (LIG) categories.
- Under the Affordable Housing in Partnership scheme, central assistance of approximately USD2,200 per house for EWS category would be provided for individual house construction/enhancement.



By 2050, the urban population is set to reach more than 814 million, an increase of about 400 million from the current level.⁰² Moreover, EWS and LIGs account for 96 per cent of the current housing shortage in urban India.⁰³ Hence, the government aims at constructing 20 million houses in the next 7 years by 2022 to counter the shortage.⁰⁴

The plan shall be implemented in 3 phases – Phase I (April 2015 to March 2017) to cover 100 cities, Phase II (April 2017 to March 2019) to cover additional 200 cities and Phase III (April 2019 to March 2022) to cover the remaining Cities. Benefits according to the Credit linked subsidy component would be started across the country in all statutory towns immediately.⁰¹

'Housing for All scheme gets govt nod: All you need to know', Business Today, September 2015
 'Government's housing scheme can give Rs 15 trillion boost to GDP', The Economic Times, July 2015

25

^{01. &#}x27;Housing for All by 2022' Mission – National Mission for Urban Housing,' accessed on 3rd December 2015

^{02. &#}x27;India builds first 'smart' city as urban population swells', The Times of India, April 2015



Steps taken so far

Increase in annual income cap

Annual income cap has been raised to USD4,516 from USD1,505 earlier for EWS and to USD4,516 to 9,031 from USD1,505 to 3,010 earlier for LIG. 03

Increase in unit size for EWS

Minimum unit size for EWS housing has been increased to 30 sq m from the current 25 to 27 sq m. 03

Increase in interest subsidy component

Interest subvention component has been increased to 6.50 per cent on loans. $^{\scriptscriptstyle 03}$

MoA signed by 22 states

By December 2015, 22 states signed a Memorandum of Agreement (MoA) with the housing ministry to implement 6 mandatory reforms to make the housing mission a success, which include Andhra Pradesh, Arunachal Pradesh, Bihar, Chhattisgarh, Gujarat, Himachal Pradesh, Jammu & Kashmir, Jharkhand, Kerala, Madhya Pradesh, Manipur, Meghalaya, Mizoram, Nagaland, Odisha, Punjab, Rajasthan, Sikkim, Tamil Nadu, Telangana, Uttarakhand and West Bengal.⁰⁴

States agreed upon the following reforms⁰⁵

- Do away with the requirement of a separate nonagricultural permission if the land for the project fell in a zone earmarked in the master plan of the city/town as residential.
- Amend or make master plans by earmarking land for affordable housing.
- Make a single-window and time-bound clearance system for layout approvals and building permissions.
- Do away with approvals below certain built-up area size or plot size for EWS and LIGs.
- Change existing rent laws, in line with the Model Tenancy Act.
- Provide additional floor area ratio (FAR), floor space index (FSI) or transferable development rights (TDR) and relax density norms for slum redevelopment and low-cost housing.

Maharashtra government clears HFA

In December 2015, the Maharashtra Cabinet cleared a decision to implement the Housing for All by 2022 scheme in 51 towns. $^{\rm 06}$

SLNAs established

As on 1 December 2015, the above mentioned 22 had established State Level Nodal Agencies (SLNAs).⁰⁴

05. '305 cities and towns identified for building homes under 'Housing for All by 2022' mission,' accessed on 3rd December 2015

SLSMCs formed

As on 1 December 2015, 18 states had formed the State Level Sanctioning and Monitoring Committee (SLSMC) — Andhra Pradesh, Arunachal Pradesh, Bihar, Chhattisgarh, Gujarat, Haryana, Himachal Pradesh, Jharkhand, Madhya Pradesh, Mizoram, Nagaland, Odisha, Puducherry, Rajasthan, Tamil Nadu, TelanganaUttarakhand and West Bengal.⁰⁴

Cities selected for HFA

About 1,049 cities (278 Class I cities) of 22 states already selected — Andhra Pradesh (60), Arunachal Pradesh (29), Chhattisgarh (36), Gujarat (57), Haryana (9), Himachal Pradesh (13), Jammu & Kashmir (25), Jharkhand (14), Kerala (14), Madhya Pradesh (74), Manipur (28), Meghalaya (10), Mizoram (23), Nagaland (23), Odisha (42), Punjab (139), Rajasthan(40), Sikkim (8), Tamil Nadu (191), Telengana (28), Uttarakhand (61) and West Bengal (125).⁰⁴

Expected next steps

Shorter timelines

Shorten the long gestation period of 6 to 8 years for real estate projects by reducing multiple approvals from multiple authorities.

Funding

Provide adequate long-term funding across the project life cycle for it to be developed smoothly.

Reduce fees and taxes

Rationalise multiple fees and taxes across project stages, which increases construction cost by 30 to 35 per cent.

Incentives in real estate sector

Invite additional investments in the real estate sector by providing several incentives. The 5 to 6 per cent CAGR observed in housing investments over the last few years would fall short of requirements.

Granting infrastructure status

The government could look at granting an infrastructure status to affordable housing to attract higher investment.⁰⁷

The following statistics depict the current progress of the Housing for All by 2022 scheme⁰⁴:

Measure	Number
Cities/towns selected	1,049
States signed MoA	22
States where SLNAs established	22
States where SLSMCs formed	18

06. 'Maharashtra Cabinet nod for 'Housing for All' scheme', The Hindu, December 2015

07. 'Decoding housing for all by 2022,' accessed on 3rd December 2015

^{03. &#}x27;Housing for All scheme gets govt nod: All you need to know,' accessed on 3rd December 2015

^{04. &#}x27;Progress - PMAY,' accessed on 3rd December 2015



Impact

- To boost economy significantly by 2022
 - Sectors like cement, iron and steel, which supply inputs to the construction industry would be one of the leading beneficiaries
 - Other sectors like construction equipment, paints, etc., would also benefit.
- Safe and hygienic conditions to lead to healthier lifestyle
 - Relocation of population from slums into house would ensure lesser chances of diseases and infections.
- Employment rates would increase, considering the labour-intensive nature of the real estate sector; increased employment would aid in poverty alleviation.

Business opportunities

- Significant business opportunities for players in the construction and real estate industry, who are also likely to attract significant investments due to business demand.
- According to a report published by KPMG in India and NAREDCO, India would require 110 million houses by 2022. Currently, it has a shortage of around 60 million units. This would lead to employment generation as the sector's manpower requirement would soar to 92 million by 2022.⁰⁸
- Ancillary equipment and service providers to the real estate sector would receive a demand boost.

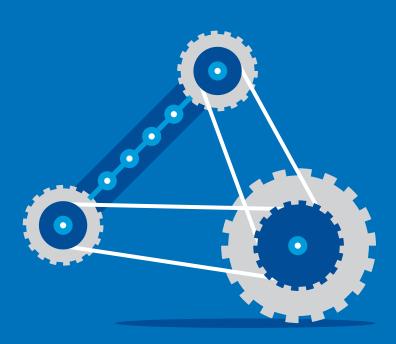


08. 'Decoding housing for all by 2022,' accessed on 3rd December 2015

Make in India making India the go-to destination for manufacturing

Objective(s)⁰¹

The initiative aims at enhancing manufacturing through investment, innovation, and by building best-in-class manufacturing infrastructure.



01. Make in India, http://www.makeinindia.com/home



Accelerating growth of the manufacturing sector is key to stimulate higher economic growth of a nation. To this effect, the Make in India flagship initiative was launched in 2014 to give a comprehensive push to industrial development by introducing a business friendly regulatory environment, enhancing the ease of doing business and improving manufacturing infrastructure, among others.

The initiative is based on 4 fundamental principles, which are mentioned below:

New processes

The Government of India (Gol) recognised Ease of Doing Business (EoDB) is critical to attract investments into the country. Thus, it introduced new de-licensing and deregulation measures to significantly reduce complexity in the government procedures and help increase efficiency and transparency.⁰¹

New infrastructure

The manufacturing infrastructure and innovation capacity are expected to witness growth owing to the development of smart cities and industrial clusters across different regions identified as potential investment destinations.⁰¹

New sectors

The government has liberalised norms and opened up new sectors for foreign investments under the Make in India initiative. The 10 key sectors identified by the government to play a major role in manufacturing are⁰¹:

- Aerospace and defence
- · Automobiles and automobile components
- Chemicals and petrochemicals
- Construction equipment, materials and technology
- Food processing
- Infrastructure development
- IT and electronics
- Industrial equipment and machinery
- Pharmaceuticals
- Textiles.

New mind-set

Aiming global recognition, the government tried to represent an attitudinal shift in its relation with investors through the Make in India initiative, which limits interventions in setting-up and operating manufacturing units and promotes governance.⁰¹



Steps taken so far

Invest India - investor facilitation cell

- The government has set up an Invest India agency a joint venture between the Federation of Indian Chambers of Commerce & Industry (FICCI), Department of Industrial Policy & Promotion (DIPP) and the state governments — to promote and facilitate investments.
- The agency established an Investor Facilitation Cell to guide, assist and handhold investors during the entire life cycle of the business.⁰²

Ease of Doing Business

- India improved its EoDB ranking to 130 in 2015 by constantly working on parameters that address investors' concerns on conducting business in India.
- The government has released a 98-point action plan for states and union territories, on which they were ranked on ease for investors to acquire land, get access to infrastructure related utilities such as electricity, get clearances and approvals from the government and pay taxes.

Liberalised FDI norms

The government, under its Make in India initiative, has eased FDI norms in key sectors which include defence, insurance, railways infrastructure, etc., resulting in a surge in proposals and investments that the country received in FY2015-16.

Modified Industrial Infrastructure Upgradation Scheme (MIIUS)

- Under MIIUS, 24 projects have been approved in principle, involving a central grant of about USD100 million. Out of the 24 projects, final approval was accorded to 11 projects in February 2014, and a grant of USD2.7 million was further released for 5 projects.
- So far, 5 projects have been completed in FY2014-15 as compared to 2 in FY2013-14.⁰³

Promoting merchant exports through incentives

To overcome challenges faced by exporters to ship products, the government has extended duty incentives on several products. About 110 new tariff lines or products have been introduced, including the textiles and electronics sectors, to the existing list of 2,228 products under the Merchandise Exports from India Scheme (MEIS). The duty benefits are a part of increased allocations, from USD2.8 billion to USD3.3 billion, for MEIS.^{04,05}

Protection of Intellectual Property Rights (IPR)

To modernise and strengthen Intellectual Property (IP) offices, the scheme aims at reducing transaction costs, improving transparency in the functioning of the IP offices and augmenting human resources to enable timely evaluation of applications.

Expected next steps

Net zero imports by 2020

The government aims at curtailing the net import-export balance for the electronics and IT sectors to zero by 2020. Proposals worth USD12.5 billion have been received for reviewed under the Modified Special Incentives Scheme (MSIS), launched by the government. According to the scheme, electronics manufacturers get a capital subsidy of 20 to 25 per cent from the government.⁰⁶

Start-up India mission

- The Start-up India mission to be run by DIPP, would promote bank financing for start-ups and offer them incentives. India also announced setting up of the Aspiration Fund and Atal Innovation Mission (AIM) to encourage start-ups.⁰⁷
- The government is expected to launch a slew of measures to enable and promote entrepreneurship and make India a leader in start-ups across the world.

Automotive Mission Plan

- The Automotive Mission Plan (AMP) 2016-26 was announced in September 2015 by the Society of Indian Automotive Manufacturers (SIAM) and Gol to make the country among the top 3 automotive industries in the world. The plan also envisages to grow the Indian automotive industry to USD260 to 300 billion by 2026.
- AMP aims to make the Indian automotive industry the engine of Make in India initiative.⁰⁸

Industry status for gems and jewellery sector proposed

- At present, India is a leader in global jewellery consumption with a share of 29 per cent.⁰⁹The sector contributes 6 to 7 per cent to the Gross Domestic Product (GDP) and is the second highest contributor to the nation's commodity exports with a share of 13 per cent, after petroleum products.⁰⁹ During April to September 2015, the exports from gems and jewellery sector was USD19.2 billion.¹⁰
- India is the world's largest cutting and polishing centre for diamonds and has made technological advancements in diamond cutting. It is also one of the lowest-cost producers of polished gems and jewellery.¹¹

Micro Units Development and Refinance Agency Ltd (MUDRA)

The Gol launched MUDRA Yojana (plan) in April 2015 with a corpus of USD3.1 billion and a credit guarantee fund of approximately USD470 million. The objective is to provide finance and credit support to the Micro-Finance Institutions (MFI) and other agencies, which lend money to small businesses and individuals.¹² It would also help in registering all the MFIs and introduce a system of performance rating and accreditation and thus, help the last-mile borrowers of finance to evaluate and approach the best MFIs.¹²

06. 'PM wants zero balance for electronics' import- export', The Business Standard, 5 August 2014

- 08. 'Automotive Mission Plan: 2016-26 (A Curtain Raiser)', SIAM, 8 September 2015
- 'Give industry status to gems and jewellery sector: Assocham', DNA India, 4 November 2015
 'ASSOCHAM suggests 7-pronged strategy & industry status for G&J sector', ASSOCHAM India, 3 November 2015/invest India website, accessed on 11 January 2016, http://www.investindia.gov.in/gems-and-jewelry-sector/
- Invest India website, accessed on 11 January 2016, http://www.investindia.gov.in/gems-and-jewelry-sector/
- 12. 'MUDRA Bank: Weighing the Possible Benefits', Maps of India, 8 April 2015

^{03. &#}x27;e-Book of DIPP on Good governance 2014-15', DIPP, 15 June 2015

^{04. &#}x27;Government Announces Enhanced Support for Export of Various Products and Covers Some Additional Products Through Merchandise Exports from India Scheme (MEIS)', Press Information Bureau Gol, 30 October 2015

^{05. &#}x27;Govt adds 110 new products under MEIS to boost exports', CNBC, 30 October 2015

^{07. &#}x27;Narendra Modi to make key announcements on Startup India: MoS Jayant Sinha', The Indian Express, 18 October 2015



Increased GDP

- The Make in India and other development initiatives are expected to help the country to grow at an average rate of 8.8 per cent annually during 2015-25. The nominal GDP is expected to reach USD3.4 trillion by FY2019-20 and further, to USD7 trillion by FY2024-25.¹³
- The Make in India initiative aims at increasing the manufacturing sector's share in GDP from 16 to 25 per cent by 2022.¹⁴

Revival of Indian manufacturing industry

The initiative is expected to revive the manufacturing sector and make it self-reliant. The sector grew at an annual average rate of 5.77 per cent for the period 2011-15, and Make in India initiative would push the growth rate of manufacturing to 12 to 14 per cent over the next 3 to 5 years.¹⁴

Increased employment

The Make in India initiative is expected to create employment opportunities for about 100 million additional people by 2022.¹⁵

Increase in new projects

There has been an overall increase in value of new projects announcements (government and private) on a quarter-on-quarter basis over the last 4 quarters (October 2014 to September 2015). The chart below depicts the increase:

New project announcements (October 2014 to September 2015)



Reviving stalled projects and reducing CAD

- Through initiatives led by the Prime Minister's office, the stalled projects' value has decreased from a peak of 8.5 per cent of the country's GDP in 4Q FY2013-14 to 7.6 per cent of the GDP in 2Q FY2015-16.¹⁶
- Indigenous manufacturing would gradually reduce dependence on imports and control Current Account Deficit (CAD) of the country. This is indicated by the April to June 2015 CAD which fell to a five-quarter low at USD6.2 billion (1.2 per cent of GDP) as compared to USD7.8 billion (1.6 per cent of GDP) during the corresponding period previous year. Reduced CAD was on account of a decline in merchandise imports of the nation and falling crude prices globally.¹⁷

Turning India into an attractive investment destination

- FDI equity inflows in the country totaled USD44.3 billion in FY2014-15, up 23 per cent on FY2013-14 value of USD36 billion. In the first 2 quarters of FY2015-16 (April to September 2015), FDI inflows amounted to USD16.6 billion.¹⁸
- India's ranking in the World Economic Forum's Global Competitiveness report FY2015-16, showing a jump of 16 places.¹⁹The country is also ranked as the fastest growing economy by the International Monetary Fund (IMF).²⁰

- 13. 'India to see average growth of 8.8% in next decade: D&B', ZeeNews, 29 October 2015
- 14. 'Note on Make In India', CMAI, 20 January 2015
- 15. Press Information Bureau website, Government of India, accessed 5 December 2015
- 'Ending red tape: Once a month, PM Narendra Modi steps in to revive stalled projects', Firstpost, 30 October 2015
- 17. 'April-June current account deficit narrows to 1.2% of GDP', The Economic Times, 12 September 2015
- 18. 'Fact Sheet on Foreign Direct Investment (FDI)', DIPP, 1 December 2015
- 19. 'India jumps 16 places in WEF competitiveness ranking', Livemint, 30 September 2015
- 20. 'India pips US, China as No. 1 foreign direct investment destination', The Times of India, 30 September 2015

Business opportunities

Sector	Sector brief and recent measures	Likely growth	
Automobile and auto components	The Indian automobile sector accounts for 7 per cent of India's GDP and is estimated to be the third largest market globally with an annual turnover of USD145 billion by 2016.	The Automotive Mission Plan 2026 plan envisages th the Indian automotive industry will grow to USD260 f 300 billion by 2026.	
	The government allows 100 per cent FDI in the sector through the automatic approval route.	It is expected to create 65 million additional jobs and contribute over 12 per cent to India's GDP. ²⁴	
	Foreign investments in the sector increased by 164 per cent to reach USD2.2 billion during October 2014 to April 2015 as compared to USD0.8 billion during October 2013 to April 2014. ²³	The government also launched National Mission for Electric Mobility (NMEM) 2020 to foster adoption of electric and hybrid vehicles and encourage their manufacturing in India. ²⁵	
Aviation	India is the ninth largest aviation market globally, worth USD16 billion and is poised to be the third largest market by 2020. ²⁶	The sector is expected to grow significantly with the emergence of Low Cost Carriers (LCC). Special emphasis is being given on infrastructure developmen by modernising airports and navigation systems.	
	About 100 per cent FDI is permitted in greenfield airport projects under the automatic approval route. The government has recently permitted 49 per cent FDI through the automatic route for regional air transport services. Additionally, foreign equity caps for	About 200 low-cost airports by 2035 have been proposed by the government; an investment of USD1.3 billion on non-metro projects by 2017 to modernise an upgrade airports is also proposed. ²⁷	
	non-scheduled air transport services, ground handling services, satellites-establishment and operation and credit information companies have been increased from 74 to 100 per cent. ^{21,22}	About 300 business jets, 300 small aircrafts and 250 helicopters are expected to be added to the existing fleet. ²⁷	
	India became the fastest growing aviation market of the world in June 2015, by registering a growth rate of 16 per cent y-o-y, ahead of the U.S., China and Russia. ²⁷	Additionally, steps are being taken to make India the aviation Maintenance, Repair and Overhaul (MRO) hut of Asia.	
Chemical and petrochemical	The chemicals industry accounts for 2.1 per cent of the nation's GDP with estimated revenues of USD144 billion. India is currently the third largest producer of chemicals in Asia and sixth (by output) in the world.	The industry is expected to grow at 9 per cent per annum to reach USD214 billion by FY2018-19.28	
	The government permits 100 per cent FDI under the automatic approval route. ^{21,22}		
Construction	Construction activities contribute to more than 10 per cent of India's GDP. The industry is valued at USD126 billion, employing more than 35 million people.	The sector is expected to grow to USD186.2 billion by 2017 and would need a 76.5 million workforce by 2022. ²⁸	
	About 100 per cent FDI is permitted through the automatic route for townships, cities and infrastructure development.	An investment worth USD1,000 billion is projected for the sector until 2017, 40 per cent of which would be funded by the private sector. ²⁹	
	The sector accounts for second highest FDI flow into the country. The government has, thus, eased some of its FDI restrictions for the investors recently. ^{21,22}	At present, India has an urban housing shortage of 18.8 million units. The shortage in rural India is estimated at about 48 million. ²⁰ The Gol launched Housing for All by 2022 scheme in June 2015 to provide a home for all Indians, thus presenting a significant opportunity for the investors in the sector. ³⁴	

- 21. 'Investment Opportunities under India's Mega Plans', FICCI, 13 January 2015
- 22. Make in India website, accessed on 5 December 2015, http://www.makeinindia.com/sectors
- 23. 'Make in India effect: Foreign investment up 164 pc in auto industry', The Economic Times, 17 July 2015
- 24. 'Automotive Mission Plan: 2016-26 (A Curtain Raiser)', SIAM, 8 September 2015

25. Press Information Bureau, Government of India, accessed 5 December 2015

- 'Conference Indian Aviation Sector', Ministry of Civil Aviation, 24 April 2015
 'Indian aviation growth fastest globally', DNA India, 7 August 2015
- 28. Tata Strategic Management Group, October 2015
- 29. 'Investment opportunities under India's mega plans', FICCI, January 2015
- 30. 'Housing for All by 2022' Mission National Mission for Urban Housing,' accessed on 3rd December 2015

Sector	Sector brief and recent measures	Likely growth	
	India spends 40 per cent of its total defence budget in capital acquisitions.	The private sector participation is expected to enable foreign investors to enter into strategic partnerships with Indian companies and leverage the domestic market	
	India meets 70 per cent of its defence requirements through imports. The government has recently allowed 49 per cent FDI under automatic approval route. The	demand. ^{33,34} India's defence budget is expected to grow at a CAGR of 8	
	portfolio investment limit has also been increased from 24 to 49 per cent. ^{301,32}	per cent to reach a value of USD64 billion by 2020. ^{33,34} The sector's offset clause also presents opportunities to investors. According to the clause, any foreign arms manufacturer who secures a deal/order worth more than USD46.8 million from India is required to source components worth 30 per cent of the deal value from the country. ^{33,34} This presents a USD15 billion opportunity in the next 10 to 15 years. ^{34,35}	
		The government is expected to finalise a deal with France to procure 36 Rafael Fighter aircraft at a cost of USD8.3 billion. ³⁵ The 30 per cent offset clause would present a USD2 billion opportunity for the Indian defence sector. ³⁶	
IT and electronics	The Information Technology-Business Process Management (IT-BPM) industry constitutes 8.1 per cent of India's GDP, adding about USD115 to 120 billion to the Indian economy. The sector is India's largest private employer and employs 3.1 million people.	The Digital India initiative aims at digitalising and providing basic government services online. Here, the IT-BPM sector could leverage the opportunity. Further, the sector could tap the consumer electronics market, which is expected to reach USD29 billion by 2020. ³⁹	
	The Electronic System and Design Manufacturing (ESDM) industry is estimated at USD90 to 95 billion. ³⁶ The government has received proposals worth USD1,716 billion from various companies since the launch of the Make in India initiative. ³⁷ The government allows 100 per cent FDI under the automatic approval route in ESDM ³⁶ and various IT-BPM sub-segments including software development,	The government plans to set-up semiconductor fabrication plants in the country. Two such facilities are expected to be set-up in Gujarat and Uttar Pradesh, where the government would invest USD10 billion for computer-chip manufacturing. ³⁸ India would also invest USD400 million	
		to develop a microprocessor. ³⁹ A dedicated Electronics Development Fund had been created to leverage the use of venture capital funds to promote start-ups in the sector. ⁴⁰	
	testing, consultancy, research and analysis services.	The government also launched the Digital India initiative, and the India Inc. has committed an investment of USD70. billion to provide telephony and fast internet. ⁴¹	
Food processing	India's food processing sector ranks fifth globally in terms of exports, production and consumption. The sector amounted USD13.2 billion in FY2012-13,	India's strategic geographic location and proximity to food importing nations makes it a favourable choice for export of processed food.	
	accounting for 9.8 per cent of the GDP. ⁴² The government allows 100 per cent FDI through the automatic approval route for most food products. ⁴³ It has also set up 42 mega food parks through PPP model with an investment of USD1.5 billion. ⁴⁴	India is the largest beef exporter, largest pulses and millet producer, and the second-largest rice and wheat producer globally. ^{45,46} Therefore, the food processing market present ample opportunities for investors. Additionally, a shift toward high-protein, low-fat and organic food diet among consumers offers growth opportunities.	
		The sector is expected to grow at a rate of 11 per cent until 2018 ⁴⁷ , driven by consumer demand for packaged and ready-to-eat food.	

- 31. 'Investment Opportunities under India's Mega Plans', FICCI, 13 January 2015
- 32. Make in India website, accessed on 5 December 2015, http://www.makeinindia.com/sectors
- 33. 'Housing for All by 2022' Mission National Mission for Urban Housing,' accessed on 3rd December 2015
- 34. 'Relaxation of Offset Clause for Defence Procurement', Press Information Bureau Gol, 21 July 2015
- 'Defence equipment business has companies interested like never before', LiveMint, 20 February 2015
 'Rafale deal to be signed on eve of Hollande's India visit', The Indian Express, 26 November 2015
- PM Modi's 'Make in India' turns one: All you need to know about the initiative', DNA, 25 September 2015
- FAQs on various aspects related to Foreign Direct Investment in ESDM sector, Department of Electronics and Information Technology (DeitY), accessed 02 December 2015
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- 40. 'Indian Govt to Invest \$10 bn for Semiconductor Fab', TeleAnalysis, 28 March 2015
- 41. 'Digital India: India Inc. commits to invest Rs 4.5 trillion', BGR, 2 July 2015
- 'Contribution of Food Processing Sector to GDP (at 2004-05 prices)', Ministry of Food Processing Industries, accessed 11 December 2015
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- '42 mega food parks worth Rs 2,000 crore to be set up in the country', The EconomicTimes, December 2015
 'India Stays World's Top Beef Exporter Despite New Bans on Slaughtering Cows', The Time, 23 April 2015
- FAO website 2013 data, http://faostat3.fao.org/browse/rankings/commodities_by_country/E accessed on 7 December 2015
- 47. 'The Next Manufacturing Destination', Make in India, accessed 02 December 2015

Sector	Sector brief and recent measures	Likely growth	
Railways	With a network spanning more than 65,000 kms, the sector at present employs 1.4 million people. ⁴⁸	Railways offer investment opportunities in infrastructure modernisation and high speed rail	
	The government has recently allowed 100 per cent FDI under automatic approval route for railway	networks. The government aims to award projects worth USD1,000 billion through the PPP model. ⁴⁸	
	infrastructure. ⁴⁹	The railway ministry envisages an investment of USD132.4 billion by 2020.50	
		The government's proposal to expand the rail network — increasing the track length by 20 per cent, increasing	
		Increasing the track length by 20 per cent, increasing the passenger and freight carrying capacities — would present multi-billion opportunities for investors. ⁵¹ Also, increased manufacturing activity would entail the need of transporting commodities and coal within the country.	
Renewable energy	Under the automatic approval route, 100 per cent FDI is permitted for renewable energy generation and	The country has revised its renewable energy targets for 2022, totalling 175GW from the sector, constituting	
	distribution projects. ⁵¹	• Solar energy — 100GW	
	India has a current installed capacity of 34.5GW of renewable energy with a major share of wind energy	Wind energy — 60GW	
	at 22.6GW. ⁵²	• Biomass energy — 10GW	
		• Small hydro energy — 5GW. ⁵³	
		The government has announced development of Ultra Mega Solar Power Projects and Solar Parks with an investment of USD156 million. Additionally, the country has untapped potential of 102.8GW of wind energy as compared to current capacity of 21.1GW. ⁵³	
		About 4.8GW of solar power capacity would be auctioned during November 2015 to April 2016, with 90 per cent of the capacity to be floated through the central government. To tap the potential market, a Japanese consortium has set up a Joint Venture (JV) with an Indian telecom provider to bid for contracts. Similarly, a U.S. based renewable energy firm intends to invest USD15 billion by 2022 in India. ⁵³ India is likely to add 10.8GW solar capacity in FY2016-17. ⁵¹	
		A recent Supreme Court judgement also makes it mandatory for industries with captive power plants to procure a percentage of their energy from renewable sources. ⁵⁴	

- 'Railways', Investment and Technology Promotion Division Gol, September 2015
 Make in India website, accessed on 5 December 2015, http://www.makeinindia.com/sectors
- 50. 'Highlights of the Railway Budget 2015-16', Indian Railways, 25 February 2015
- Indian Railways website, http://www.indianrailways.gov.in/railwayboard/uploads/directorate/finance_ budget/Budget_2015-16/English_Speech_Highlights_2015-16.pdf accessed 11 December 2015
- 52. 'Renewable Energy in India: Growth and Targets', Ministry of New and Renewable Energy, 13 May 2015
- 'For Investors, India's Solar Push Could Signal A Gold Rush', The Forbes, 7 July 2015
 'India's Supreme Court Reinforces Renewable Energy Targets for Industry', World Resources Institute, 17 June 2015

Sector	Sector brief and recent measures	Likely growth	
Textile and garments	India has the second largest manufacturing capacity globally in textiles and garments. ⁵⁵ The industry contributes 14 per cent to country's industrial production, 4 per cent to GDP and 13 per cent to	The Indian textile and apparel industry (domestic sales and exports) is expected to grow from USD107 billion at present to USD223 billion by 2021. ⁵⁷ The sector has a potential to generate additional 6.31	
	exports, and is expected to reach a value of USD100 billion by 2017. ⁵⁶	million jobs between 2013 and 2022.58	
	Under the automatic approval route in the textile sector, 100 per cent FDI is allowed. $^{\rm so}$		
Tourism and hospitality	Tourism accounted for 7 per cent of the country's GDP in 2014, contributing USD119.2 billion and generating 36.7 million jobs. ⁵⁹	India offers a geographical diversity, world heritage sites and niche tourism products like cruises, adventure, medical, eco-tourism, film, rural and	
	In tourism and hospitality, 100 per cent FDI is allowed	religion tourism.	
	under the automatic approval route. ⁵⁵	The segment offers opportunities for resorts, convention centres, motels, heritage hotels, tour operations and travel guides, and other stakeholders.	



55. Make in India website, accessed on 5 December 2015, http://www.makeinindia.com/sectors

Textiles and Garments', Make in India, accessed on 22 December 2015
 India ITME-2016 - the 'Game changer & catalyst' for Textile industry & Textile Machinery manufacturers', Textile Association of India, 15 October 2015

58. 'Textiles and Clothing Sector (2013-17, 2017-22)', NSDC report, accessed on 02 December 2015 59. 'Travel and tourism industry to grow 7.5% in 2015: report', Live Mint, 24 March 2015

Urban development -transforming Indian cities

Project outlay

The estimated outlay for the Smart Cities Mission from FY2015-16 to FY2019-20 is more than USD15 billion. $^{\rm O1}$

The estimated outlay for the Atal Mission for Rejuvenation and Urban Transformation (AMRUT) from FY2015-16 to FY2019-20 is approximately USD7.5 billion.02



art Cities Mission State es. Ministry of Urban Development, Government of India, June 2015, http:// ent & Guid

Smart cities inssion Statement ad Guidelines, funiaty of Oran Development, Sovernment of India, June 2015, http:// smartcities.gov.in/writereaddata/SmartCityGuidelines.pdf AMRUT Mission Statement and Guidelines Ministry of Urban Development, Government of India, June 2015, http://amrut. gov.in/writereaddata/AMRUT%20Guidelines%20.pdf

Smart Cities Mission

Objective(s)

The Smart Cities Mission aims to drive economic growth and improve the quality of life in the country by enabling local area development and harnessing technology, especially technology that leads to Smart outcomes.⁰¹



The Smart Cities initiative will help create cities which optimally tap into digital and information technologies, urban planning best practices, public-private partnerships, and positive policy changes.

The mission shall be implemented through area-based and pan-city developments. The area-based developments would include the following:

- Retrofitting which shall include transformation of existing built-up areas through more intensive infrastructure services and smart applications (e.g. city centres and central zones).
- Redevelopment of existing areas, including replacement of existing built-up environments to enable co-creation of new layouts with better infrastructure and land-use (e.g. redevelopment of slums).
- Greenfield developments to introduce smart solutions to the cities through innovation planning, financial planning and implementation planning tools to accommodate expanding populations (e.g. Industrial and Technology Parks and clusters, such as the Gujarat International Finance Tec-City (GIFT City) in Gujarat.

In addition to the above, pan-city developments would aim to enable the application of identified smart solutions to existing infrastructure across the cities. The application would leverage state-of-the-art Information and Communication Technology (ICT) tools to improve the living conditions and governance. (e.g. intelligent traffic management systems, waste water recycling, smart metering, etc.). The above mentioned developments have been set in place, to accommodate expanding populations in cities while improving the livability of the entire city.

Further, the core infrastructure of a smart city would include the following elements:

- Adequate water supply
- Assured electricity supply
- · Sanitation, including solid waste management
- Efficient urban mobility and public transport
- Affordable housing, especially for the poor
- Robust IT connectivity and digitisation
- Good governance, especially e-governance and citizen participation
- Sustainable environment
- Safety and security of citizens, particularly women, children and the elderly, and
- Health and education.

It has been envisaged that the area-based and pan-city development objectives would converge with other initiatives including AMRUT and Clean India Mission.

^{01.} Smart Cities Mission Statement & Guidelines, Ministry of Urban Development, Government of India, June 2015, http://smartcities.gov.in/writereaddata/SmartCityGuidelines.pdf

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Steps taken so far

Smart cities

Identification and allocation of smart cities for each state/ UnionTerritory(UT)

- A total of 100 cities have been identified for the mission⁰².
- First phase of India Smart Cities Challenge was conducted to promote competitive and cooperative federalism; about 97 cities submitted their Smart Cities Proposals (SCPs) to the Ministry of Urban Development (MoUD). Up to 20 of the best SCPs are set to be shortlisted to receive funding from MoUD after the first round.

Financing strategy

- The Smart Cities Mission is to be implemented as a centrally sponsored scheme with central government providing financial support to the extent of approximately USD7.2 billion over 5 years, which would be matched up by respective states and ULBs⁰². In addition, it is expected that funding shall come from PPP, commercial/ multinational bodies. The private sector would have a role to play by taking up projects in PPP mode or work as contractors, consultants, etc.
- Certain sectors of urban infrastructure such as power, ICT and integrated townships would bear the maximum impact of transformation. Both in terms of requirement (resources) and impact, these sectors are expected to play vital roles, and thus warrant conceptualisation of focussed financing mechanisms.

Mission statement and guidelines⁰²

- MoUD has made a comprehensive guide available, to assist states and ULBs to formulate their strategies and SCPs. The document also prescribes the implementation of Special Purpose Vehicles (SPVs) to plan, evaluate, release funds, operate and monitor the development projects under the initiative.
- Greenfield developments and other urban initiatives such as international airports, port cities and industrial clusters, among others are also being taken up to complement the Smart Cities Mission.
- To encourage the development of smart cities providing habitation for the neo-middle class, the requirement for the built up area and capital conditions for FDI are being reduced from 50,000 sq m to 20,000 sq m and from USD10 million to USD5 million, respectively. As a further impetus, projects that commit at least 30 per cent of the total project cost for low cost affordable housing would be exempted from the minimum built-up area and capitalisation requirements⁰³.

Expected next steps^{02,04}

- With the conclusion of the first round of the Smart Cities Challenge, up to 20 cities will be selected in the first year, which would be eligible to receive funding of up to USD75.75 million from the government over the next 5 years in a phased manner.
- Special Purpose Vehicles (SPVs) would be set up for the implementation of the projects as per the plan envisaged in the SCPs.
- The remaining 77 cities are expected to be funded for Smart Cities transformation, over the next 2 years.



Smart Cities Mission Statement & Guidelines, Ministry of Urban Development, Government of India, June 2015, http://smartCities.gov.iv/writereaddata/SmartCityGuidelines.pdf
 FDI in insurance to be hiked to 49 per cent: Jaitley, The Indian Express, 10 July 2014, http://indianexpress. com/article/india/politics/fdi-in-insurance-to-be-hiked-to-49-per-cent-jaitley/

04. India Smart Cities Challenge, http://smartcitieschallenge.in – accessed on 30 November 2015

Exprese 10 July 2014 http://indianeyprese

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Impact

Transformative impact on urban infrastructure

The envisaged spend for the initiative is stated to come from the MoUD, the concerned states, ULBs and PPP/ commercial/multinational bodies.

Creation of market for manufactured goods and commodities

An approach towards urban living and smart living would entail significant procurement of steel, cement, electronics, furnishings, electrical equipment, sewage plants, ICT equipment and services, etc. triggering a growth in global trade.

Improved economic efficiency

Smart cities would require augmented safety, security, sustainability and energy efficiency that could help trigger a virtuous cycle of efficiency.

Business opportunities

Significant business opportunities are foreseen for both domestic and global players in light of the potential investments required for the implementation of the Smart Cities projects.

Investment potential

- The Centre's Expenditure Finance Committee has approved a central funding of approximately USD42 billion to develop 100 smart cities and upgrade the basic civic infrastructure in another 500 cities during the next 10 years⁰⁵. However, given the scale of development, the total funding requirement would be more than USD1 trillion at present value terms over the next 20 years.
- The magnitude of investments is extremely significant for the economy. For instance, the state of Maharashtra has been allocated 10 smart cities, which would add up to a spending of approximately USD6 billion over 5 years.
- India has also invited other countries for partnership in developing the smart cities and has signed agreements to build 8 such cities — 3 with Germany, 3 with the U.S., and 1 each with Spain and Singapore⁹⁶.

The following table lists the potential business opportunities for both domestic and foreign investors through different schemes in each sector:

Sector	Investment potential		
Smart governance	USD83 million allocated for Digital India initiative.		
 Smart energy Implementation of 8 smart grid pilot projects in India with an investment of USD10 million for energy The Power Grid Corporation of India has planned to invest USD26 billion in the next 5 years; about meters would be installed by 2021. 			
Smart environment The Ministry of Water Resources plans to invest USD50 billion in the water sector in the coming year			
Smart transportation	 The Government of India has approved a USD4.13 billion plan to spur electric and hybrid vehicle production by setting up an ambitious target of 6 million vehicles by 2020. 		
	MoUD plans to invest more than USD20 billion on the metro rail projects in the coming years.		
	• The proposed 534km Mumbai-Ahmedabad high speed rail project would have an investment of about USD10.5 billion.		
Smart ICT	Cloud computing is expected to evolve into a USD4.5 billion market in India by 2016.		
	 Under the flagship Safe City project, the Union Ministry proposes USD333 million to make 7 big cities (Delhi, Mumbai, Kolkata, Chennai, Ahmedabad, Bengaluru and Hyderabad) to focus on technological advancement rather than manpower disaster management. 		

 Top govt panel approves Rs 2.73 lakh crore to modernise cities, Hindustan Times, 28 March 2015, http:// www.hindustantimes.com/india/top-govt-panel-approves-rs-2-73-lakh-crore-to-modernise-cities/story-UL8VEEHPHMMe6V96 [UPpO.html - accessed on 3 December 2016

 India's Smart City vision is part of a larger agenda of creating Industrial Corridors between India's big metropolitan cities in India, Make in India, http://www.makeinindia.com/article//v/internet-of-thingsaccessed on 3 December 2015

Sector	Investment potential
Smart building	India is expected to emerge as the world's third largest construction market by 2020, by adding 11.5 million homes every year.
	• The Intelligent Building Management Systems market is estimated to be worth USD621 million and is expected to reach USD1,891 million by 2016.
Smart health and education	• The health budget was up by 27 per cent in FY2013-14 to USD5.26 billion, with special focus on improving affordable healthcare for all.
	• FDI limit in the insurance sector increased to 49 per cent from 26 per cent.
	The Indian medical devices market is expected to reach USD11 billion by 2023.



AMRUT rejuvenation of 500 cities

Objective(s)⁰¹

Atal Mission for Rejuvenation and Urban Transformation (AMRUT) envisages urban India's transformation, by aiming to:

- 1. Ensure that every household has access to a tap with assured supply of water and a sewerage connection;
- 2. Increase the amenity value of cities by developing greenery and well maintained open spaces (e.g., parks); and
- 3. Reduce pollution by switching to public transport or constructing facilities for non-motorised transport (e.g., walking and cycling).



The primary purpose of the flagship initiative, AMRUT, is to provide basic services such as water supply, sewerage and urban transport to every household in order to improve the quality of life, while promoting equitable access to city services. Among the estimated 4,040 urban zones in India, about 500 would be targeted through AMRUT.

The objectives of AMRUT constitute the Service Level Benchmarks (SLBs). The capacity building and supportive reforms, which act as integral parts of the mission, aim at improving service delivery, resource mobilisation and greater transparency in municipal functioning and capacity building in order to empower municipalities and increase their operational efficiency. The mission envisages to focus on the following Thrust Areas $^{\mbox{\tiny O2}}$:

- Water supply
- Sewerage facilities and septage management

- Storm water drains to reduce flooding
- Pedestrian, non-motorised and public transport facilities, parking spaces, and
- Enhancing amenity value of cities by creating and upgrading green spaces, parks and recreation centres, especially for children.

02. Thrust Areas, AMRUT, Ministry of Urban Development, Government of India, http://amrut.gov.in/ writereaddata/Thrust%20Areas.pdf

^{01.} The Mission, AMRUT, Ministry of Urban Development, Government of India, http://amrut.gov.in/ writereaddata/The%20Mission.pdf



Steps taken so far

Identification of cities⁰³

About 500 cities have been selected based on the following criteria:

- All cities and towns with a population greater than 100,000, having notified municipalities, including cantonment boards (civilian areas)
- All capital cities/towns of states/UTs, not covered under the 100 Smart Cities Mission
- All cities/towns classified as heritage cities by MoUD
- Thirteen cities and towns on the stem of the main rivers with a population between 75,000 and 100,000
- Ten cities from hill states, islands and tourist destinations (not more than 1 from each state).

Identification of mission components⁰⁴

MoUD has identified capacity building, reform implementation, water supply, sewerage and septage management, storm water drainage, urban transport and green-space development as the chief components of the mission.

Finance strategy⁰⁵

With a total estimated outlay of USD7.5 billion for the period between FY2014-15 and FY2018-19, the initiative is to be operated as a centrally sponsored scheme. The funds would consist of the following:

- 1. Project fund (80 per cent of the annual budgetary allocation)
- 2. Incentive for reforms (10 per cent of the annual budgetary allocation)
- 3. State funds for administrative and office expenses (8 per cent of the annual budgetary allocation)
- 4. MoUD funds for administrative and office expenses (2 per cent of the annual budgetary allocation).

Reform milestones⁰⁶

The reform milestones with corresponding timelines for AMRUT cities have been created in order to constitute a guiding source for ULBs and states. The areas covered by the milestones are e-governance, creation and adding professional approach to municipal cadre, review of building by-laws, accountability and auditing, city level plans, devolution of funds, setting up financial intermediaries, tax and user fee collection, credit rating, energy and water audit, sanitation and hygiene (alignment with the Clean India Mission).

Capacity building

For individual capacity building⁰⁷, key departments in ULBs have been identified as follows:

- Finance and revenue
 Financial planning and management, and revenue
 mobilisation
- Engineering and public health Water and sanitation, drainage and solid waste management
- Town planning Urban planning including pro-poor planning approaches
- Administration e-Governance, computer and soft skills.

The aim of institutional capacity building⁰⁷, is to improve institutional outcomes including accountability and transparency, service delivery, citizen empowerment and resource mobilisation. Institutional capacity could be built upon accountability and transparency, service delivery, citizen empowerment and resource mobilisation.

Expected next steps⁰⁸

- State governments shall formulate and submit their State Annual Action Plans (SAAP) under AMRUT.
- Post the appraisal and approval by the Apex Committee, states shall invite consultants to help formulate the plans.
- Consequently, the states shall invite vendors to execute the plans.
- City level Action Plans have been approved for 474 cities in 18 States and union territories with a total project expenditure of about USD2.94 billion under AMRUT for FY2015-16⁰⁹.

 Coverage, AMRUT, Ministry of Urban Development, Government of India, http://amrut.gov.in/writereaddata/ Coverage.pdf

- write readuate/inters/z0virission.pdf
 05. Fund Allocation, AMRUT, Ministry of Urban Development, Government of India, http://amrut.gov.in/ writereaddata/Fund%20Allocation.pdf
- writereaddata/tund%20Allocation.pdf 06. List of Reforms, AMRUT, Ministry of Urban Development, Government of India, http://amrut.gov.in/ writereaddata/List%20of%20Reforms.pdf
- Individual Capacity Building, AMRUT, Ministry of Urban Development, Government of India, http://amrut.gov. in/writereaddata/Individual%20Capacity%20Building%20Plan.pdf
- AMRUT Action Plans for 474 cities cleared with a project outlay of Rs.19,170cr, Press Information Bureau Government of India, 15 December 2015, http://pib.nic.in/newsite/printrelease.aspx?relid=133300
- Execution Steps, AMRUT, Ministry of Urban Development, Government of India, http://amrut.gov.in/ writereaddata/Execution%20Steps.pdf

The Mission, AMRUT, Ministry of Urban Development, Government of India, http://amrut.gov.in/ writereaddata/The%20Mission.pdf



Impact

Multiplier effect/complementarity

AMRUT holds significant implications for urban transformation vis-à-vis the 100 Smart Cities Mission. While the former has a project-based approach, the latter follows an area-based strategy.

On the other hand, at the planning stage itself, cities have been instructed to converge their smart city planning, aligning them to the objectives of AMRUT, Clean India Mission, National Heritage City Development and Augmentation Yojana (HRIDAY), Digital India, Skill Development, Housing for All, construction of museums funded by the Department of Culture and other programmes connected to social infrastructure such as health, education and culture.

Enhanced operational efficiencies of cities10

The reforms of the mission aim at enhancing the operations and efficiencies of ULBs and capacity building in order to empower municipal functionaries and enable timely completion of projects.

Business opportunities

investment is estimated at USD15.15 million per city, for 500 cities, over the next 5 years¹¹. AMRUT is expected opportunities for investments:

- 1. Digitisation of ULBs offers scope for integrated platforms and services such as digital registries registration and taxation, issuance of licenses, construction permits, personnel training, MIS, grievance redressal system, energy and water audit, e-procurement and e-governance.
- 2. Creation of municipal cadre where personnel requirements to operationalise the objectives of capacity building in ULBs would present scope for specialised cadre training programmes.
- 3. Water management components of the mission plants, pipelines, metering and grid management solutions, de-silting, ground-water recharge, etc.
- decentralised underground sewerage networks, sewage treatment plants, waste collection-transporttreatment integration, septage cleaning-transporttreatment, storm water drainage and reuse, etc.
- to invest in ferry vessels, pathways, skywalks, non-motorised transport, multi-level smart parking, bus
- landscaping, creating of green infrastructure (parks, ponds, etc.), vertical greening, etc.
- like implementation, consulting, monitoring and evaluation services.



The Mission, AMRUT, Ministry of Urban Development, Government of India, http://amrut.gov.in/ writereaddata/The%20Mission.pdf

11. Fund Allocation, AMRUT, Ministry of Urban Development, Government of India, http://amrut.gov.in/ writereaddata/Fund%20Allocation.pdf

Power for All a step toward affordable power

Objective

Launched with an aim of providing 24x7 quality, reliable and affordable power supply to all Indian citizens by March 2019.01 $\,$

Investment outlay

The Government of India has planned an investment of USD45.2 billion in power transmission and distribution business to achieve its targets under the Power for All initiative.⁰¹



01. Government eyes Rs 3-trn investment, reforms to light up power sector', The Financial express, 28 December 2015.



As a joint initiative of the Government of India (Gol) and the state governments, 24x7 - Power for All (24x7 PFA), has an objective of providing 24x7 power to all households, industry, commercial businesses, agriculture farm holdings, and any other electricity consuming entity by FY2018-19.⁰²

The Power for All programme, covers the entire spectrum of the power sector, including generation, transmission, distribution, renewables, energy conservation and customer initiatives. The programme is focussed on modernising transmission and distribution infrastructure in India.

Status

In the first phase of the programme, Andhra Pradesh has been selected, along with Rajasthan and Delhi.⁰³ Andhra Pradesh requires an investment of USD8.2 billion to electrify households and provide 24×7 power to all.⁰⁴ While, Rajasthan needs to provide connection to an additional 3 million households, which requires investment of around USD11.8 billion.⁰⁵

In 2014, the government sanctioned an amount of USD30 million to support the power transmission system in Delhi, which would enhance the reliability of power supply to consumers in the Delhi region.⁰⁶

Steps taken so far

- The Deendayal Upadhyaya Gram Jyoti Yojana and Integrated Power Development Scheme, worth USD6.5 billion, have already been initiated by the government to enhance the T&D network.⁰⁷
- National Electricity Plan for the next 5 years to outline the sector's projections is drafted.
 - The committee entrusted to chart out the National Electricity Plan, constitutes 11 sub-committees to deal with different aspects of the sector.⁰⁸
- To boost electricity distribution, Gol has announced to make amendments in the existing Electricity Act, including stricter penalties for power defaulters and providing the consumer an option to choose the power distribution company, thus encouraging competition in the sector.⁰¹
- The target of 10,000 MW of wind power installations per year has been set.⁰⁹
- The Renewable Energy Bill is prepared to expedite speedy growth of clean power generation in the country.¹⁰
- The government has announced the installation of 100,000 MW (or 100 GW) of solar power generating capacity by 2019, of which 20,000MW would be contributed by solar parks and 40,000MW each from roof-top and distributed generation projects.¹¹
- To increase the production of coal, the Parliament passed the Coal Mines Special Provisions Bill, 2015 to allocate coal blocks to state entities and private companies through auctioning.¹² As of October 2015, the government had auctioned 29 coal blocks and another 38 were allotted to the state-owned entities.¹³

Expected next steps¹⁴

 The government has planned to increase solar power capacity from 20GW currently, to 100GW and wind to 60GW, by 2022.⁰⁵

- The government aims at establishing IT-enabled smart grids with its application from power generation to power consumption for achieving its Power for All programme.¹⁵
- The government plans to focus efforts to achieve its target to double the production of Coal India Limited, (CIL) by 2019¹⁶, with 18 per cent CAGR.
- The government is expected to set up coal-based 5 new Ultra Mega Power Projects (UMPPs), under the plug and play model, involving investments of approximately USD15.1 billion.¹³
- The government has set a goal to add 115,603 MW of power capacity by 2017 and 101,745 MW between 2017 and 2022.¹⁷
- The Ministry of Power has come up with a scheme UDAY (Ujjwal DISCOM Assurance Yojana) to deal with over USD60.2 billion loans of power distribution companies (discoms) to reduce their liabilities.¹³

- 'Power for All programme', Vikaspedia, Department of Electronics and Information Technology, Ministry of Communications & Information Technology, Government of India.
- 'A Joint Initiative of Government of India and Government of Andhra Pradesh', Power for All, Ministry of Power, Government of India.
- 04. Govt scheme for 24x7 power still in nascent stage, Business Standard, 17 June 2015
- 05. 'When the NDA Promised Power for All, it Took on its Greatest Challenge', The Wire, 20 June 2015.
- 06. Landmark Initiatives Towards Achieving 24x7 Power for All, Press Information Bureau, 28 December 2014
- 07. Reforms in Power Sector, Press Information Bureau, 01 December 2014.
- 'Govt begins work on National Electricity Plan', Business Standard, 20 September 2015.
 Government aims to add 10,000 MW per year to lift wind energy sector, The Economic Times, 12 August 2014.
- 10. Renewable Energy Programmes Gets A New Impetus, Press Information Bureau, 21 December 2014.
- 11. India sets new solar capacity target of 100,000 MW by 2022, The Economic Times, 17 June 2015.
- 12. Parliament Passes the Coal Mines (Special Provisions) Bill, 2015, Press Information Bureau, 20 March 2015.
- 'Power sector in India: All you wanted to know in 5 points', The Financial Express, 19 October 2015.
 '2014: When India inched forward on providing power for all', Business Today, 29 December 2014.
- Will ensure 24x7 electricity to all Indians by March 2019, Piyush Goyal says', The Times of India, 5 December
- 2014.
- 16. Coal India to produce 1 billion tonnes by 2019: Goyal, The Hindu, 06 November 2014.
- 17. 'Electricity supply to all Indian households by 2019?', Rediff, 18 June 2015.

Government eyes Rs 3-trn investment, reforms to light up power sector', The Financial express, 28 December 2015.

- To boost clean energy generation in India, the government is drafting a legal framework to waive off transmission charges for electricity generated from renewable sources.¹⁸
- Linkages with sectors such as rail and road could be helpful for power producers. Thus, the government could emphasise on the enhancement in rail connectivity to

critical mines in the states of Jharkhand, Chhattisgarh and Odisha, which would improve the coal production by 200MT.

• To make electricity available to every Indian, there is a need for developing an off–grid solution for areas where conventional grids are unfeasible, owing to unfavourable internal conditions.

The following statistics shows the Generation Addition Planned (in MW) Summary¹⁹

Year	Thermal	Nuclear	Hydro	Renewable	Total
Till 31/08/14	176,119	5,780	40,798	31,692	254,389
FY2015-16	15,000	2,400	3,989	7,810	29,199
FY2016-17	14,000	1,900	5,100	15,000	36,000
FY2017-18	11,280	3,600	2,400	9,000	26,280
FY2018-19	11,280	3,600	2,400	9,000	26,280
Total	227,679	17,280	54,687	72,502	372,148



18. 'Power sector in India: All you wanted to know in 5 points', The Financial express, 19 October 2015.

19. 'Strategy for Providing 24x7 Power Supply', Forum of Regulators, December 2014.



Business opportunities

- The Power for All programme presents immense opportunities for foreign companies/investors for building equipment as well as setting up new utilities
- Given the significant power capacity addition plans of Gol, there exists good opportunities for foreign companies with expertise in building transmission and distribution infrastructure.
- Gol has pushed renewable energy to the top of its energy security agenda, to curtail India's dependency on coal-fuelled electricity. The government has •

set the target of achieving 175 GW of renewable energy by 2022²¹. It has waived off transmission charges for cleaner sources of power. Significant opportunities lies in the generation of solar energy, as the government plans to set up 25 solar power parks in India.²² A Japanese telecom company announced USD20 billion investment in solar energy projects in partnership with an Indian telecom giant and a Taiwanese telecom company.²³ KPMG in India expects solar power to disrupt the traditional power generation ecosystem as early as 2017 by becoming



^{20. &#}x27;Achieving 100 GW power by 2019 is a big challenge for Modi', Rediff, 3 November 2014.

Covernment aims to add 10,000 MW per year to lift wind energy sector, The Economic Times, 12 August 2014.

22. 'Japan's foreign aid arm plans to finance India solar power parks', Live Mint, 24 July 2015.

23. SoftBank, Bharti Enterprises, Foxconn announce \$20 bn solar project, The Financial Express, 22 June 2015.

UDAY a step towards brighter India

Objective

Launched to provide financial turnaround for the state-owned power distribution companies (DISCOMs), by helping them overcome outstanding debt of USD64.8 billion, as on March 2015.⁰¹





UDAY (Ujwal DISCOM Assurance Yojana) was approved by the Government of India (GoI) on 5 November 2015.

The scheme aims at improving the financial health of DISCOMs by helping them reduce interest burden and allowing them to buy power to ensure an uninterrupted supply. UDAY provides a permanent resolution to the key issues faced by the power sector through 4 key initiatives:

- Reduction in interest cost of DISCOMs, primarily through a phase-wise takeover of the DISCOMs' debt by the state governments
- Reducing the cost of power purchase
- Enhancing operational efficiencies of DISCOMs
- Enforcing financial discipline on DISCOMs through an alignment with state finances.

UDAY envisages support in the form of taking over of 75 per cent of DISCOMs' debt (50 per cent in 2H FY2015-16 and 25



per cent in FY2016-17)⁰³ by the respective state governments. Further, the reduction in interest rate for the balance 25 per cent of DISCOMs' debt, which may be issued in the form of DISCOM bonds, is guaranteed by respective state governments.

From FY2016-17, under the scheme, the states would take over the future losses of DISCOMs, in a categorised manner. The scheme also includes the following benefits⁰²:

- a. Access to additional/priority funding for implementation of capital expenditure schemes
- Availability of cheaper linkage coal in substantial quantity and low cost power from central public sector.

There are no cash incentives to state governments for debt takeover or loss reduction under this scheme. The scheme, which is optional, would be operationalised through a tri-partite agreement among the Ministry of Power, a state government and the DISCOM concerned.⁰⁴

Steps taken so far

- The government has outlined the following measures to ensure effective implementation of the UDAY scheme⁰⁵:
 - Hard budget constraints: For the DISCOMs' debt that is taken over by the respective state governments, non-SLR (statutory liquidity ratio) bonds would be issued and this would not be included in calculating the fiscal deficit of respective states in FY2015-16 and FY2016-17.
 - Losses incurred by Discoms from FY2017-18 onwards would to be taken over by respective states in a phased manner — 5 per cent of FY2016-17 loss in FY2017-18, 10 per cent of FY2017-18 loss in FY2018-19, 25 per cent of FY2018-19 loss in FY2019-20 and 50 per cent of FY2019-20 loss in FY2020-21 — the funding of which would be included while computing the fiscal deficit.
 - Regular monitoring: The government has mandated regular monitoring on the progress of this scheme through meetings involving representatives from the central government, state government and DISCOMs on the tenth day of every month.⁰⁶

- Restriction on bank funding: To ensure DISCOMs are operated in a profitable and sustainable manner, the government has made provisions in the scheme to make states more accountable for operations of DISCOMs and by restricting banks from funding their operational losses.⁰⁶
- The central government has linked availability of several central government funds such as Deendayal Upadhyaya Gram Jyoti Yojana (DDUGJY) and Integrated Power Development Scheme (IPDS) to the successful implementation of UDAY.⁰⁷
- The states entering into agreement for UDAY scheme would get additional coal, at notified prices, and if possible cheaper power from state firms.⁰⁷

Expected next steps

- The government would focus on tackling losses as a consequence of power theft and unsustainable direct subsidies.
- Formulating strategies for the state governments to sustain the losses of DISCOMs transferred to them.

- 05. Cabinet green signals rescue package for ailing discoms, The Hindu Business Line, 05, November 2015
- UDAY Scheme for Operational and Financial Turnaround of DISCOMs, Ministry of Power, 20 November 2015
 'Cabinet clears \$7-billion reform package to boost discorms, The Economic Times, 6 November 2015
- 07. Cabinet alcars \$7 billion reform package to boost alsooms, the Economic times, 6 November 2010

^{02. &#}x27;Impact Assessment of UDAY Scheme Approved by Government of India for Financial Turnaround of State Distribution Utilities', ICRA, November 2015.

http://articles.economictimes.indiatimes.com/2015-11-06/news/68071359_1_state-discoms-power-financecorporation-rural-electrification-corporation.

^{04. &#}x27;Centre OK's UDAY to turn around crisis hit discoms, bring affordable power: Top 10 things to know, The Financial express, 6 November 2015.



Impact

- Indian power plants operated at 65 per cent capacities in FY2014–15, lowest in more than 15 years. Despite strong demand from customers, financially-stressed DISCOMs have not been able to purchase power due to their poor financial health, contributing to low power load factors (PLF). Increasing the power generation capacity alone is unlikely to address the power shortage issue; financial troubles of distribution companies need to be addressed to ensure 24x7 power supply across India. Essentially, the success of the government's flagship programmes, such as Power for All, Make in India and Digital India, depends on undisrupted power availability.
- The scheme is likely to benefit DISCOMs through higher liquidity on account of immediate reduction in interest burden.
- Implementation of UDAY is likely to result in further savings, as the scheme charts out reduction in cost of power and efficiency improvement.
- The implementation of UDAY would benefit private players in the power generation sector, as the

demand for power is expected to increase with an improvement in the financial health of DISCOMs.

 The UDAY scheme would not only improve the capability of distribution companies, but it would also account for capital savings of about USD1.8 billion for Public Sector Banks (PSBs).

Business opportunities

- Due to implementation of UDAY scheme, the power generating companies would witness an increase in the demand for power.
- The renewable energy developers are likely to have more bankable PPAs with improvement in the financial position of DISCOMs. This is a good opportunity for domestic as well as foreign companies involved in renewable energy business.
- Strategy and management consulting firms could look to work with state governments and advise them to devise plans for the successful adoption of UDAY scheme.
- Improving the financial health of the DISCOMs would encourage them to invest in new electrical equipment.



Digital India -harnessing technology to enhance India's connectivity

Objective⁰¹

The vision of Digital India programme is to transform India into a digitally empowered society and knowledge economy. It would work as an 'umbrella programme' covering various sectors under its purview to lay emphasis on the national e-governance plan.

Total outlay⁰¹

About USD17.5 billion⁰² for 5 years ending 2019.

- tal India, Department of Electronics and InformationTechnology //www.digitalindia.gov.in/content/vision-and-vision-areas.
- Digital India' is to be A Game Changer for the Country, Press nformation Bureau, Gol -, 24 December 2014, http://pib.nic.i



Digital India is a flagship programme unveiled on 1 July 2015 and is designed to build capabilities across infrastructure, manufacturing, processes, skill sets and delivery platforms, which in turn would lead to the creation of a self-reliant knowledge economy. The programme builds on existing initiatives and is expected to impact almost all ministries such as Communications and InformationTechnology, Rural Development, Human Resource Development and Health & Family Welfare.

The vision of Digital India programme entails 3 key areas:

- **Digital infrastructure for every citizen:** This includes internet availability, digital identity, mobile phones, bank accounts, safe and secure cyber space, etc.
- Governance and services on demand: It includes realtime availability of services on mobile phones and online platforms, enabling electronic and cashless financial transactions possible, etc.
- **Digital empowerment of citizens:** It encompasses universal digital literacy, availability of digital resources in Indian languages, etc.

The Digital India programme is structured on 9 pillars, with each pillar specifying a different sector that is expected to be revamped and digitalised in phases through 2018. **Following are the 9 pillars under its portfolio**^{04,05}:

- Broadband highways: to provide internet connectivity to 2.5 lakh Gram Panchayats (local government bodies at the village level) by December 2016, with an investment of approximately USD5 billion. DeitY would be the nodal department.
 - Virtual network operators to be leveraged for service delivery in all new urban developments. Additionally, nationwide infrastructure have been planned to be facilitated through National Knowledge Network and National Optic Fiber Network by 2016.
- 2. Universal access to mobile connectivity: the initiative is to focus on network penetration and fill the gaps in connectivity in the country.
 - Altogether 42,300 villages would be covered for providing universal mobile connectivity in the country.
 - DoT would be the nodal department and the project cost is expected to be about USD2.5 billion during the period FY2014–18.
- 3. Public Internet Access Programme: the Common Service Centres (CSCs) would be made viable through multi-functional end-points for delivery of government and business services.
 - Number of CSCs to be increased from approximately 135,000 operational at present to 250,000 i.e. 1 CSC in each gram panchayat. DeitY would be the nodal department to implement the scheme.
 - Additionally, a total of 150,000 post offices are proposed to be converted into multi-service centres by 2016. The Department of Posts would be the nodal department to implement this scheme.

- **4. E-governance:** this would focus on government business process re-engineering using IT to improve transactions. Its focus would also cover the use of electronic databases, automation of workflow in government offices with an aim to enable government work efficiently by using IT for public grievance redressal.
- **5. eKranti:** aims at providing electronic delivery of services like education, healthcare, justice, emergency services and disaster related services, financial inclusion and cyber security.
- 6. Information for all: involves effective use of open data platform and online hosting of information and documents to facilitate open and easy access to information for citizens. Also, the platform would facilitate crowdsourcing through MyGov.in for consultation/dialogue with citizens.
- 7. Electronics manufacturing: aims to target net zero imports by 2020, through increased local manufacturing. Coordinated efforts would be taken to provide clarity on taxation, incentives, economies of scale, incubators, clusters, skill development and government procurement procedures.
- 8. IT for jobs: aims at training people in smaller towns and villages and in the north-eastern region. The telecom service providers are expected to train 500,000 people in 5 years to create rural workforce to cater to their own needs.
- **9. Early harvest programme:** it consists of those projects which are to be implemented within short timeline. All central government ministries and departments would come up with their individual projects that could be delivered to public using ICT like health services, education, judicial services, biometric attendance, Wi-Fi in all universities, secured email proposition within the bureaucratic domain, disaster alerts, national portal for lost and found children, etc.



 Digital India, Press Information Bureau, Gol, http://pib.nic.in/newsite/efeatures.aspx?relid=115276accessed on 7 December 2015.

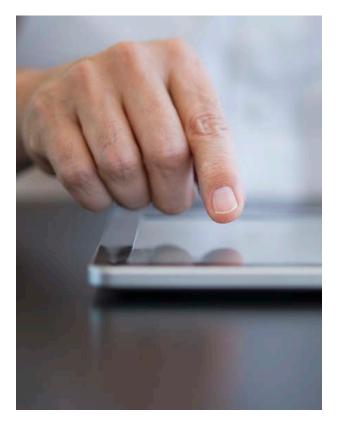
Digital India, Department of Electronics and Information Technology, http://www.digitalindia.gov.in/accessed on 7 December 2015.

^{04.} Digital India, Department of Electronics and Information Technology, http://www.digitalindia.gov.in/content/ programme-pillars - .



Steps taken⁰⁶

- **Digital locker system** was introduced to minimise the use of physical documents and enable sharing of e-documents across agencies. With a personal storage space of 10MB, it is linked to the Aadhar number of the user. India has 1,016,375 registered users and has 1,209,241 documents stored in digital form as at 3 December 2015.⁰⁷
- The Online Registration System (ORS) was introduced under e-Hospital application to provide services such as online registration, payment of fees and appointment, online diagnostic reports and enquiring availability of blood online. The portal has seen over 46,000 online bookings since May 2015.08
- The Department of Electronics & Information Technology (DeitY) has undertaken an initiative **Digitize India Platform** (**DIP**) for large scale digitisation of records in the country that would facilitate efficient delivery of services to the citizens.
- The Bharat Net initiative is a high speed digital highway to connect all 2.5 lakh Gram Panchayats. This is expected to be the world's largest rural broadband connectivity project using optical fibres. This would have a significant bearing on the e-commerce in the country.
- Next Generation Network (NGN) has been introduced to replace 30-year-old exchanges, which is an IP-based technology to manage all types of services like voice, data, multi-media, etc.



Expected next steps

- India Inc. has pledged a collective investment worth USD69.5 billion⁰⁹ toward several projects, which companies would undertake in the future.
- A total of 150,000 post offices are proposed to be converted into multi-service centres.¹⁰
- To focus on setting up BPOs to facilitate ICT-enabled growth in each state in the north-eastern region.¹⁰
- To train 3 lakh service delivery agents as part of skill development initiative to run viable businesses delivering IT services.¹⁰
- To train 5 lakh rural workforce in telecom and telecomrelated services.¹⁰
- Within government, emails would be the primary mode of communication. All books would be converted into e-Books. SMS-based weather information and disaster alerts would be provided to citizens.¹⁰
- For instant signing of their documents securely in a legally acceptable form, e-Sign framework would be introduced to Aadhar card holders.⁰⁶
- Implementation of biometric attendance currently underway — to cover the central government offices in Delhi to begin with. Over 1,000 biometric attendance terminals are under installation at entry gates of various government buildings, which would be connected with Wi-Fi access points and mobile phones.¹⁰
- Cities with a population of more than 1 million would have tourist centres with public Wi-Fi hotspots to promote digital cities. The scheme would be implemented by DoT and the Ministry of Urban Development (MoUD).¹⁰
- The government aims at establishing the first manufacturing cluster for electronic goods by March 2016.¹¹ This is expected to create jobs and encourage local manufacturing and research & development (R&D).

- Digital India Week, Press Information Bureau, Gol, http://pib.nic.in/newsite/PrintRelease.aspx?relid=122895, accessed on 7 December 2015.
- Digilocker, Department of Electronics & Information Technology, Gol, https://digitallocker.gov.in/ accessed on 3 December 2015.
 Online appointment system reduces waiting period in AIIMS, but leaves out some patients, the Indian
- Online appointment system reduces waiting period in Anims, but leaves out some patients, the indian Express, 29 August 2015.
 Digital India: Industry pledges Rs 4.5 lakh crore to create 1.8 million jobs & end Digital Divide – Press
- Information Bureau. 10. Digital India, Press Information Bureau, Gol, http://pib.nic.in/newsite/efeatures.aspx?relid=115276 –
- accessed on 7 December 2015. 1. PM Modi's Digital India project: Government to ensure that every Indian has smartphone by 2019, The Economic Times, 25 August 2014.



Impact

The estimated impact of Digital India by 2019:

- Last mile internet connectivity enabled along with better access to government services and development of IT skills
- Setting up of a pan-India fibre-optic network by June 2016
- Provision of Wi-Fi services in cities with a population of more than 1 million, as well as major tourist centres
- Provision of broadband internet access to 250,000 village clusters by 2019
- Availability of 'digital lockers' to each citizen, allowing them to store all their original identification documents and records
- Development of 100 smart cities in India
- Universal mobile phone connectivity
- Setting up of 400,000 internet access points
- Net Zero Imports to be realised by 2020
- Digital inclusion to target job creation for approximately 1.7 crore people, trained in IT, telecom and electronics
- Creation of at least 8.5 crore indirect IT-related jobs
- Focus on moving toward automation in delivery of government services
- Achievement of a leadership position in IT toward betterment of health, education and banking services
- Widened internet access and an enabled use of shareable private space on a public cloud model in order to empower citizens digitally.

Business opportunities

The Digital India initiative would bring significant opportunities for different sectors:

- IT sector: the programme is expected to bring significant business opportunities for the IT sector
- **Telecom:** help India achieve connectivity and convergence, supporting the growth of the telecom sector
- Healthcare: affordable healthcare across the country could be realised through digital services like online registration, eHealth, electronic records maintenance, etc.
- Education: eBooks, online information repository, digitally approved finances, etc., would help the education sector grow, as digital connectivity would leverage the educational devices being distributed by the government
- Significant investment opportunities in start-ups
- Manufacturing sector expected to get an impetus due to a rising demand for internet-related peripherals (routers, switches and devices)
- Open access to broadband highways is expected to facilitate trade across the country, including e-commerce which is projected to cross USD80 billion by 2020 and USD300 billion by 2030¹²
- Unpenetrated markets and financially excluded segments offer growth opportunities
- Demographic dividend is likely to create a sizable digital-savvy customer segment.



12. 'India internet - Unlocking the potential of a billion digital users.' - Goldman Sachs.

Financial and Social Inclusivity Infrastructure – JAM Number Trinity

Objective(s)

The JAM Number Trinity or the 'Jan Dhan Yojana – Aadhar – Mobile Number Trinity' aims at enabling direct subsidy transfers in order to enable the government to provide targeted subsidies, reducing distortion and subsidy leakages, and to provide financial inclusivity.⁰¹

 Wiping every tear from every eye': the JAM Number Trinity Solution, Economic Survey 2014-15, http://indiabudget.nic.in/es2014-15/echapyol1-03.pdf.



The Pradhan Mantri Jan Dhan Yojana (Financial Inclusivity Programme) has helped create more than 194 million bank accounts with deposits worth more than USD4 billion in 10 months.⁰²

The Aadhar (Unique Identification Number) initiative is estimated to have over 1 billion citizen registrations (by the end of December 2015). $^{\circ1}$



Economic impact⁰¹

- The JAM Number Trinity could help alleviate subsidy leakage significantly, enabling targeted subsidies, and thus in turn, allowing greater space for the government to increase public expenditure.
- Moreover, the initiative primarily targets families in the Below Poverty Line (BPL) category, who have a significant share in national consumption.

Compact social security mechanism⁰¹

 The implementation of JAM Number Trinity is estimated to enable rolling of all subsidies into one or just a few monthly transfers, thus helping structure India's social security and support the poor with a direct income source.

Targeting alleviation of leakages⁰¹

- Leakages in price subsidies bear both direct costs and opportunity costs of wastage on fiscal resources. Thus, conversion of price subsidies into direct benefit transfers could be a viable goal for a government policy.
- For instance, the subsidies for kerosene used as a source of energy by non-electrified households totalled to more than USD4.2 billion in FY2013-14. The poor sections of the society were estimated to be consuming only 46 per cent of subsidised kerosene, and the fiscal cost of leakages is estimated at about USD1.5 billion, implying a significant opportunity cost.

Alternate/hybrid financial transfer mechanisms⁰¹

 JAM Number Trinity might enable mobile money. The linking of 900 million mobile users (estimated India is estimated to have more than 900 million mobile phone users, of which about 370 million (41.1 per cent) are estimated to be based in rural regions.⁰²

The JAM Number Trinity aims at linking the above mentioned initiatives to create a compact and optimally inclusive financial transfer mechanism to transfer subsides with maximum efficiency.

figure) with their Aadhar accounts could revolutionise financial transactions and create a comprehensive mobile platform for banking. With more than 40 per cent of mobile phone users estimated to be based in rural regions, mobile money would be a viable solution to address the challenge of last mile connectivity.

 India also has the world's largest network of post offices (estimated at about 155,015) of which 89.76 per cent are in the rural areas. The postal network-Aadhar benefits transfer architecture would help post offices mobilise Aadhar-linked accounts, thus enabling financial transfers to geographically isolated consumers.

Business opportunities

- Telecommunications, ICT, user payment digitisation services and digital wallets have become stakeholder sectors in the implementation of JAM NumberTrinity and enabling last mile connectivity.
- **E-commerce:** Digitisation of banking, user fees and benefit-transfers would act as an impetus to the country's e-commerce industry.
- **Computerisation of ration shops:** Biometric registries and economic status databases could help enhance transparency and efficiency of food rationing shops.
- Payment bank licenses: The Reserve Bank of India, in principle, has given approval to 11 entities to set up payment banks in order to facilitate money transfers, ATM/debit cards and sell financial products.
- Financial products: Empowering citizens through provision of financial security would boost insurance and mutual fund sectors.

^{02.} Pradhan Mantri Jan Dhan Yojana Home Page, Ministry of Finance, Government of India, http://www.pmjdy. gov.in/account.

Indradhanush revitalising public sector banks

Objective(s)

A seven-point reform plan to strengthen governance in public sector banks and address the NPA problem. $^{\rm OI}$



 Banks Are Facing Challenging Time But No Cause Of Panic, Press Information Bureau, 14 August 2015.



The Public Sector Banks (PSBs) have played a vital role in the Indian economy. Since they account for a significant share of infrastructure financing, delays in project implementation and an economic slowdown led to a rise in non-performing assets. The high NPAs affected banks' profitability as they have to increase provision against such loans. In order to revamp the

Status

functioning of PSBs and de-stress them from high NPAs, the government has launched a seven point reform plan which aims at not only infusing capital but also addressing the fundamental issues such as infusing right skills and expertise in Indian banks.

Steps taken so far⁰²

- **Appointments:** The post of Chairman and Managing Director would be separated. The CEO is expected to get the designation of MD and CEO, and another person would be selected for non-executive Chairman position.
- Bank Board Bureau (BBB): BBB, a body of eminent professionals, would replace the appointments board for the appointment of whole-time directors. BBB would have a chairman and consist of 6 members, including 2 banking sector experts, and is expected to start functioning from April 2016.
- **Capitalisation:** PSB's capital requirement up to FY2018-19 is estimated to be USD28 billion. The government would allocate USD11 billion over the next 4 years, and the remaining part would be raised from the financial market.
- De-stressing PSBs: Measures have been proposed to destress PSB include speeding up pending approvals/permits, addressing long-term availability of fuel, reforming power distribution companies and asking promoters to bring in additional equity.
- Strengthening risk control measures and NPA disclosures: Creation of a central repository of information on large credits to provide banks with data on credit exposures of approximately USD0.8 million and above; Joint Lenders Forum was formed to incentivise early identification of problem cases.
- **Empowerment:** Greater autonomy would be given to banks and they would be expected to take business decisions without government interference. Greater flexibility would be provided to banks for hiring professionals. To make banks more accountable, they were asked to create robust grievances redressal mechanism for customers.
- Framework of accountability: A new framework of Key Performance Indicators (KPIs) to measure the performance of PSBs has been unveiled. This new framework divides the KPI into 4 sections totalling up to 100 marks. 25 marks are given to indicators measuring efficiency of capital use and diversification of business, 15 marks to NPA management and financial inclusion, and 20 marks to qualitative criteria, such as strategic initiatives, taken to improve asset quality.

Expected steps

- About USD11 billion capital would be allocated as follows: USD4 billion and USD4 billion are is expected to be given in FY2015-16 and FY2016-17, respectively. Later, banks are expected to receive USD1.5 billion and USD1.5 billion in FY2017-18 and FY2018-19, respectively.⁰²
- The government has appointed private sector professionals to run the Bank of Baroda and the Canara Bank⁰³. More private sector professionals are likely to be recruited for mid-level positions. BBB would be responsible for recruiting top officials.
- Bank Investment Committee, a holding company for all public sector banks, would be set up. The government's stake in all PSBs would be transferred to this holding company, which would also help the former to lower its stake in PSBs.⁰⁴
- Banks are expected to reduce NPAs by March 2017.05

Business opportunities

- Compliance with Basel III norms by March 2019 would result in significant investment in technology. Many Indian banks are expected to focus on improving their credit systems to contain a rise in NPAs in the future by deploying credit risk management and financial services analytics. This might create business opportunities for companies specialised in performing credit risk analysis digitally.
- Banks' financial inclusion initiatives would require them to adopt technology that facilitates significant card issuance. Until now, banks issued 160 million⁰⁶ RuPay cards (an Indian version of credit/debit card) and this figure is expected to cross 500 million mark by 2020.

^{02.} Banks Are Facing Challenging Time But No Cause Of Panic, Press Information Bureau, 14 August 2015.

Private sector professionals to head Bank of Baroda, Canara Bank, The Financial Express, 14 August 2015
 Bank Board Bureau likely to be set up for creating holding company model, The Economic Times, 10 December 2015.

RBI, government steps to help banks end NPA woes by March '17: Raghuram Rajan, The Economic Times, 01 December 2015.

^{06.} RuPay credit cards coming next year, The Hindu Business Line, 16 June 2015.

Skill India and entrepreneurship development making India globally competitive

Objective(s)

Skill India seeks to provide the institutional capacity to train a minimum of 300 million skilled people by 2022.⁰¹

'Start-Up India Stand-Up India' aims to create an optimally enabling environment for both existing and prospective entrepreneurs.02

Total outlay⁰³

USD234 million of which USD174 million will be spent on skill training of 14 lakh youth and another USD34 million has been earmarked for a special emphasis to recognition of prior learning.

The Start-Up India framework is expected to be launched in January 2016.04



- PIB Backgrounder-National Mission for Skill Development, http:// pibmumbai.gov.in/scripts/detail.asp?releaseId=E2015FR41#. PM/s address to the nation on 69th Independence Day, Press Information Bureau, Gol, 15 August 2015, http://pib.nic.in/ newsite/PrintRelease.aspx?relid=126088.

Pradhan Mantri Kaushal Vikas Yojana, Press Information Bureau http://pib.nic.in/newsite/PrintRelease.aspx?relid=117547.

Govt. to launch Start-Up India's framework on Jan. 16: PM Modi Business Standard. 27 December 2015.



By 2030, India is expected to have the largest labour force in the world.⁰⁵ With more than 12 million people joining the workforce every year, the country needs to create job opportunities for all of them.⁰⁶ The skill development initiative is aimed at bridging this gap between understanding the needs of the market and preparing the youth for the same. Ministry for skill development and entrepreneurship was set up in November 2014 to add impetus to the Skill India agenda. National policy of skill development and entrepreneurship 2015 aims to provide an umbrella framework to all skilling activities being carried out within the country. It is envisaged as a multi-skill development programme for nationwide job creation and entrepreneurship.



Steps taken so far

- Efforts taken to create a positive environment for increased apprenticeship opportunities in the country through active industry participation.
- Creation of a national portal on entrepreneurship as a one-stop shop to provide optimal information services and interaction platform to start ups and existing entrepreneurs.
- The Pradhan Mantri Kaushal Vikas Yojana (PMKVY), demand-driven, reward-based skill training scheme launched to incentivise skill training by providing financial rewards to candidates who successfully complete approved skill training programmes.
- PMKVY expected to skill 24 lakh youth, across India by the end of 2016. For the first time, the skills of young people who lack formal certification, such as workers in India's vast unorganised sector, will be recognised. Through an initiative known as 'Recognition of Prior Learning' (RPL), 10 lakh youth will be assessed and certified for the skills that they already possess.
- Skill loan scheme has been introduced. Under this, loans ranging from USD77.8 to USD0.2 million will be made available to 34 lakh youth of India seeking to attend skill development programmes over the next 5 years.
- A national SMS campaign is being rolled out to build awareness of the program, reaching about 40 crore subscribers.
- Integration of skilling in formal education and seamless movement between vocational training and formal education to ignite student interest.
- The World Bank has agreed to provide by USD1 billion for activities ranging from strengthening skill training infrastructure in underserved areas to informing Indian workers about employment opportunities abroad and facilitating their movement to foreign shores.

Expected next steps⁰⁷

- A national campaign to be launched to create awareness and a positive pro-skilling environment.
- New ITIs to be set up in PPP mode. Further, higher order skilling to be promoted through ATIs and Multi Skill Institutes (MSIs) set up in PPP mode with strong industry linkage.
- National skills universities and institutes will be promoted in partnership with states as centres of excellence for skill development and training of trainers.
- All National Skills Qualification Framework (NSQF) compliant assessment and certification bodies to be set up to assess skilling component of vocational education and training, wherever required.
- Government to support the creation and use of infrastructure in both public and private domain through appropriate equity, grant and loan support.
- A national Labour Market Information System (LMIS) is expected to be created. To oversee this function, Government of India has already notified a national steering committee with representatives from various ministries and organisations.
- In addition, entrepreneurship education to be integrated into the mainstream curriculum in 3,000 colleges around India.
- A network of Entrepreneurship Hubs (e-Hub) to be established to deliver support to entrepreneurs, including coordinated delivery of national and state government entrepreneurship programmes and access to enabling resources.

Seizing India's Moment' by Christine Lagarde, Managing Director, International Monetary Fund, Lady Shri Ram College, New Delhi, 16 March 2015, https://www.imf.org/external/np/speeches/2015/031615.htm.

^{06. &#}x27;Govt sets target to skill 500 million people by 2022,'The Times of India, 10 January 2012, The Times of India

^{07.} Ministry of Skill Development and Entrepreneurship, 'National Policy for Skill Development and Entrepreneurship, 2015'.



- The initiatives towards skill development and entrepreneurship development shall lead to bridging the skill gaps in the country in addition to the development of micro-enterprises. This will help ensure developing strong backward and forward linkages
- Better access to skilled labour with cheaper labour costs is likely to attract a lot of companies to set-up their businesses in India. More jobs could translate into more spending power, more consumption and more output, thus unleashing virtuous productivity cycles
- Currently only 2.3 per cent of the current Indian workforce has undergone skills training, hence substantial investment in vocational education and training (VET) could see significant returns for India's economy. This also points to a large training capacity that is spread between existing and new infrastructure across vocations, thus opening up significant investment opportunities.

Business opportunities

- The skill and entrepreneurship revolution might mark a comprehensive impetus to Small and Medium Enterprises (SMEs) in India
- Idea incubators, legal advisory, business advisory, marketing, integrated digitisation solutions, HR, etc.

are some areas that are expected to attract investor interest

- Strong integration of general, vocational and technical education opens up opportunities for international training providers to showcase their expertise
- Sectors that are likely to play a major role in generating job opportunities in the future
 - Building, construction and real estate
 - Retail
 - Textile and clothing
 - Handloom and handicraft
 - Auto and auto components
 - Food processing
 - Tourism, hospitality and travel.

Creating adequate employment opportunities in manufacturing and services segments is critical to harness the benefits of country's demographic dividend.

These 8 selected sectors are expected to create 67 per cent of additional jobs during next decade. This is expected to open opportunities for capacity building for Indian training institutes.⁰⁸

S. No.	Sector	Employment base in 2015 (million)	Projected employment by 2020 (million)	Projected employment by 2025 (million)	Increase in employment between 2015 and 2025 (million)
	Auto and auto components	11.0	12.4	14.4	3.4
	Food processing	7.0	8.5	11.0	4.0
	Retail	38.6	43.7	54.0	15.4
	Handlooms and handicrafts	11.7	13.5	17.2	5.6
	Tourism, hospitality and travel	7.0	9.4	13.0	6.1
	Building, construction and real estate	45.4	57.5	74.2	28.7
	Textile and clothing	15.2	17.5	20.9	5.6
	Transportation and logistics				
	Other sectors	323.6	328.4	355.8	32.2
	Grand total	459.5	490.9	560.5	101.0

 NSSO 68th Round EU Survey, Industry Estimates, NSDC Skill Gap Studies, KPMG in India analysis; data excludes mining, quarrying and other allied activities.

Hygiene infrastructure a step towards sanitation and rejuvenation

Objectives

A. Swachh Bharat Abhiyaan (Clean India initiaitive)⁰¹

- Elimination of open defecation
- Eradication of manual scavenging
- Modern and scientific municipal solid waste management
- To effect behavioural change for healthy sanitation practices
- Generate awareness about sanitation and its linkage with public health
- Capacity augmentation for Urban Local Bodies (ULBs)
- To create an enabling environment for private sector participation in capex (capital expenditure) and opex (operational expenditure).

B. National Mission for Clean Ganga (NMCG)⁰²

- To ensure effective abatement of pollution and rejuvenation of the river Ganga by adopting a river basin approach to promote inter-sectoral co-ordination for comprehensive planning and management.
- To maintain minimum ecological flows in the river Ganga with the aim of ensuring water quality and environmentally sustainable development.

Total outlay

- A. The total cost of the Swachh Bharat Abhiyan is estimated at USD9.6 billion⁰³
 - Share of the central government amounts to USD2.3 billion, while USD760 million is expected to be contributed by the states and ULBs as their share.
 - The funding of the projects/incentives would be shared in the ratio of 75:25 between the central government and the states/ULBs.
- **B.** National Mission for Clean Ganga USD317 million has been allocated for an Integrated Ganga Conservation Mission called 'Namami Gange'. In addition, a corpus of USD15 million was announced for the development of ghats and beautification of the river fronts.⁰⁴

- National Mission for Clean Ganga, Ministry of Water Resources, River Development & Ganga Rejuvenation, Gol, https://nmcg. nic.in/aims_obj.aspx - accessed on 6 December 2015.
- Guidelines for Swachh Bharat Mission (SBM) https:// swachhbharaturban.gov.in/writereaddata/SBM_Guideline.pc accessed on 6 December 2015
- National Mission for Clean Ganga, Ministry of Water Resources, River Development & Ganga Rejuvenation, Gol, https://nmcg. nic.in/NamamiGanga.aspx- accessed on 6 December 2015.



- Government of India launched the Swachh Bharat Abhiyan, undertaking a cleanliness pledge, with the aim of making India clean. The programme targets the construction of 10 million household toilets and 0.3 million public toilets by 2019.⁰⁵
- Swachh Bharat Abhiyan projects have been launched in the entire rural India covering 627 districts in 31 states/UTs, for which a provision of USD565 million— including USD156 million for urban sanitation— has been made for the year 2015–16. Out of the allocated provision, about USD56 million— including USD16 million for the urban sector is earmarked for the northeast region and Sikkim. Further, about 22 per cent and 10 per cent of the total allocation have been earmarked for meeting expenditure on Schedule Caste Sub-Plan and Tribal Sub-Plan, respectively.⁰⁶
- The Bal Swachhta Mission⁰⁷ (Hygiene for Children) is part of the Swachh Bharat Abhiyaan and has the following 6 themes:

- Clean anganwadis (meaning 'courtyard shelter'; started in 1975 as part of the Integrated Child Development Services programme to combat child hunger and malnutrition)
- Clean surroundings like playgrounds
- Clean self (personal hygiene/child health)
- Clean food
- Clean drinking water
- Clean toilets.
- On similar lines, **NMCG**⁰⁸ aims at ensuring effective abatement of pollution and rejuvenation of the river Ganga. The investments required to create the necessary treatment and sewerage infrastructure would be shared between the centre and the state governments on 70:30 basis, respectively. The government has also set up a Clean Ganga Fund, which is open for contributions from Indian citizens as well as non-resident Indians (NRIs) and Person of Indian Origin (PIO).



- 05. Swachh Bharat Programme for Urban Areas, Ministry of Urban Development, Gol, 24 September 2014.
- Expenditure Budget Vol.I, Plan Outlay 2015-2016 Union Budget http://indiabudget.nic.in/ub2015-16/eb/ po.pdf - accessed on 6 December 2016.
- 07. Smt. Maneka Sanjay Gandhi launches the nationwide Bal Swachhta Mission, Smt. Maneka Sanjay Gandhi launches the nationwide Bal Swachhta Mission, Gol, 14 November 2014.
- National Mission for Clean Ganga, Ministry of Water Resources, River Development & Ganga Rejuvenation, Gol, https://nmcg.nic.in/NamamiGanga.aspx-accessed on 6 December 2015.
- Swachh Bharat Abhiyan, Ministry of Urban Development, Gol, https://swachhbharaturban.gov.in/RPT_ DashBoard.aspx?id=5ebe21011208101bd1636de15d12a23c – accessed on 2 Dec 2015.



Steps taken so far

The following statistics depict the progress of the Swachh Bharat Abhiyan⁰⁹

Measure	Number
Urban local bodies registered	3,168
Community toilet constructed	19,450
Public toilet constructed	7,684
No. of municipal wards with 100 per cent door-to-door collection (SWM)	32,292
Individual household latrine approved	1,769,819
Individual household latrine constructed	537,338

Funds released to states/UTs under the eligible component of Swachh Bharat Mission Project— USD212 million. $^{\rm 10}$

- With the objective of streamlining and formalising Solid Waste Management (SWM) systems, ULBs have been instructed to upgrade the work conditions of informal workers in waste management (like the ragpickers). This would directly enumerate and integrate them into the formal system of SWM in cities.
- Efforts are underway to rehabilitate the manual scavengers.
- It has been mandated that construction labourers in urban areas to have access to temporary toilets at all sites in urban areas like buildings, parks and roads, where construction/maintenance work is taking place, or wherever they have been accommodated.
- Measures to prioritise pro-active inclusion of households has been initiated — especially for the vulnerable sections such as pensioners, girl children, pregnant women and lactating mothers — into the mission through provisions of sanitation.
- The Ministry of Urban Development (MoUD) has partnered with the United States Agency for International Development (USAID) and the Bill & Melinda Gates Foundation to advance the Clean India Mission.
- The government has notified a levy of Swachh Bharat Cess at the rate of 0.5 per cent on all taxable services. The proceeds from this cess would be exclusively used for initiatives taken under Swachh Bharat Abhiyan.¹¹
- National Mission for Clean Ganga The National Ganga River Basin Authority (NGRBA) has so far approved a total

of 77 projects costing USD953 million¹². The investments required to create the necessary treatment and sewerage infrastructure would be shared between the centre and the state governments on 70:30 basis, respectively.¹³

 For the success of Ganga Rejuvenation and NMCG, a special portfolio has been set up within the Ministry for Water Resources, River Development and Ganga Rejuvenation. Already, countries like Germany, Japan, Australia, Israel and Denmark have expressed interest in sharing their expertise in water management and recycling and conducting impact studies.¹⁴ A consortium of Danish companies is, at present, conducting a pilot project for water management in Rajkot, Gujarat. Also, many Israeli desalination plants have come up in Tamil Nadu and Hyderabad.¹⁵

Expected steps

- Implementation of initiatives has been accelerated through a countrywide awareness and cleanliness campaign from 25 September 2015 to 31 March 2016, focussing on areas such as railway stations, airports, educational and medical institutions and religious places.
- The states are expected to prepare and implement citylevel sanitation plans and formulate their state sanitation strategy.
- The central government has announced plans to set up 6 power plants that convert waste to energy, with a combined capacity of 74MW, 2 of which would be set up in Delhi and one each in Jabalpur (Madhya Pradesh), Chennai (Tamil Nadu), Hyderabad and Nalgonda (Andhra Pradesh.

^{10.} Swachh Bharat Abhiyan NPMU, Ministry of Urban Development, Data collected on 9 December 2015.

^{11.} Press Information Bureau, Gol, Ministry of Finance - http://pib.nic.in/newsite/PrintRelease.

aspx?relid=130308.
 National Mission for Clean Ganga, Projects Sanctioned - https://nmcg.nic.in/about_nmcg.aspx - as at 7 December 2015.

National Mission for Clean Ganga, Ministry of Water Resources, River Development & Ganga Rejuvenation, Gol, https://nmcg.nic.in/external_funding.aspx-accessed on 6 December 2015.

Countries Ride Ganga Wave to Cleanse the River, The New Indian Express, 4 October 2015, http://www. newindianexpress.com/thesundaystandard/Countries-Ride-Ganga-Wave-to-Cleanse-the-River/2015/10/04/ article3081186.ecc.

Israel, Denmark keen to partner in Ganga cleanup, water management, The Times of India, 6 June 2014, http://timesofindia.indiatimes.com/india/strael-Denmark-keen-to-partner-in-Ganga-cleanup-water management/articleshow/36119037.cms.



- Achieving alleviation of open defecation and manual scavenging by encouraging healthy sanitation lifestyle approach: States like West Bengal, Karnataka, Rajasthan and Maharashtra have taken the lead in constructing individual household latrines and community toilets. These states may achieve the target of Open-Defecation Free status in 2017 or 2018, well in advance of the target of 2 October 2019.¹⁶
- Cost effective productivity gains: Hygiene standard directly contributes to the productivity of an individual and society at large. The programme, hence, would help reduce health costs and facilitate availability of labour measured in active days/hours, thereby contributing to country's economic growth.
- Better conservation of water resources through public awareness: As part of NMCG, about 77 projects¹⁷ have been approved for the creation of treatment capacity. This would lead to more water availability in cities and for several industries.
- Digital approach to awareness: A Swachh Bharat Abhiyan mobile app has been developed¹⁸, which states the goals, sources and contacts, an interactive sanitation information and communication channels for citizens and government organisations, to spread awareness swiftly.

Business opportunities

 Given the enormous investments required for the mission, the government is majorly looking at PPPbased approach. The government has set a target of attracting private sector investments worth USD6.5 billion, for construction of solid waste management plants and individual and community toilets¹⁹. Further, India Inc. has pledged its support by earmarking over USD155 million for projects ranging from building toilets in distant villages, running workshops to bring in behavioural changes, waste management to water hygiene and sanitation.²⁰

- According to the government's policy document, water pipelines facilitating, on-demand tap connection would be provided to all households by 2019, which presents an opportunity for the pipeline industry.
- The Indian tourism and hospitality industry, one of the key drivers of growth among the services sector in India, fails to achieve optimum potential due to lack of hygiene in tourist destinations. The Clean India Mission would complement the Incredible India campaign, to attract tourists and increase employment opportunities.
- In the Ganga basin, approximately 12,000 million litres per day (mld) sewage is generated, for which, at present, there is a treatment capacity of only about 4,000 mld.²¹The initiative presents business opportunities for firms engaged in infrastructure, clean technology, sewerage collection, treatment of solid waste, water filtration, treatment, recycle and reuse of treated water/grey water, waste management, watershed management, water harvesting, transportation, sanitation and urban planning.



- Many States can achieve the Open-Defecation Free status well before the target of 2nd October 2019: Birender Singh, Press Information Bureau, Gol, 7 October 2015 - http://pib.nic.in/newsite/PrintRelease. aspx?relia/128522.
- 17. National Mission for Clean Ganga https://nmcg.nic.in/about_nmcg.aspx as at 7 December 2015.
- Press Information Bureau, Gol, MoUD http://pib.nic.in/newsite/mbErel.aspx?relid=114133.

 Swachh Bharat - an android application to keep your city clean, Deccan Chronicle, 6 October 2014, http:// www.deccanchronicle.com/141006/technology-latest/article/swachh-bharat-android-application-keep-you

- India Inc Gifts Rs 1k Crore to PM's Swachh Bharat Mission India CSR, 23 March 2015.
- 21. National Mission for Clean Ganga https://nmcg.nic.in/pollution.aspx.

Ease of Doing Business - creating a conducive business environment

Objective

Launched with an aim to create conducive business environment by streamlining the regulatory structures, to create an investor-friendly business climate by cutting through red tape.





Ease of Doing Business (EoDB) in India is an attempt to simplify the processes involved in conducting business in India. It measures and tracks changes in regulations affecting 11 areas of a business life cycle i.e., starting a business, dealing with construction permits, getting electricity, registering property, getting credit, protecting minority investors, paying taxes, trading across borders, enforcing contracts, resolving insolvency and labour market regulation.

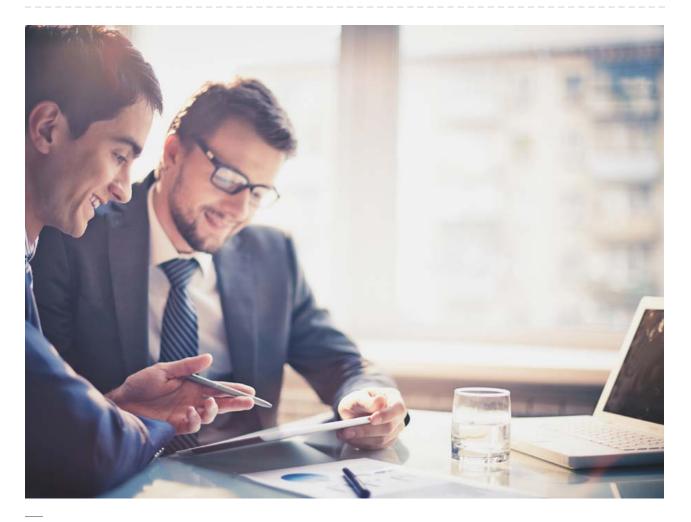
India has shown an improvement on the World Bank's latest ease of doing business report (from 134 in 2015 to 130 in 2016), and the current government set itself an ambitious target of getting the ranking within the top 50 by 2017.⁰¹

Days required to start a business in India⁰²



2015

2016



01. India's World Bank ranking on 'ease of business' will improve further: Arun Jaitley, The Economic Times, 29 October 2015. 02. The World Bank's Doing Business database, accessed on 15 December 2015



Steps taken so far

Central government initiatives⁰³

- To promote competitive federalism and improve business condition across the country, the central government has conducted an assessment of state implementation of business reforms.
- A proposition of unified online portal for: registration of Labour Identification Number (LIN), combined filing returns under 8 labour laws and simplified grievance redressal.
- Online portals for Employees State Insurance Corporation (ESIC) and Employees Provident Fund Organisation (EPFO) for: real-time registration and payments through 56 accredited banks.
- For single-window clearance, 14 central government services are integrated with e-Biz portal. Through the e-Biz website, entrepreneurs can apply for Industrial License (IL) and Industrial Entrepreneur Memorandum (IEM) on a 24x7 basis.
- The distinction between partial and full commencement of production for all products is no longer applicable.
- Colour-coded maps for locations requiring NOC from the Airports Authority of India (AAI) could be viewed online.
- Documents required for export and import businesses have been reduced from 7 to 3.
- The Companies Act has been amended to remove the provision of minimum paid-up capital to start a new business in the country. To simplify and fast track the procedure for company registration in India, the Ministry of Corporate Affairs (MCA) has introduced Form INC-29— Integrated Incorporation Form.
- Arbitration Act has been amended to fix deadline to finish commercial disputes.
- The Bankruptcy Law Reform Committee submitted its report to the Finance Ministry on 4 November 2015, to make bankruptcy process faster and fair for improving EoDB (Ease of Doing Business).
- A checklist with specific time-lines has been introduced to process all applications filed by foreign investors for cases related to retail/NRI/EoU foreign investments.
- An Investor Facilitation Cell has been established to guide, assist and handhold investors during the entire life cycle of a business.

- 14. Coal India output up 8.8% over last year's production, Mint, 26 December 2015.
- Government to auction 9 coal blocks in fourth round, Business Today, 10 December 2015.
 Coal Minister launches online project monitoring portal, the Hindu Business Line, 26 March 2015
- To. Coartvirtilister lauricities online project monitoring portai, the Hindu Business Line, 26 March 2015.

Sector initiatives

Aviation

- Proposed open sky policy allows countries beyond 5,000km to expand their network and frequencies in India.⁰⁴
- MRO activities are proposed to be excluded from service tax; tools and parts imported for MRO activities are proposed to be exempted from customs duty.⁰⁵
- Such tools and parts would be allowed to be stored for 3 years without any taxes.⁰⁵
- Airport royalty and additional levies on MRO service providers will be rationalised in consultation with airport operators.⁰⁵

Defence

- Up to 49 per cent FDI in defence sector is allowed under automatic route.⁰⁶
- If state-of-the-art technology is provided in India, 100 per cent FDI is allowed.⁰⁷
- Retrospective changes have been brought in offsets policy, allowing foreign firms with more flexibility in selecting partners.⁰⁸
- Validity of industrial license has been extended to 15 years and could be extended further for 3 years.⁰⁹

Telecom¹⁰

• New spectrum trading guidelines could free up unused airwaves for telecom companies.

Petrochemical

- Customs duty structure has been rationalised, augmenting competitiveness of the domestic petrochemical industry.
- Four Petroleum, Chemicals and Petrochemical Investment Regions (PCPIRs) have been approved in the states of Andhra Pradesh, Gujarat, Odisha and Tamil Nadu. The 4 regions have so far attracted around USD23.4 billion investment.¹¹

Coal

- Policy for automatic transfer of coal linkage in case of scrapping of old thermal plants and replacing them with new supercritical plants.¹²
- Swapping of coal between state-owned power companies and central power utilities has been allowed.¹³
- One billion tonne coal production target has been set for state-owned coal India.¹⁴
- Three rounds of e-auctioning of coal blocks have generated proceeds over USD47 billion.¹⁵
- Online Coal Project Monitoring Portal (CPMP) has been launched to interact with all the stakeholders to resolve issues and avoid delay.¹⁶

^{03.} Make in India website, accessed on 20 December 2015.

^{04.} The World Bank's Doing Business database, accessed on 15 December 2015.

^{05.} Draft aviation policy: India eyes MRO hub ambitions, The Financial Express, 30 October 2015.

^{06.} Opposition to challenge government's defence FDI notification, The Economic Times, 13 November 2015.

^{07.} Boost domestic R&D in defence technology, The Economic Times, 04 November 2015.

^{08.} Defence Ministry brings major retrospective changes in offsets policy, The Economic Times, 13 August 2015.

Industrial licence validity for defence raised to 15 years, The Economic Times, 23 September 2015.
 Government approves spectrum trading norms for telecom firms, The Times of India, 09 September 2015.

overnment approves spectrum trading norms for felecom tirms, Ihe Times of India, 09 September 2015.
 Setting up of Petroleum, Chemicals and Petrochemical investment Regions, Press Information Bureau, Gol, 10 March 2015.

Coal Ministry Approves Transfer of Existing Coal Linkage of Panipat TPS, Press Information Bureau, 17 April 2015.

Government mulls swapping of coal supplies only for state-run utilities, the Economic Times, 06 February 2015.

Oil and gas¹⁷

- Government of India approved the auctioning of 69 oil and gas marginal fields.
- A more transparent and market-oriented regime has been adopted to auctioning the fields.
- Single license is expected to cover all types of hydrocarbons, as opposed to the earlier system where a separate license for each product.
- Successful bidders would be given freedom to sell oil products at market prices.
- The existing cost recovery method (successful bidders are allowed to recover their expenditure before paying their share to the government) is replaced by revenue-sharing model.

Tax-related initiatives

Measures to reduce litigation and provide certainty

- Central Board of Direct Taxes (CBDT) clarified on phasing out plan of deductions under the Income-tax Act pursuant to reduction in corporate tax rate from 30 per cent to 25 per cent.18
- Government of India has clarified that Minimum Alternate Tax (MAT) shall not be applicable to foreign companies having no permanent establishment/place of business in India.19
- Constitution of high level committee headed by Justice A.P. Shah to look into the issue of MAT on Foreign Institutional Investors (FIIs) as well as other issues.²⁰
- CBDT has clarified that dividend declared and paid by a foreign company outside India would not be taxable under the indirect transfer provisions of the Income-tax Act.²¹
- CBDT sets-up a committee to examine fresh cases referred by the tax officer in respect of indirect transfer of assets prior to 1 April 2012.22
- CBDT has clarified on whether tax is required to be deducted on the whole sum remitted or only the portion representing the sum chargeable to tax while making payment to non-resident.23
- Constitution of local committee to deal with taxpayers grievances from high pitched scrutiny assessment.²⁴
- CBDT instructs tax officers to expeditiously decide FPIs claim of tax treaty benefits.²⁵
- CBDT clarified on the tax treatment in the case of Alternative Investment Funds.²⁶
- CBDT clarified on allowability of deduction under Section 10A/10AA on transfer of technical manpower in the case of software industry.27
- Constitution of Bench of the Supreme Court to deal exclusively with tax matters.28
- Government announces setting-up of 2 additional benches of AAR (Authority for Advanced Ruling) at NCR (National Capital region) and Mumbai.29

Use of new technology to ease various procedural requirements

- New facility of pre-filling TDS data while submitting online rectification.30
- Use of email based communication for paperless assessment proceedings.31
- Usage of the Digital Signature Certificate for electronic filing of customs documents.32

GST

- The advantage of GST is that it will widen the tax base, subsume several central and state taxes and give one tax rate, give input credit and also push the gross domestic product up. The committee headed by the Chief Economic Adviser Dr. Arvind Subramanian on possible tax rates under GST has submitted its report to the Finance Minister in December 2015.33
- The joint committee issued a report on the GST return process.34



- 17. Govt to auction 69 oil, gas fields under revenue-sharing model, Mint, 03 September 2015
- 18. India Tax Konnect, KPMG in India, December 2015.
- 19. Government of India decides that Minimum Alternate Tax shall not be applicable to foreign companies having no permanent establishment/place of business in India, KPMG in India, Tax Flash News, 24 September 2015
- 20. High Level Committee (HLC) Headed by Justice A.P. Shah on DirectTax Matters Constituted, Press Information Bureau, Gol, 20 May 2015.
- 21. CBDT clarifies that dividend declared and paid by a foreign company outside India would not be taxable nder the indirect transfer provisions of the Income-tax Act, KPMG in India, Tax Flash News 27 March 2015
- CBDT sets-up a committee to examine fresh cases referred by the tax officer in respect of indirect transfer of assets prior to 1 April 2012, KPMG in India, KPMG Flash News, 1 September 2014. 23. CBDT clarifies on 'amounts not deductible' under Section 40(a)(i) of the Income-tax Act, KPMG in India KPMG Flash News, 16 February 2015.
- 24. Set up local committees for grievances: CBDT to IT officials, The EconomicTimes, 9 November 2015.
- 25. CBDT's instructions to tax officers to expeditiously decide FPIs claim of tax treaty benefits, KPMG in India Tax Flash News, 24 April 2015.
- 26. CBDT clarification on the tax treatment in the case of Alternative Investment Funds, KPMG in India, KPMG Flash News, 4 August 2014.
- 27. CBDT clarifies on allowability of deduction under Section 10A/10AA on transfer of technical manpower in the case of software industry, KPMG in India, KPMG Flash News, 29 July 2014. 28. Constitution of Bench of the Supreme Court to deal exclusively with tax matters on all working days -
 - Circular Dated 10-3-2015 Income Tax
- 29. 2 more Benches for advance I-T rulings, Business Standard, 26 February 2015.
- New facility of pre-filling TDS data while submitting online rectification, Press Information Bureau, Gol, 10 December 2015.
- 31. Going paperless: CBDT to roll out pilot project on e-assessments, The Hindu BusinessLine, 20 October
- Usage of Digital Signature Certificate in Remote EDI filing (RES) of Customs Documents, Circular No. 10/2015-Customs, Ministry of Finance Department of Revenue, 31 March 2015. 33. Press Information Bureau, Gol, 4 December 2015.
- The Joint Committee report on the Goods and Services Tax return process, KPMG in India, Tax Flash News, 23 October 2015. 34.

Transfer Pricing

- CBDT revises and updates guidance for selection and referral of transfer pricing cases for assessments.³⁵
- CBDT issues important directives on Safe Harbour Rules.³⁶
- Safe harbour rules for transfer pricing documentation: notified for specified domestic transactions of electricity companies run by the government.³⁷
- CBDT issues FAQs on Advance Pricing Agreement (APA) rollback provisions.³⁸
- Rollback rules notified and pre-filing consultation made optional.³⁹

FDI-related initiatives

 FDI regime has been simplified by introducing a composite cap that combines FDI, FPI and investments by NRIs⁴⁰; various notifications related to FDI are likely to be consolidated in a single booklet.

- Warrants and partly-paid shares are issued by Indian companies that would be eligible instruments for FDI.⁴¹
- Investments in India by firms owned and controlled by NRIs shall be deemed as domestic.
- Government of India has permitted 100 per cent FDI under automatic route for Limited Liability Partnerships (LLPs) in sectors that do not require government's approval.⁴²
- For ease of transfer of ownership, government approval will be required only if the company functions in the sector in which government's approval is required rather than capped sectors.⁴²
- Government's approval will not be required for selling product through wholesale or retail including e-commerce.⁴²
- Threshold equity investment has been raised to approximately USD780 million from USD467 million and proposals above USD780 million will now go to CCEA.⁴²

S. No.	Sector	Change in policy
1	Construction	Floor area restriction and minimum capitalisation removed; each phase of construction will be considered a separate project; easy exit for foreign investors if project or trunk infra completed or 3 years of lock-in for each tranche completed; and 100 per cent FDI in automatic route permitted for operation of townships, malls, and business centres.
2	Direct-to-home (DTH) and multi-system operators (MSOs)	Cap raised to 100 per cent (49 per cent automatic and beyond Government approval).
3	Non-news broadcasters	FDI limit raised to 100 per cent from 74 per cent (automatic route).
4	News, current affairs and FM radio	FDI limit raised to 49 per cent from 24 per cent(FIPB approval).
5	Private banks	Full fungibility of foreign investment with sectoral limit at 74 per cent.
6	Plantation	Coffee, rubber, cardamom, palm oil and olive oil opened up to 100 per cent.
7	Single brand retail trading	A single entity can undertake both wholesale and single-brand retail as long as both business arms comply to the conditions of FDI policy.
8	Regional air transport	FDI limit raised to 49 per cent under automatic route.
9	Non-scheduled air transport, ground handling services, satellites and credit information companies	FDI limit raised from 74 per cent to 100 per cent under automatic route.

Other FDI reforms (sector-wise)⁴²

- CBDT revises and updates guidance for selection and referral of transfer pricing cases for assessments, KPMG in India, Tax Flash News, 21 October 2015.
- CBDT issues important directives on safe harbour rules, KPMG in India, KPMG Flash News, 6 January 2014.
 Safe harbour rules for transfer pricing documentation: notified for specified domestic transactions of electricity companies run by the government. KPMG in India, KPMG Flash News, 10 February 2015.
- CBDT issues FAQs on Advance Pricing Agreement (APA) rollback provisions, KPMG in India, Tax Flash News, 12 June 2015.
- Indian Advance Pricing Agreements Rollback rules notified and pre-filing consultation made optional, KPMG in India, KPMG Flash News, 16 March 2015.
- 40. Nod to composite cap on foreign investment, Business Standard, 17 June 2015.
- 41. Govt opens FDI door wider by allowing partly-paid shares, The Hindu Business Line, 15 September 2015.
- 42. Reforms in FDI, Press Information Bureau, 10 November 2015.

Reforms at the state

The subsequent sections delve on the major reforms implemented by the state governments to improve the ease of doing business conditions in the respective states.



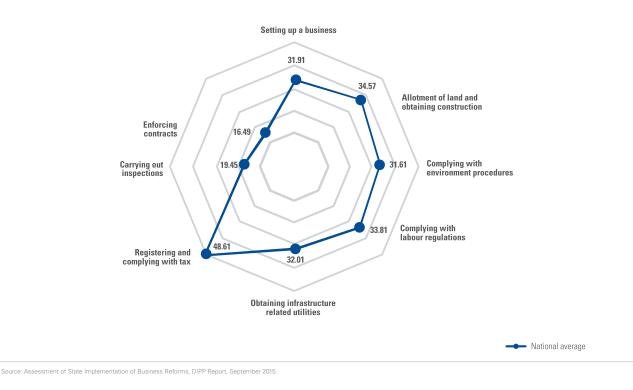
The reforms have been depicted under 3 broad categories:

- 1. Policy or regulatory reforms
- 2. Process reforms
- 3. Sector-related reforms.

For each category, key reforms are highlighted with a 'Reform versus Benefits' assessment represented for *exemplary states*. The benefits and investments shown represent the ground-level impact of the reforms implemented by the state governments over the past 18 months and the investments received/announced during that period. It represents the changes witnessed by the industry and investors, and have been captured through direct interactions with industry leaders, key government representatives and major investors.

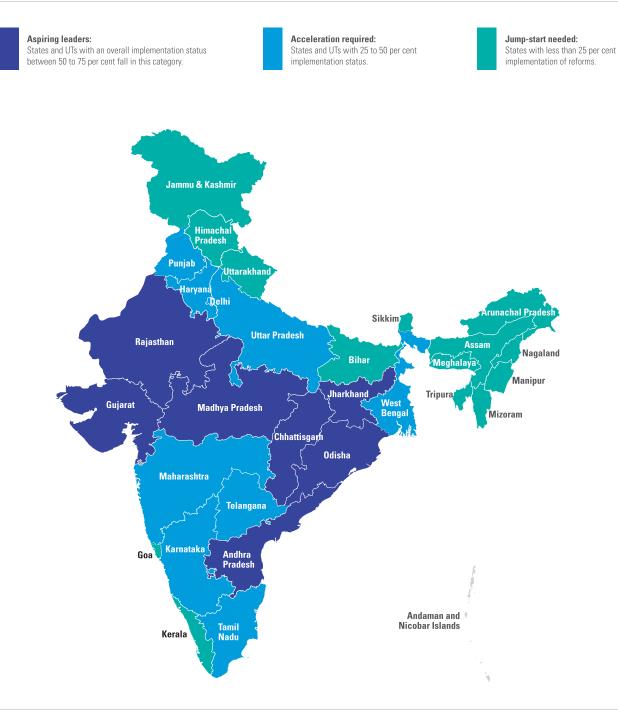


In an effort to make the states more competitive in attracting investments and facilitating business operations, the Government of India (GoI), through its Department of Industrial Policy and Promotion (DIPP), launched an effort (in collaboration with the World Bank) to present an action plan to all states and Union Territories (UT) to improve their Ease of Doing Business conditions. Based on their reforms and actions in the 6 months from January to June 2015, states were assessed on 8 broad parameters of Ease of Doing Business and assigned a score representative of the implementation status of their reforms. The chart below depicts the national average score on the 8 parameters, obtained by adding the weighted average of scores of individual states and UTs:



Ease of Doing Business score

The map below represents the 3 categories of states and UTs highlighted based on the scores/implementation status in June 2015. The 3 categories of states include:⁰¹



^{01. &#}x27;Assessment of State Implementation of Business Reforms', DIPP Report, September 2015.



The state governments have taken several initiatives in the form of introducing new policies, altering regulations, introducing sector policies and reforms, etc. to make the business environment more conducive and to help the development of states and the nation as a whole. The sections below highlight some of the key reforms implemented by the states.

Policy/regulatory reforms

Land acquisition

Several states have amended their land acquisition and allotment policies to make it easier for the investors to acquire land for industrial purposes with minimum government interference.

Tamil Nadu

In January 2015, the Tamil Nadu government appended a section to the centre's Right to Fair Compensation and Transparency in Land Acquisition, Rehabilitation and Resettlement Act (RFCTLARRA) 2013, exempting 3 state land acquisition acts from the purview of the central act,^{02,03} namely:

- i. The Tamil Nadu Highways Act, 2001
- ii. The Tamil Nadu Acquisition of Land for Industrial Purposes Act, 1997
- iii. The Tamil Nadu Acquisition of Land for Harijan Welfare Schemes Act, 1978.

Potential benefits

As a result, acquiring land for industrial and infrastructural purposes under the mentioned 3 acts has become easier:

- Consent clause removed: Consent is not required for land acquisition, from 70 per cent land owners for PPP-model, and 80 per cent land owners for private projects
- **SIA clause removed:** Social Impact Assessment (SIA) is not required for land acquired under the above-mentioned acts.

Andhra Pradesh

The state of Andhra Pradesh, in efforts to build its new capital city, launched 'Land Pooling Scheme' in December 2014, based on the following model:

• Voluntary transfer of land ownership: Unlike land acquisition, where land is acquired by the government and the land-owners are compensated in the form of money, the 'Land Pooling Scheme' encourages land owners to voluntarily provide the ownership rights to the government agency. Later, the government allocates a share (around one-third) of the developed land back to the owners.⁰⁴

Potential benefits

• **Majority land acquired:** The capital city of Amaravathi, is expected to occupy around 21,600 Hectares (Ha) of land out of which approximately 8,400 Ha is already owned by the government. Further, the state government has acquired an additional 12,400 Ha of land under this scheme.⁰⁵

^{02. &#}x27;Tutorial from Tamil Nadu for states to get around land acquisition', Firstpost, 3 September 2015.

^{03. &#}x27;Tamil Nadu Government Gazette', Government of Tamil Nadu, 5 January 2015

^{04. &#}x27;The Big Land Pooling Experiment!', The Firm – CNBC, 24 October 2014.

^{05. &#}x27;Land pooling strategy for the new Andhra capital could become a model for India's Smart Cities', Scroll.in, 12 August 2015.

Labour

State governments have implemented labour reforms in their respective jurisdictions to make it easier for investors and industrialists to manage labour issues and address labour demands at the same time.

Gujarat

The Labour Laws Amendment Act was implemented in September 2015 with the following key provisions:⁰⁶

- **Reduced restrictions on labour management:** Restrictions on reducing labour force have been relaxed and a regime of collaborative approach to payment of compensation has been introduced for units located in Special Investment Regions (SIR) and National Investment and Manufacturing Zones (NIMZ).
- Rationalisation of time window for labour to raise objections: The time limit for workers to raise objections on decisions taken by industries has been rationalised from 3 years to 1 year.

Potential benefits

• Significantly eased scaling up and scaling down of operations; ease of exit is enhanced.

Rajasthan

- Rajasthan implemented labour law amendments in November 2014 to make it easier for employers to hire, train and rationalise the workforce.⁰⁷
- Major reforms under the amendments include:
 - **Simplification of shutdown process and workforce rationalisation:** Government permission is not required for workforce rationalisation or shutting down of units which have an employee strength of less than 300.⁰⁷
 - More representative labour unions: To form labour unions, employee strength of at least 30 per cent of total membership is required.⁰⁷
 - Relaxed applicability of the Factories Act: The Factories Act would now be applicable to companies employing more than 20 people (with electricity) and to companies employing more than 40 people (without electricity).⁰⁷

Potential benefits

• Ease of exit of operations: A Jaipur-based manufacturer and exporter of canvas bags and aprons – with an employee strength of 70, are able to easily exit their operations and allow the employees to be reengaged more productively elsewhere, after Rajasthan implemented its labour law amendments.⁰⁸

- 07. 'President nod to Rajasthan labour law amendments', The Times of India, 9 November 2014.
- 08. 'Why Rajasthan's labour laws are a peek into India's bleak future', CatchNews, 1 September 2015

^{06. &#}x27;Controversial labour law amendments to come into force in a week in Gujrat', The Times Of India, 22 September 2015.

Industria policy

Several states have launched new industrial policies or made amendments to existing ones, to provide investors with a favourable business climate. The objective is to create a more conducive eco-system to develop industries and make them more competitive globally.

Punjab

The Government of Punjab notified 'Fiscal Incentives for Industrial Promotion (Revised), 2013' amendment in November 2015 to boost investment and industrial growth in the state. The following highlights its key features^{09,10}:

- Broader purview of incentives: Extending incentives to units located in industrial zones, apart from units located in industrial parks.
- Affordable power: Power at a cost of less than INR5 per ٠ unit for establishments setting up their businesses during Invest Punjab and having a utilisation factor of 50 per cent or more.
- Focus sectors: Manufacturing, textiles, electronic hardware and IT, tourism and health, and agriculture and food
- Tax incentives: No input tax levied on new food processing companies.¹¹ Additionally, the state government is offering VAT/CST retentions, stamp-duty, electricity duty and property tax exemptions depending on the scale of investment.12

Investments received

Punjab received investment proposals worth USD17.4 billion: In its Progressive Puniab Investor's Summit held in October 2015. around 380 companies signed MoUs with the state government with investment proposals amounting to USD17.4 billion.13

Andhra Pradesh

The state launched Industrial Development Policy (IDP) 2015 to 2020 in April 2015 to support the development of various industries and provide financial assistance under the following major categories^{14,15}:

- Large industries: Industries with an investment of less than or equal to USD75.5 million on plant and machinery fall under this category. The incentives given to them include:
 - Reimbursement of 100 per cent stamp duty and transfer duty on purchase of land.
 - Reimbursement of 50 per cent net VAT/CST/SGST for a period of 7 years.
 - Subsidies on plant and machinery costs and on sustainable eco-friendly measures.
- Mega industry projects: Projects with an investment of at least USD75.5 million or direct employment of 2,000 people, fall under this category. The government would extend tailor-made benefits to such projects to suit investors' requirements.

Investments received

Investments from the U.S.: Around 15 companies from the U.S. have assured a collective investments of approximately USD750 million in Andhra Pradesh; majorly being pumped in the renewable energy sector.¹⁶

- 'How Punjab is wooing investors at a time when the law and order situation has hit rock bottom', The Economic Times, 1 November 2015.
- 13. 'Punjab gets investment proposals worth Rs 1.15 lakh crore', The Economic Times, 29 October 2015. 14. 'Industries & Commerce Department - 'Industrial Development Policy 2015-2020' - Orders-Issued', GoAP, 29 April 2015.
- 15. 'Andhra Pradesh unveils new industrial policy', The Business Standard, 1 April 2015

- '15 companies assure Rs 5,000 crore investment in Andhra Pradesh, to create 10,000 jobs', The Economic Times, 12 July 2015.

^{09. &#}x27;Notification', Government of Punjab, 9 November 2015.

^{&#}x27;Nod to host of incentives to boost industries, investors', Daily Post, 27 October 2015

^{&#}x27;Fiscal sops to continue for investors in Punjab during GST regime: Sukhbir Singh Badal', The Business Standard, 16. 20 October 2015. 12.

Telangana

Telangana launched a bold and investor-friendly Industrial Policy in June 2015 to attract investments from the country as well as from global industrialists. The following are some of the policy's key reforms¹⁷:

- Rapid clearances: Industrialists have been accorded with the 'Right to timely clearances', assuring clearances within 15 days for mega projects (investments worth USD30 million or more) and maximum of 30 days for all other categories.
- Self-certification: TS-iPASS (Telangana State Industrial Project Approval and Self-certification Services) Act has been implemented to provide speedy processing and approvals based on self-certification by companies.
- Automatic clearances and punitive measures: Projects • would be deemed approved if no clearances are given by the government in a specified number of days. Moreover, a penalty of USD15 per day would be levied on the officerin-charge for causing such unnecessary delays.
- Others: Round-the-clock power supply, tax concessions and zero-tolerance for corruption.¹⁸

Investments received

- New record set: The Government of Telangana had cleared 17 projects worth USD225 million within 10 days of launching the new industrial policy.19
- ITC investment plan: An investment of USD1.2 billion was announced by ITC reacting to the government's announcement of its investorfriendly Industrial Policy.²⁰

Maharashtra

- Scrapping RRZ: The Maharashtra State Government scrapped its River Regulation Zone (RRZ) policy in January 2015. As a result, the areas within 2 km of high flood lines on either side of the river basins would no longer come under no-development zones.²¹
- . Increasing FSI: The State Government increased the Floor Space Index (FSI) for industry activities from 0.1 to 1, while delegating the power to sanction projects to collectors to speed up the projects. Agricultural land, classified as No-Development Zone earlier, would also be accessible to the industry with a maximum FSI of 1.22,23

Investments received

Scrapping of the RRZ policy could result in approvals for projects worth USD1.1 billion in the river zone.21



- 17 / Telangana Industrial Policy 2015' Sakshi Education, 17 June 2015
- 'TSiPass to Kick off with Clearances to 164 Industries', The New Indian Express, 11 June 2015. 18.
- 19. Telangana govt sets record with new industrial policy, clears 17 projects worth Rs 1500 crore in 10 days', The Indian Express, 22 June 2015
- 'Telangana announces industrial policy, ITC responds with Rs 8,000 crore investment plan', Business Today, 12 June 2015. 20. 21. 'Maharashtra government scraps RRZ policy, draws greens' wrath', DNAIndia, 22 January 2015
- 22. 'New FSI policy to help Maharashtra industry', The Economic Times, 23 December 2014.
- 23. 'Maharashtra govt unlocks agricultural land for industry, education institutes', The Times of India, 13 June 2015.

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Investment promotion

To make the business environment more investor friendly and to improve their Ease of Doing Business rankings, several states have adopted new investment promotion policies or amended the existing ones.



Rajasthan

The Government of Rajasthan amended the Rajasthan Investment Promotion Scheme 2010 to implement the new scheme in 2014 providing financial assistance and subsidies to new as well as existing enterprises seeking expansion.24,25

- Various exemptions: 50 per cent exemption is given to manufacturing and service enterprises on electricity duty, land tax, mandi fee, stamp duty and conversion charges for a period of 7 years.
- Increased subsidies are given on VAT and CST, ranging from 20 to 50 per cent under different categories.
- Additional benefits to thrust sectors: These sectors would include ceramic and glass, dairy, electronic system and design manufacturing, industrial glass, pharma, plastic to oil manufacturing, power loom, textiles, tourism, etc.

Process reforms

Effective singlewindow approval

Several states have introduced single-window clearance mechanisms to provide an easy approach to investors' queries and requisite clearances in a short time-frame.

E	

Punjab

- All industrial clearances under one agency: The Punjab Bureau of Investment Promotion (PBIP) acts as a unified agency that provides a One-Stop Clearance System (OSCS) for all 27 state-level regulatory and fiscal incentive approvals, including pollution control, excise and taxation, labour issues, factory licences, boiler registrations, town and country planning, land and power issues and revenue issues26
- Deemed approvals: The state has provisions for deemed approvals in cases where the required clearances are not given within a specified time frame.²⁷

Potential benefits

Punjab ranked number 1 in DIPP's State Assessment report in the 'Setting-up of Business' parameter of Ease of Doing Business by World Bank; business can be set-up in 35 to 40 days now.

- 25. 'Rajasthan Investment Promotion Scheme, 2014', Government of Rajasthan, August 2014.
- 26. 'Punjab best state to startup, Andhra Pradesh second', The Economic Times, 14 September 2015. 27. 'States asked to follow Punjab model to attract investors', The Financial Express, 26 March 2015.

^{24. &#}x27;Business Opportunities and State Initiatives - Rajasthan', OIFC, November 2014.

Andhra Pradesh

• **Clearances in 21 days:** The state government implemented a Single Desk Clearance mechanism to provide all industrial clearances, except for heavy units, within 21 days.²⁸

Potential benefits

 Quick clearance to Xiaomi: Owing to the state's Single Desk Clearance, Xiaomi received approval for its Vishakhapatnam plant in 8 days.²⁹

Labour

Several state governments have established labour reforms in their respective jurisdictions to make it easier for investors and industrialists to manage labour issues and address labours' demands.

Jharkhand

- Online CLMS portal: Jharkhand introduced a Comprehensive Labour Management System (CLMS) to enable industrialists access to all departmental services, like registration of workers, licensing, annual returns, etc., online – resulting in speedy approvals and clearances.³⁰
 - The department introduced self-certification for renewals and returns, and mandated a single joint inspection every 5 years under 14 labour laws.
 - The initiatives allowed the state to reach a compliance rate of 72 per cent as compared to the national average of 19.5.³¹

Potential benefits

• Improved ease of managing workers.

Madhya Pradesh

- The state implemented a Voluntary Compliance Scheme (VCS) to quicken services related to labour law compliance, maintaining registers and filing returns:³²
 - **Exemption from surprise inspections** under 16 labour laws.
 - Maintaining only 1 consolidated register instead of 61.
 - Filing only 2 returns annually instead of 13.

Potential benefits

- Significant reduction in government intervention for inspection, leading to decline in corruption.
- Improved ease of compliance.

- 31. 'World Bank to take up Jharkhand as case study', Daily Pioneer, 29 November 2015.
- 32. 'Voluntary Compliance Scheme for industries implemented in State', The Pioneer, 20 October 2014.

^{28. &#}x27;Investors in Andhra Pradesh to get nod in 21 days', The Times of India, 2 April 2015.

^{29. &#}x27;Xiaomi got clearance for Vizag plant in just 8 days', The Mobile Indian, 10 August 2015.

^{30. &#}x27;Jharkhand launches 'Ease of Doing Business', The Business Standard, 3 May 2015.

Finance and tax

By adopting online tools and techniques, several state governments are ensuring that filing of returns, tax-paying procedures and other financial processes are easier for investors to carry out.

Maharashtra

- Simplified tax registration: The state government amended the MVAT and CST registration processes creating a unified process requiring single ID for VAT and Professional Tax registration.³³
- Online tax payment: The state implemented an online system for payment of VAT, CST, Professional tax, luxury tax and entry tax.³⁴
- Investment facilitation cell: Maharashtra Industry, Trade and Investment (MAITRI) facilitation cell was launched to support and guide investors through hand-holding and approve all investment-related information including incentives, subsidies, grievances and other clearances.³⁵

Investments received

- Foxconn investing in Maharashtra: Foxconn signed an MoU with the Maharashtra Government in August 2015 to invest USD5 billion in the state over the next 5 years.³⁶
- **GM investing in the state:** General Motors (GM) had signed an MoU with the state government to expand its manufacturing capacity in Pune by investing USD1 billion.³⁶

Sector reforms



The Indian IT-BPM industry is pegged to grow at a rate of 13 per cent in the current fiscal to reach USD146 billion. By 2020, the industry is expected to achieve a revenue of USD300 billion. The landscape of Indian IT-BPM is dominated by exports, mainly to the U.S. In FY2014-15, Indian IT exports are expected to touch USD98 billion, which is an approximate 12 per cent increase as compared with FY2013-14.

NASSCOM Strategic Report 201

Rajasthan

Rajasthan E-Governance IT and ITeS Policy 2015

- For manufacturing enterprises with investments of more than USD4 million
 - 70 per cent of VAT and CST deposited for 7 years will be reimbursed
 - Employment generation subsidy of 10 per cent of VAT and CST deposited for 7 years will be deposited
 - 50 per cent of the electricity duty will be exempted for 7 years
 - 50 per cent of the land tax (tax payable under chapter VII of the Rajasthan Finance Act, 2006) will be exempted for 7 years.
- For service providers
 - 50 per cent of the VAT paid on equipment and machinery for a period of 7 years will be reimbursed;

for service providers engaged in providing entertainment, 25 per cent of the VAT will be reimbursed

- 50 per cent of the electricity duty will be exempted for 7 years
- 50 per cent of the land tax.
- Customised fiscal incentive packages could be provided to enterprises investing over USD31 million and providing employment to 400 people (for manufacturing enterprises), or 500 people (for service providers).
- 100 per cent exemption of stamp duty on purchase/lease of land will be provided for enterprises with investments of over USD0.8 million.

'Ease of doing business: Here's all you need to know about the top 10 states'. DNAIndia. 22 January 2015.

- 35. 'Govt of Maharashtra launches MAITRI', Projects Today, 27 February 2014.
- 36. 'Foxconn to 'Make in India', will invest \$5bn in Maharashtra', The Hindustan Times, 8 August 2015.

 ^{&#}x27;State Government Initiatives', Government of India, accessed on 23 November 2015 For electronic sources, please provide the entire url. Carry out this change across the document.

Chhattisgarh

Chhattisgarh Electronics, IT and ITeS Investment Policy 2015-20

- Interest benefits: Units established in the state will be reimbursed 75 per cent of the total interest paid annually for 8 years with a maximum limit of USD166,300 per annum.
- Capital investment subsidy: 50 per cent of the fixed capital investment will be reimbursed to units, subject to a limit of USD200,000.
- **Subsidy on land premium:** 85 per cent of the land premium will be reimbursed to units that are established in notified IT areas.
- **Tax exemptions:** 100 per cent exemption on electricity duty will be reimbursed for a period of 12 years; 100 per cent exemptions on CST and entry tax will be reimbursed for a period of 10 years; 100 per cent stamp duty will also be reimbursed.
- Training incentives: USD300 per employee will be paid to units for recruitment and training for the first 3 years, up to a limit of USD15,600.

Investments received

- The state government signed an agreement with a Chinese company, Forstar Industry Limited (FIL) to set up a manufacturing plant for computer systems and mobile devices.
- Chhattisgarh government would be investing USD1.6 billion in the coming 2 to 3 years (2015-18) to build the upcoming new capital city of Naya Raipur into a smart city. Approximately USD1 billion had already been spent to create the basic infrastructure including connectivity and power supply.³⁷

Manipur

Manipur IT-Policy 2015³⁸

- Special incentive for mega IT/ITeS projects: Projects with a new investment of USD3.1 million and above (excluding land cost) and with an employment capability of 200 or more (for IT unit) and 500 or more (for ITeS unit) would come under this category. A special incentive to the tune of 5 per cent of investment would be offered after the second year of the operation available to maximum 2 such projects.
- **Registration and stamp-duty concessions:** IT/ ITeS units intending to establish or expand would be eligible for 100 per cent reimbursement of stamp duty and registration fee on sale/lease/transfer of land for the first transaction and 50 per cent reimbursement subsequently.
- Other incentives: Other incentives include performance-based lease rental subsidy, electricity duty exemptions, land allotment facilitation, etc.

Andhra Pradesh

Andhra Pradesh IT Policy 2014-2020

- **Registration and stamp duty reimbursement:** IT companies will be eligible for 100 per cent reimbursement of stamp duty, transfer duty and registration fee on the first sale/lease deal transaction, and 50 per cent on the second transaction.
- Exemption of electricity duty: New IT units will be provided 100 per cent exemption on electricity duty for a period of 5 years.
- Incentive for mega projects: For projects that can create employment of 5,000 or more in 5 years (mega projects).
 - For lease/rental, a subsidy of INR10 per square foot per month will be provided for 3 years
 - 10 per cent of capital expenditure will be reimbursed for mega project that enter into an MoU with the state by 2016.

Investments received

- Andhra Pradesh attracted investments worth approximately USD500 million in the IT sector, with around 37 companies planning to setup their bases in the state.³⁹
- The state expects a total of approximately USD2 billion investments in the sector by 2020.⁴⁰

 'Andhra Pradesh expects Rs 42,000 crore investments in IT, electronics sector', Deccan Chronicle, 28 September 2014.

^{37. &#}x27;Chhattisgarh to invest Rs 10K crore in new capital city', Money Control, 11 February 2015

^{38. &#}x27;Manipur IT Policy 2015', Government of Manipur, 13 March 2015.

^{39. &#}x27;AP attracts Rs 3,000 cr investments in IT', The Hindu, 11 May 2015

Solar energy

In July 2015, the government of India revised its solar power generation capacity target to 100,000 MW from 20,000 MW. The capacity is proposed to be achieved through 40,000 MW of rooftop solar projects and 60,000 MW of ground-mounted solar projects.

'Ministry of New and Renewable Energy', accessed on 14 December 2015.

Rajasthan

Solar Energy Policy 2014⁴¹

- Generation of electricity from solar parks would be treated as an eligible industry; incentives under Rajasthan Investment Promotional Scheme will be available to solar parks.
- Promotional schemes: Various fiscal incentives such as VAT, CST subsidies, 50 per cent land tax exemption, electricity duty and stamp duty exemption will be offered.
- Water availability: Adequate water would be provided for power generation with fast clearances from the state pollution control board.42

Investments received

- Four companies have signed MoUs to develop solar power projects under the state's solar policy; the 4 projects combined would contribute about one-fourth (26 GW) of India's solar power generation target by 2022.43
 - Adani Enterprises will develop a 10 GW solar park in Rajasthan by 202544
 - IL&FS Energy Ltd. and Essel Infra Projects Ltd. each of them are expected to develop solar parks of 5 GW capacity⁴³
 - Reliance Power is expected to develop a solar park with a capacity of 6 GW by 2021.43
- The 4 projects would need an investment of USD24.3 billion.43

Andhra Pradesh

Solar Power Policy 2015⁴⁵

- Transmission and distribution charges exemption: Transmission and distribution charges would be exempted for wheeling of power generated from projects for captive use or third-party sale within the state.
- Tax and other benefits: Electricity duty, cross subsidy surcharge is exempted for captive consumption and sale within the state.
- Solar power projects will be given industry status and will • be eligible for incentives available to industrial units.
- The state government will help facilitate infrastructure for power evacuation, water requirement and internal roads.

Jharkhand

Jharkhand Solar Policy 201547

- Transmission and distribution charges exemption: Transmission and distribution charges would be exempted for wheeling of power generated from projects for captive use or third-party sale within the state.
- Tax and other benefits: Electricity duty, cross subsidy surcharge is exempted for captive consumption and sale within the state; also, equipment purchased would be exempted from VAT and entry tax.
- Solar power projects will be given industry status and will be eligible for incentives available to industrial units.

Investments received

SoftBank (a Japanese telecom and Internet company) will set up a 20 GW solar plant in Andhra Pradesh (timelines not disclosed yet).46

Investments received

A large Indian conglomerate is planning to set up a 1 GW solar power plant at an investment of USD1.1 billion (timelines not disclosed yet).48

'Rajasthan solar policy 2014', accessed 23 November 2015. 'Solar for a brighter future', accessed on 23 November 2015. 'Rajasthan clears solar power projects worth Rs.1.56 lakh crore', accessed on 13 December 2015.

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- AP Solar Power Policy', accessed on 19 November 2015.
 SoftBank to set up 20 GW solar plant in Andhra Pradesh', accessed on 25 November 2015.
 Jharkhand Solar Power Policy', accessed 14 December 2015.
- 48. 'Adani to set up 1000MW solar power plant in Jharkhand', accessed on 14 December 2015

Adani to develop 10,000 MW solar parks in Rajasthan', accessed on 20 November 2015.

Automotive

The Indian automotive sector's current output value is around USD72.4 billion and is envisaged to grow 3.5 to 4 times its current value to about USD265 billion by 2026 according to the Automotive Mission Plan (AMP2026).

Indian automotive exports grew by 14.9 per cent in April-March 2015 over the same period last year.

SIAM, accessed on 25 November 2015, http://www.siamindia.com/uploads/filemanager/47AUTOMOTIVEMISSIONPLAN.pdf, http://www.siamindia.com/statistics.aspx?mpgid=8&pgidtrail=9.

Tamil Nadu

Tamil Nadu Automobile and Auto Components Policy 201449

- Infrastructural setup: Automotive Industrial Development . Centre (AIDC) would be formed offering investment facilitation services, like policy implementation, interventions and corrections, and assisting investors in decision making.
 - Automotive Suppliers Park would be setup to improve logistics competitiveness.
 - Auto City would be set-up as a state-of-the-art industrial park catering to domestic and global automotive and component design, manufacturing and remanufacturing.
 - Auto Industrial Parks and auto clusters would be promoted to extend various infrastructural and other facilities with an aim to attract more investments.
- Land Rebate: Ultra mega⁵⁰ and super mega projects⁵¹ to be offered a rebate in cost of land procured from SIPCOT at 10 per cent and 5 per cent.
- Capital subsidy and stamp duty benefit: 50 per cent stamp duty concession and further capital subsidy of 5 per cent.52

Investments received

- MRF proposed to invest USD680 million to manufacture truck and passenger car radial tvres.54
- Apollo Tyres proposed to invest USD400 million for manufacturing truck and bus radial tyres.54
- Mahindra & Mahindra signed an MoU with the Tamil Nadu government to invest USD600 million for setting up a test track and an automotive plant.53
- Renault-Nissan has committed an investment of USD780 million to expand its Tamil Nadu plant.54

Maharashtra

Maharashtra VAT incentives 2014

- VAT refund: The state re-amended its 2011 policy in favour of the industry, and the VAT refund to auto-manufacturers would now be given to companies on gross basis instead of net basis.55
- Ultra mega projects benefit: 100 per cent gross VAT refund was proposed for ultra-mega project with investments over USD235 million.55

Investments received

- Maharashtra received investment commitments from global automakers and signed MoUs worth USD1.8 billion which include⁵⁵:
 - Mahindra & Mahindra and Tata Motors to invest USD625 million each
 - Bajaj Auto planning to invest USD310 million
 - Volkswagen India to invest USD235 million by 2021.

- 52. 'TN Automobile and Auto Components Policy 2014,' accessed on 18 November 2015
- 53. 54. 'Tamil Nadu attracts mega investments at Global Investors Meet,' accessed on 25 November 2015. 'Renault-Nissan plans to invest Rs 5,000 crore to expand Tamil Nadu plant', DNA India, 23 April 2015
- Maharashtar government, automakers reach agreement over VAT; Rs 11,510-crore plans rev up', The Economic Times, 29 August 2014. 55.

^{&#}x27;Tamil Nadu Automobile and Auto Components Policy 2014', Government of Tamil Nadu, 21 February 2014

Ultra mega projects are ones with investments of over USD755. Binline radius (21) EOUIdar 2014, Constraint of the constraint

Aerospace and defence (A&D)

The Indian A&D sector present a robust growth potential in the coming years. A&D expenditure on acquisitions are estimated to be around USD100 billion over the next decade, 2015-25.

The Indian civil aviation industry is among the top ten globally with a market size of USD16 billion in 2014 and is expected to be among the top 3 by 2020.

Andhra Pradesh

Andhra Pradesh A&D Policy 2015-20⁵⁶

- Aerospace and Defence Park: Proposed set-up of A&D Park, under PPP-model, in Ananthapur and Chittoor/ Nellore districts, comprising of technology and training centres. Further a subsidy of up to 50 per cent of the cost of land, building and plant and machinery is proposed.
- Aetropolis set-up: The government would set up an • Aetropolis at Bhogapuram which would comprise of an MRO-hub with full aircraft base maintenance services for regional and global aircrafts and an Air Cargo complex with integrated processing, storage and handling facilities.
- Tax benefits: VAT/CST/SGST reimbursements and 100 per • cent exemption from entry tax on plant and machinery and capital goods for first 3 years will be offered.
- Maintenance benefits: Aircrafts brought in for . maintenance and overhaul would receive 100 per cent reimbursement of VAT on input material, excluding aviation turbine fuel.

Investments received

- USD3 billion investments by 2020: The new A&D Policy is expected to attract investments worth USD3 billion by 2020. The investments are expected from various companies such as Airbus, Essel Infra, SREI Infra, etc., which have shown interest in setting-up defence and aerospace parks.⁵⁷
- An Indian company is setting up its defence systems integration complex in Anantapur district with an estimated investment of USD78 million.58
- Indian-made helicopter production: Airbus announced a JV with an Indian defence manufacturer to produce helicopters in India. The investment is likely to come up in Hyderabad.59
- Major global A&D companies interested to invest: According to the policy advisory group of the World Economic Forum (WEF), 12 to 13 out of the 30 major global A&D industries such as American GE, Boeing, etc., have evinced interest to invest in the state.60

Tourism

The travel and tourism industry is one of the largest service industries in India. During 2014, the industry contributed USD120 billion to the country's GDP which is expected to grow at the rate of 7.8 per cent annually till 2018. The investment in the industry stood at USD33 billion and is expected to rise by 6.5 per cent to reach a figure of USD67 billion by 2025.

Gujarat

Tourism Policy 2015-202061

- Capital subsidies: An investment of over USD7.6 million for tourism units will get a subsidy of 15 per cent, up to a maximum of USD1.5 million.
- Stamp duty reimbursements: Tourism Units will qualify • for 100 per cent reimbursement of stamp duty and registration charges on sale/lease/transfer of land for the first transaction only.
- Exemption from Luxury Tax and Entertainment Tax for • eligible Tourism Units for 5 years from commencement of commercial operations or the date of completion of expansion.
- Complete exemption from Electricity Duty for 5 years for new tourism units only.

Bharat Electronics to set up new defence systems integration complex in Andhra Pradesh, accessed on

Investments received

As per the World Travel & Tourism Council, investments estimated to the tune of USD4 billion is likely to come into the state by 2025.62

- Aerospace Defence Manufacturing Policy 2015-20,' GoAP, 16 June 2015. 'Andhra Pradesh looks to attract Rs 20,000 crore in defence, aerospace parks,' The Economic Times, 25 August 'Investment likely in defence, aerospace, atomic energy', The Hindu, 6 September 2015. 'GE, Boeing Keen to Invest in AP, The New Indian Express, 14 December 2015. 'Gujarat govt unveils new tourism policy, in a first tourism gets 'industry status', accessed on 23 November 2015. 'Gujarat govt unveils new tourism policy, in a first tourism gets 'industry status'', The Indian Express, September 60. 61. 62.

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Goa

- The state of Goa introduced its Investment Policy in 2014 to promote tourism and other industries, with a focus on private or public-private investments 63:
 - Establishment of hotels: The government targets granting permissions to hotels to build a cumulative additional capacity of around 8,000 beds in 5 years till 2019
 - More focus on high-spending tourists: The government would focus on high spending tourists and encourage development of boutique and luxury hotels in the state. Investments in other high-end tourism products such as tourism hubs - including oceanariums, theme parks, shopping malls, entertainment centres, etc., convention centres, water and adventure sports, marinas and hinterland river cruise, heritage tourism, etc. would be encouraged.
- Medical tourism: To boost the state's medical tourism the government is encouraging large healthcare facilities to set-up hospitals in Goa. It also intends to put the details of each healthcare facility along with its procedures online on a web portal.
- Tourism master plan: The Goa government is working to develop a vision for tourism for the state. The project includes development of a implementable master plan over the short-term (5 years), medium term (15 years) and long-term (25 years) with a framework for deciding appropriate tourism products and right type of tourists.64

Karnataka

Karnataka Tourism Policy 2015-2065

- Identification of tourism destinations: 319 destinations have been identified across the state for developing into tourist destinations.
- Focus on research and infrastructure: The policy would focus more on research and infrastructural development instead of concessions and incentives.
- Other benefits: ٠
 - Mega projects worth more than USD7.8 million would be eligible for special incentives
 - 100 per cent exemption on entertainment tax for small and medium theme parks
 - Transfer of development rights also in the offing through Development Rights Certificate, for the development of heritage buildings.

Investments received

- Six MoUs have been signed with corporates for • adoption of tourist destinations in the state.66
- An investment worth USD8.4 billion is estimated in the sector over the policy period, out of which 50 per cent is expected from the private sector.66

- 'Goa Investment Policy 2014', Directorate of Industries, Trade & Commerce, 18 June 2014. 'Finally, a tourism master plan',The Times of India, 22 July 2014. 'Karnataka Tourism Policy 2015-2020', 17 July 2015.

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Chhattisgarh

Chhattisgarh Tourism Policy 201467

- Development of Gangrel Dam: The Chhattisgarh Tourism . Board (CTB) is developing Gangrel Dam as a mega water sports adventure destination. It would invest around USD3.9 million in the dam's development and apart from leisure activities for attracting Meetings, Incentives, Conferencing and Exhibition (MICE) would also be developed.
- South-East Asian tourists: Sirpur, would be highlighted . as a Buddhist site to attract inbound tourists, especially from the South-East Asia region.
- Others: The CTB would focus on developing convention • centres and niche segments for camping and promoting caravan tourism, promote light and sound show, and develop mega eco-tourist circuit in the state.

Investments received

The CTB received USD17 million project prioritisation from Gol's Ministry of Tourism.67

India is one of the fastest growing markets for electronics, globally. The sector was valued at around USD70 billion in FY2013-14 and is expected to reach USD400 billion by 2020.

The domestic manufacturing base is expected to be USD104 billion by 2020, thus leading to a demand-supply gap of approximately USD300 billion in the country, presenting significant investment opportunities.



Uttar Pradesh

Electronics

Electronics Manufacturing Policy 201468

- Capital subsidy of 15 per cent on fixed capital other than land, will be offered to the first 10 companies operating in electronics manufacturing clusters, subject to a maximum of USD0.8 million.
- Tax and other benefits: Units will be eligible for 100 per cent exemption from stamp duty on purchase/lease of land for establishment of electronic manufacturing clusters, and 100 per cent reimbursement on VAT/CST for a period of 10 years.
- Land Rebate: 25 per cent rebate on sector rates on purchase of land from state agencies will be offered.
- Industrial promotion: Industrial promotion subsidy equivalent to 50 per cent of the incentives applicable for new units would also be extended to existing units if additional capacity investment of 25 per cent or more is made within 3 years of commencement.

Investments received

- Samsung announced an investment worth USD80 million, to expand its manufacturing facility in Noida.69
- Spice group announced plans to set up a manufacturing unit in Uttar Pradesh worth USD75 million.70
- In August 2015, The Taiwan Electrical and Electronic Manufacturers' Association (TEEMA) signed an MoU to invest USD200 million to develop a 210 acre greenfield electronic manufacturing cluster in Greater Noida.71
- Similar agreements were also signed with Lava International for USD90 million, EON Electric for USD30 million, Pacetel System for USD75 million.72

- 'Samsung to expand Noida facility, invests Rs 517 crore', accessed on 18 November 2015.
 'UP Government ropes in Rs 5k cr investment for mobile manufacturing units', accessed on 19 November 2015.
 Taiwanese firms ink MoU for electronic cluster in Gr Noida', accessed on 26 November 2015.
 'UP to sign MoUs of Rs 5,000 cr for electronics manufacturing, The Business Standard, 25 January 2015.

Chhattisgarh Tourism prepares blueprint plan for tourism,"The Financial Express, 10 July 2014, http:// archivetravel.financialexpress.com/sections/market-section/2740-chhattisgarh-tourism-prepares-blueprint-plan-

^{&#}x27;Uttar Pradesh Electronics Manufacturing Policy-2014', Deity, 5 September 2014.

Andhra Pradesh

Electronics Policy 2014-2073

- Building infrastructure: The following establishments are • proposed to be set-up through the PPP model:
 - Mega Electronics Hub in Visakhapatnam
 - Electronics Hardware Park in Kakinada
 - 20 Electronic Manufacturing Clusters (EMCs) across the state
- Tax and duty costs: Units will be given 100 per cent ٠ reimbursement of stamp duty, transfer duty and registration fee on sale and lease deeds. Additionally, 100 per cent VAT/CST reimbursement will be offered for a period of 5 years for new units and for products manufactured and sold in Andhra Pradesh.
- Reimbursement of patent costs for companies headquartered in Andhra Pradesh (a maximum of USD7,500 for domestic and USD15,000 for international companies).
- Special incentives will be offered to mega projects with over USD40 million in investment.

Investments received

- Lava (a mobile handset manufacturer) announced an investment of USD75 million in its Andhra Pradesh manufacturing plant at Tirupati.74
- Micromax, Karbonn and Celkon (mobile handset manufacturers) have also signed up with Andhra Pradesh to set up their manufacturing facilities near Tirupati with a total investment of USD110 million.75
- Foxconn (mobile handset manufacturer) had earlier set up a facility in Sri City multi-product economic zone for manufacturing of mobile phones for Xiaomi, Asus and Oppo among others.⁷⁵

Madhya Pradesh

- **Analog Semiconductor Fabrication (FAB) Investment Policy 2015**⁷
 - Land provision: Contiguous land measuring up to 30 Hectares (Ha), would be provided free of cost on a 50 year renewable lease to new units.
 - Construction cost: The cost of construction of the building shell used for housing the FAB unit would be reimbursed by the state government.
 - Other incentives:
 - Stamp duty and registration fee is exempted for FAB units
 - Reimbursement of cost of internal training is also available
- Electronic Manufacturing Cluster (EMC) Scheme: The state also launched this scheme to support creation of advanced infrastructure for attracting investments in the ESDM sector.77
 - Financial assistance under this scheme: Greenfield EMCs would get an assistance of 50 per cent of the project cost, while Brownfield EMCs would receive an assistance up to 75 per cent of the project cost subject to a maximum of USD8 million.

Investments received

- Reliance group has announced investment to the tune of USD4.2 billion in the electronics sector in Madhya Pradesh to make ingots and polysilicons used in solar panels.78
- The Union Communications and IT Minister also laid the foundation stone for 2 EMCs in the state in October 2014, and pledged an investment of USD31 million.79

- 'ITE&C DEPT Andhra Pradesh Electronics Policy 2014-2020- Orders –Issued', GoAP, 9 September 2014. 'Lava to invest Rs 500 crore in Andhra Pradesh manufacturing plant', accessed on 25 November 2015. 'Big boost for cellular, electronics manufacture in AP', accessed on 23 November 2015. Analog Semiconductor Fabrication (FAB) Investment Policy 2015,' Deity, 10 February 2014.

75 76.

- Madhya Pradesh Government website, accessed on 15 December 2015
- Madhya Pradesh Government website, accessed on to December 2010.
 Yanil Ambani-led Reliance Group to further invest Rs 46,000 crore in defence. IT in Madhya Pradesh' The Economic Times, 22 October 2015.
- 79. 'Madhya Pradesh gets twin electronics clusters'. The Hindustan Times. 7 October 2014.



The food processing sector contributed USD132 billion to India's GDP in FY2012-13, accounting for 1.5 per cent of the GDP. The sector is expected to grow to USD230 billion by FY2016-17.

The sector is a key contributor to India's exports, and contributed to 11.8 per cent of Indian exports in FY2014-15, valued at USD35 billion.

Contribution of Food Processing Sector to GDP (at 2004-05 prices)', Ministry of Food Processing Industries, http://mofpi.nic.in/WriteReadData/FPL GDPXbx, accessed 11 December 2015; 'Contribution of Food Processing Sector to GDP (at 2004-05 prices)', Ministry of Food Processing Industries http://mofpi.nic.in/WriteReadData/FPL_GDPXbx, accessed 11 December 2015; NSDC – Food processing report 2013-17; Export-Import Database, Ministry of Commerce, http://www.commerce nic.in/eidb, accessed 11 December 2015; NSDC – Food processing report 2013-17; Export-Import Database,

Andhra Pradesh

Food Processing Policy 2015-2020⁸⁰

- Establishment of food parks: The policy aims to • establish 3 categories of food parks across the state:
 - Integrated Food Parks: Consisting of minimum 10 food processing units, grant of 50 per cent of project cost for setting-up these food parks would be provided with a limit of USD3 million.
 - Mega Food Park: Consisting of minimum 20 food processing units, grant of 50 per cent of project cost would be provided with a limit of USD8 million.
 - Ultra Mega Food Park: Consisting of state-of-theart infrastructure with plug-and-play facilities and customised incentives.
- Capital subsidy: Up to 25 per cent of project cost (limited to USD0.8 million) will be provided as capital investment subsidy for new units, for existing players capital subsidy of 25 per cent for new equipment is available (limited to USD150.000).
- Others: 100 per cent reimbursement of stamp duty and transfer duty on purchase/lease of land will be provided. Additionally, VAT/CST reimbursements, export incentives and marketing assistance are also provided under the policy's purview.

Investments received

The policy targets to attract new investments worth USD780 million by 2020.80

Assam

- The North-Eastern state announced its Industrial & Investment Policy in 2014 where the following food parks are either proposed to be set-up or are under development currently.81
 - North East Mega Food Park: A mega food park accommodating 27 food processing units is being developed under the PPP-model in the Nalbari district in Assam at a cost of USD12 million
 - Tea Park: The state of Assam is popular for its tea. To provide adequate blending, storage and transhipment facilities of its tea in the world market, a Tea Park is being set-up in the Kamrup district.

Marketing infrastructure: Assam is also constructing marketing infrastructure for its agro-food processing industry. The infrastructure would be created at 5 locations within the state to promote the Food Processing sector and to provide storage facilities to farmers.

AP Food Processing Policy', accessed on 23 November 2015.
 'Industrial & Investment Policy of Assam 2014', MoFPI, 22 February 2014.

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Case studies

1

Madhya Pradesh

Obtaining construction permits and infrastructure related utilities



The state of Madhya Pradesh has shown significant improvements in easing the process of land allotment and obtaining construction permits. One key differentiating feature of the state's practice is the Automatic Building Plan Approval System (ABPAS).

- **ABPAS:** This is a thorough and automated approval system that allows various activities of obtaining construction permits for investors to be carried out online, such as:
 - Online application and status tracking
 - Scrutiny of drawings
 - Uploading remarks, reports or photographs via a mobile during site inspection
 - Fee calculation and online payment
 - Final certificate issuance.
- **Reduction in approval time:** The land allotment and construction permit reforms have been effective in bringing down the building approval period from 30-60 days to 21 days.
- Innovation award: The state's Urban Administration and Development Department (UADD) was awarded under the 'Gold' category of 'Innovative use of Technology in E-Governance' for implementing the project.
- **Role-model:** The software, which helps ensure transparency in scrutinising the building plans and leaves no scope of manual intervention, is being studied by the union government's Ministry of Housing and Urban Poverty Alleviation for implementation across the country.

'Centre For Innovations In Public Systems', CIPS website, 26 August 2014; 'M Ramachandran: City stories', Smart Investor website, 19 October 2014; 'Building plan approval system hogs limelight', The Hindu, 1 February 2015.

2

Chhattisgarh Tax reforms

Laughe Stat

To enhance Ease of Doing Business in the state, Chhattisgarh in its budget document introduced tax reforms such as:

- **Exemption from filing quarterly returns:** Traders with an annual turnover of up to USD156,000 have been exempted from filing quarterly returns.
- Online tax payment: The government has mandated e-payment of taxes and sameday registration of VAT.
- VAT incentives: VAT on re-rolled products and aviation turbine fuel has been reduced to 4 per cent, while all industrial inputs including lubricants, light diesel oil, electric panels, etc., have been brought under the 5 per cent VAT slab.
- Entry tax reliefs: Entry tax exemption has been extended to investments up to USD780,000 in plant and machinery for MSMEs. Similarly, VAT and Entry Tax has been exempted for construction of bio-toilets to boost the centre's Clean India initiative.

Youth, Infrastructure and Industry the Focus of Dr Raman Singh's Budget for Chhattisgarh', Sales Tax India website, 13 March 2015; 'Adani to invest Rs 25,200 crore in Chhattisgarh', The Business Standard, 25 August 2015.

3

Karnataka

an established leader in the A&D sector



- USD9.1 billion investments expected
- Karnataka is home to global aerospace giants like Boeing, Honeywell, Airbus, EADS, Pratt & Whitney, Rolls Royce, UTC.

- The presence of various public sector institutions in defence, viz. HAL, BEML, BHEL, NAL, DRDO, ISRO, etc., has positioned Karnataka as a hub for the aerospace industry in India.
- The aerospace policy launched by Karnataka for 2013-23 was the first by any Indian state and aims to make the state an aerospace hub for Asia by 2018 and a top global aerospace and MRO destination by 2023.
- The salient features of the policy include the following:
 - **Infrastructure:** Setting up Bangalore Aerospace Park (BAP) and Bangalore Aerospace SEZ (BASEZ) at Devanahalli and Aerospace Parks at potential locations like Mysore, Hubli, Mangalore, Belgaum through PPP model.
 - Financial assistance: It was proposed to provide 50 per cent of land cost, building, plant and machinery up to USD3 million for testing centres, USD3.8 million to Technology Innovation/Certification/Calibration Centres and USD7.6 million for Common Facility Centres. Additionally companies would be funded through Karnataka Aerospace Venture Capital (KARAVEN) Fund with a corpus of USD30 million.
 - Research and talent pool: Proposed to commission a 'Karnataka Aerospace Research & Innovation Centre' and launch a new Aerospace University in the state; Hindustan Aeronautics Ltd later announced that it would help in setting up the University.
 - **Others incentives:** Anchor Unit subsidy of USD0.8 million to the first ten Aerospace OEM enterprises; stamp duty, electricity duty, CST and EntryTax.
- Aerospace Park set up near Bengaluru airport in Devanahalli, operational since mid-2014.
 - Wipro and Swiss machine tools manufacturer Starrag set up shop
 - Further, more than 40 companies were allotted land at the park.
- Rolls-Royce, which also operates and manages 2 engineering service centres in Bengaluru with QuEST and TCS, is looking to set-up a new facility in Bengaluru and hire 500 engineers by 2017.
- Honeywell, a global giant in products and services across aerospace and defence, announced that it would invest USD211 million in India for a new campus spread across 5.4 acres.
- Recently, Aequs Aerospace, a leading aerospace parts manufacturing firm and a major supplier of Airbus Group, has expressed interest to invest USD50 million to set up a new manufacturing facility in the Aequs Special Economic Zone (SEZ) in Belagavi, Karnataka.

"Kamataka Aerospace Policy 2013-23," assessed on 18 November 2015; Invest in Kamataka, accessed 15 December 2015; 'Aequs Aerospace to spend Rs 334 crore on its Belagavi unit, The Economic Times, September 2015; 'Rolls-Royce to hire 600 engineers for new Bengaluru facility,' The Hindu, April 2015; 'CM Siddaramaiah woos US aerospace firms to 'Make in Karnataka,' The Conomic Times, November 2015.

Startup India an enabling ecosystem for entrepreneurs

The 'Startup India' initiative announced on 15 August 2015 aims to foster entrepreneurship and promote innovation by creating an ecosystem that is conducive for the growth of startups, in the country.

The initiative was launched on 16 January 2016 by Prime Minister of India, Shri Narendra Modi who unveiled the Action Plan highlighting initiatives and schemes being undertaken by the government to address various aspects relating to developing a conducive startup ecosystem in the country. The key highlights of the Action Plan are as below:¹

Simplification and handholding

Compliance regime based on self-certification

Startups shall be allowed to self-certify compliance with nine labour and environment laws. In case of the labour laws, no inspections will be conducted for the first three years. Startups may be inspected on receipt of credible and verifiable complaints of a violation, filed in writing and approved by at least one level senior to the inspecting officer.

In case of the environment laws, startups which fall under the 'white category', would be able to self-certify compliance, and only random checks would be carried out in such cases.

Startup India hub

The objective is to create a single point of contact for the entire startup ecosystem and enable knowledge exchange and access to funding. Among other objectives, the hub shall assist startups through their lifecycle with specific focus on important aspects like obtain finance, test feasibility, advise business structuring, enhance marketing skills, technology commercialisation and management evaluation.

Rolling out of mobile application and website

The objective of the mobile application and website is to serve as a single platform for startups to interact with the government and regulatory bodies. The mobile application shall provide accessibility to startups to register themselves with relevant government agencies, track status of the registration application, file for compliances and obtain information on various clearances/approvals/registrations, collaborate with various startup ecosystems partners and apply for various schemes being undertaken under the Action Plan.

Legal support and fast-track patent examination at lower $\ensuremath{\mathsf{costs}}^2$

The scheme for 'Startup Intellectual Property Protection' (SIPP) shall facilitate the filing of patents, trademarks and designs by innovative startups. Fast track startup patent applications, form a panel of facilitators who can assist in filing of IP applications, 80 per cent rebate on filing of applications, etc. are some measure being planned by the government.

Relaxed norms of public procurement for startups

To promote startups, the government shall exempt them (in the manufacturing sector) from the criteria of 'prior experience/turnover' without any relaxation in guality standards or technical parameters. The startups are required to demonstrate the requisite capability to execute the project and should have their own manufacturing facility in India.

Faster exit for startups

The objective is to make it easier for startups to wrap up operations. The Insolvency and Bankruptcy Bill 2015, provides the timeline for startups to wrap-up operations on a fast-track basis within 90 days, from date of making application.

Funding support and incentives

Funding support through a 'fund of funds' with a corpus of INR10,000 crore

To provide funding support to startups, the government shall set-up a fund with an initial corpus of INR2,500 crore and a total corpus of INR10,000 crore over a period four years (i.e. INR2,500 crore per year). The fund will be in the nature of a 'fund of funds', which means that the government shall not invest directly into startups, but shall participate in the capital of SEBI registered venture funds.

Credit guarantee fund for startups

Debt funding to startups is perceived as a high-risk area and to encourage banks and other lenders to provide venture debts to startups, a credit guarantee mechanism through the National Credit Guarantee Trust Company (NCGTC)/SIDBI is being envisaged with a budgetary corpus of INR500 crore per year for the next four years.

Tax exemption on capital gains

The exemption shall be given to individuals who have capital gains during the year, if they have invested such capital gains in the 'fund of funds' recognised by the government. In addition, existing capital gain tax exemption for investment in newly formed manufacturing Micro, Small and Medium Enterprises (MSMEs) by individuals shall be extended to all startups.

Tax exemption to startups for three years

With the objective of encourage development of startups, its profits shall be exempted from income tax for three years. This fiscal exemption shall facilitate the growth of business and meet the working capital requirements during the initial years of operation. The exemption shall be available subject to nondistribution of dividend by the startup.

^{01.} http://dipp.nic.in/English/Investor/startupIndia/StartupIndia_ActionPlan_16January2016.pdf

Tax exemption on investments above Fair Market Value

Under the Income tax Act, 1961, where a startup (company) receives any consideration for issue of shares which exceeds the Fair Market Value (FMV) of such shares, such excess consideration is taxable in the hands of a recipient as 'income from other sources'. Currently, investment by venture capital funds in startups is exempted from operations of this provision. The same shall be extended to the investment made by incubators in the startups.

Industry academia partnership and incubation

Organise startup festivals to showcase innovate products/ services and provide a collaboration platform

To bolster the startup ecosystem in India, the government proposes to introduce annual startup festivals at both, national and international levels.

Launch of Atal Innovation Mission with Self-Employment and Talent Utilisation programme

Atal Innovation Mission (AIM) shall have two core functions:

- 1. Promote entrepreneurship through Self-Employment and Talent Utilisation (SETU):
- Establish sector specific incubators including in PPP mode
- Establish 500 tinkering labs
- Provide pre-incubation training to potential entrepreneurs in various technology areas in collaboration with various academic institutions with expertise in the field
- Strengthen incubation facilities in existing incubators and mentor startups
- Provide seed funding to potentially successful and high growth startups.

2. Promote innovative products and services:

- Institution of Innovation Awards Three per state/UT and three at the national level
- Provide support to 'State Innovation Councils' for creating awareness and organising state level workshops/ conferences
- Launch of grand 'Innovation Challenge Awards' for finding ultra-low cost solutions to resolve India's pressing and intractable problems.

Harness private sector's expertise for incubator set-up

The government shall encourage setting up of:

- a. Nearly 35 new incubators in existing institutions. Central government shall provide funding support of 40 per cent (subject to a maximum of INR10 crore) for establishing new incubators, for which 40 per cent funding from respective state governments and 20 per cent funding from private sector has been committed. The incubators shall be managed and operated by the private sector.
- b. Nearly 35 new private sector incubators. Central government shall provide a grant of 50 per cent (subject to a maximum of INR10 crore) for incubators established by private sector in existing institutions. The incubator shall be managed and operated by the private sector.

Build innovation centres at national institutes

To augment incubation and R&D efforts in the country, the government shall set-up/scale-up 31 centres (to provide facilities for over 1,200 new startups) of innovation and entrepreneurship at national institutes. This shall include setting up 13 startup centres with annual funding support of INR50 lakh and setting -up/scaling-up 18 technology business incubators at NIITs/IITs/IIMs etc.

Set-up seven new research parks modeled on the research park set-up at IIT, Madras

The government shall set-up seven new research parks, based on the research park set-up at IIT Madras, in identified institutes with an initial investment of INR100 crore each. This is to propel successful innovation through incubation and joint R&D efforts between academia and industry.

Promote startups in the biotechnology sector

The government shall set-up five new bio-clusters, 50 new bio-incubators, 150 technology transfer offices, 20 bio-connect offices and biotech equity funds to foster and facilitate bio-entrepreneurship.

Launch innovation focussed programmes for students

To promote research and innovation among young students, the government shall initiate innovation core programme to target school kids with an outreach of 10 lakh innovations from 5 lakh schools. In addition, government programmes such as the 'National Initiative for Developing and Harnessing Innovations' (NIDHI) programme and 'Uchhattar Avishkar Yojana' shall also be instituted to promote research and innovation among students and youth.

Annual incubator grand challenge

In order to build an effective startup ecosystem, the government proposes to make forward-looking investments towards building effective, well equipped incubators. These incubators would be given INR10 crore each as financial assistance which may be used to ramp-up the quality of service offerings. An annual 'Incubator Grand Challenge' exercise shall be carried out to identify such incubators.

With the above proposed measures, Government of India has set the tone for laying the foundation of a new chapter in India's economic growth. With the launch of scheme for facilitation of Startups Intellectual Property Protection, the government seems to be working aggressively to promote innovative startups in the country.² In addition, the RBI has proposed regulatory relaxations such as permitting FVCI to invest into startups, allowing access to rupee denominated ECB, issuance of convertible loans, issue of sweat equity to promoters, etc.³ Further, the RBI has simplified processes on select FDI related filings (online facility) to make the life of startups easier.

The various interventions being planned are all parts of a massive impetus to aid entrepreneurs have a less cumbersome journey, from the inception of ideas to starting and operationalising their businesses, thereby encouraging innovation and entrepreneurship among India's thriving startup generation.

^{02.} http://www.ipindia.nic.in/iponew/facilating_StatupIndia_SIPP_18Janaury2016.pdf

Future pointers.

The narrative of India is gradually changing. At a time when the global economies are facing headwinds in recent years, India is moving on a higher economic growth trajectory.

While cities and urban areas show progressive rise in the average per capita spending, proactive measures directed towards benefitting rural India to help increase its income opportunities would contribute towards increasing total domestic consumption in India. In this context, large rural infrastructure projects such as interlinking the rivers and building rural roads, would ensure less dependence on the monsoons for the agricultural output and a more efficient farm to fork supply chain. This in turn shall help ensure a more broadbased consumption pattern.

On the other hand, the rising efficiency of the cities, through Smart Cities initiative, is expected to allow for higher productivity, leading to increased wages and disposable incomes, contributing to the growth of domestic consumption.

In addition, India has embarked on a process of increasing connectivity to its neighbouring economies, thus integrating more tightly with these economies. By connecting its roads, highways and industrial corridors such as the Amritsar– Kolkata Industrial Corridor (AKIC), Bengaluru–Mumbai Economic Corridor (BMEC), Chennai–Bangalore Industrial Corridor (CBIC) and Delhi– Mumbai Industrial Corridor (DMIC) to the neighbouring South Asian and South-East Asian economies, India shall become the epicenter of an economic structure that is significantly larger than its own economy. The process of tighter economic integration with neighbouring economies has started off with initiatives such Bangladesh, Bhutan, India and Nepal (BBIN) initiative, BBIN-Motor Vehicle Agreement, Kolkata-Dhaka-Agartala bus water-ways with Bangladesh, road agreements with Association of Southeast Asian Nations (ASEAN). Also, 6 of the 9 Asian Highway (AH) projects pass through India - a befitting India's strategic location as an is being further strengthened to support regional coastal shipping. Investors based out access to a market size that is much larger than the 1.3 billion that is much larger than the USD2 trillion Indian economy, the fastest growing set of economies in the world.

India's macro story is expected to continue to become more attractive. Reform measures initiated by the government has underpinned India's longterm growth potential while the reduction in the current account deficit on the back of falling oil prices enabled the RBI to increase foreign exchange reserves, which could act as a cushion against external shocks. Inflation has remained benign and inflation expectations are likely to be anchored by the inflation targeting mechanism. Turning to fiscal policy, the government is committed to bring the fiscal deficit to 3 per cent by FY2017-18. Thus the Indian economy is expected to become even more resilient, thus giving sufficient operational comfort to investors.

The Government of India has announced intentions of mobilising more investments towards urban development. Among its many proposed initiatives, the government has announced its intentions to create a comprehensive National Energy Policy, enhance sector-wide efficiency, and improve the quality of energy infrastructure and technology. These initiatives will start bearing fruit in coming years.

The push given by the government on innovation and startups will also add to the growth of the economy. Creating 20 one billion dollar Unicorns would lead to a 1 per cent growth in the economy. The government has put together a fund of funds, the India Aspiration Fund, to support the startup ecosystem in India. Surely, these initiatives will pay off and contribute to the growth of the economy.

To conclude, with favourable macroeconomic conditions, a prudent fiscal policy, responsible government spend and a pro-reform government, India shall continue to evolve into an even more attractive and stable investment destination.

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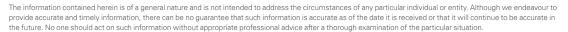
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