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ENVISIONING INDIA 2030



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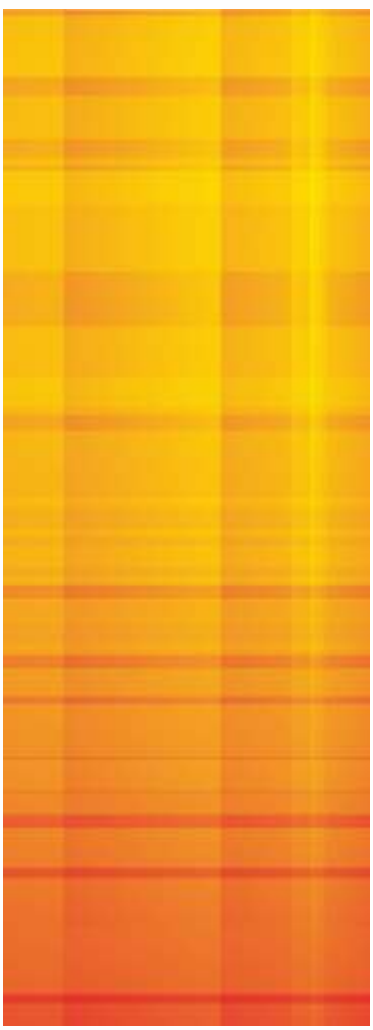
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Innovative India with Shared Prosperity

"Saajha Samriddhi Ke Saath Abhinav Bharat"

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Foreword

India started its economic reforms in 1991 and has seen huge incremental benefits – greater openness, higher growth and substantial poverty reduction. India is now the world's sixth largest economy and has seen major transformation in many parts of the economy and the country. But with new opportunities have come new challenges which are now being tackled.

Seminal reforms such as GST and IBC are transforming the economic landscape of the country. India's infrastructure deficit is being addressed at a faster pace and the ease of doing business is being tackled on a war footing with India's global rankings showing huge improvements. But yet more needs to be done as the aspirations of India's young population are huge. India is also in the midst of a huge demographic transformation which if taken advantage of can propel India to even higher levels of growth.

The benefits of India's demographic dividend and a huge domestic market puts it in an advantageous position to become a $9 - 10 trillion economy by 2030. However, our economic growth is contingent on improving competitiveness, attracting more investment, creating enough employment opportunities to absorb the growing population and overcoming the challenges of exclusion and inequitable access due to multiple deprivations of class, caste and gender — all of which require disruptive approaches to find solutions. Unfortunately, there is no single silver bullet, no one action that will fix all the problems that we face currently. Rather, we need to act on several fronts.

The report "**Envisioning India 2030**" was initiated by FICCI with a view to chart out an agenda of reforms and programmes in 10 inter-connected areas that will help drive India to its goals of shared prosperity by 2030 and a more competitive economy rising to become the third largest in the world. This report, encompassing ten underpinning chapters, identifies the challenges of tomorrow, points to key choices ahead, and recommends not just "what" needs to be reformed, but "how" to undertake the reforms.

Policy consistency and coordination is essential if we are to achieve inclusive growth and significantly reduce unemployment. Productivity and investment-led transformation can inject new dynamism into the economy and ensure future growth, employment, and prosperity. This would enable the economy to gain the momentum it needs to become the global economic centre and become a magnet for investments.

In the last 91 years, FICCI has played an active role in the progress and development of the Indian economy, representing not just the voice of industry but also being an active partner in the development agenda of the government. By 2030, India should transcend a new era of transformation and FICCI will continue to contribute to the building of a "New India". We are confident that you will find this report insightful and engaging and look forward to your feedback and suggestions.

Rashesh Shah
President, FICCI

Overview

India has aspirations to eliminate poverty and become a $9 trillion economy by 2030 - the world's third largest. It could achieve that goal if it improves competitiveness, attracts more investment, creates sufficient jobs to absorb its growing population and pulls women into the job market, who are currently left out of paid work - thus realising its demographic dividend.

If India were to be a $9 trillion economy, its per capita income with a population of 1.5-1.6 billion by then would be under $6000. However, it would not yet be an advanced industrial economy and still be below Thailand and China of today. Nevertheless, it would be an impressive achievement and more importantly change people's lives within a generation.

What is becoming increasingly clear is that there is broad consensus among most political parties on what needs to be done on the economic front. Collaboration on some key reforms - Goods and Services Tax (GST), Insolvency and Bankruptcy Code (IBC), the continuation of Aadhaar, Mahatma Gandhi National Rural Employment Guarantee Act (MGNREGA) and Direct Benefit Transfer (DBT) shows that whichever government comes to power, the agenda for economic change remains more or less the same, perhaps with some differences in emphasis. Between now and 2030, under a normal election cycle of five years, we will see three changes of government at the Centre, but the broader agenda for India's long-term sustainable development will remain the same.

At the state level too, it is becoming clear that an aspirational young population now demands economic progress, jobs and delivery of basic services. The party that delivers these is usually re-elected and those that cannot must give way for others. The underlying issues of jobs, water, housing, education and health are common demands that remain the same, irrespective of the party in power.

In this spirit, FICCI has produced an agenda of reforms and programmes in 10 inter-connected areas that will help drive

> "We are the makers of our own fate. The wind is blowing; those vessels whose sails are unfurled catch it, and go forward on their way, but those which have their sails furled do not catch the wind. Is that the fault of the wind?"
>
> **Swami Vivekananda**

India to its goals of shared prosperity by 2030 - a $9 trillion economy, poverty eliminated and reduced disparities across the states and among its citizens. It must be an agenda in which government, private sector and civil society come together, in which the Centre and the States work as one, where a governance contract to focus on 'vikas' is the driving force of the country, especially in a turbulent global environment.

India has no option but to go forward on this agenda. Slower or jobless growth will create greater social discord and even conflict. It may even revive disparate tendencies in the union and leave us struggling at much lower levels of achievement than we are capable of. It is time to take our rightful place among the big economic global players, deliver a better life to our citizens that our Constitution promised nearly 70 years ago.

As a latecomer, India can learn from others' mistakes. Latin America and the Middle East focused on education and health but large social disparities, high corruption and weak business freedom led to huge unemployment which resulted in social conflict. In the Middle East, the Arab Spring showed that if you educate people and don't give them jobs, you create a time-bomb.

In East Asia, the focus was not only on education and health but also on business freedom which helped investments, both domestic and foreign, created jobs and led to rapid prosperity. And even though inequality has risen, a broader, shared prosperity has helped maintain a governance contract for development.

India will need to find its own way forward but it must become a more competitive economy if it is to catch up with others and even surpass them. It must also take advantage of the demographic dividend of a rapidly growing young population. It must give aspirational youth a platform to create and innovate, which Indians are so capable of. It must be much more transparent and reduce unnecessary controls and regulations - "unshackled" such that corruption will be reduced.

Dr. Ajay Chhibber
Chief Economic Advisor, FICCI

Executive Summary: Employment, Competitiveness and Shared Prosperity

The Indian Conundrum

At the end of 2018, the Indian economy represents a huge conundrum. At a GDP growth of around 7 per cent over the last decade, the country is among the fastest growing economies in the world. But even at this rapid growth, India is not creating sufficient jobs to meet the needs of the country's young and rapidly growing working population. This is creating huge income inequality, social tensions and divisive politics in the country. India should be in a 'sweet spot' but is not.

India reformed on the back of a crisis in 1991 and over the last 25 years has made considerable progress. The GDP of Maharashtra today is higher than India's GDP in 1991. Life expectancy has increased by 10 years. Poverty (relative and absolute) has declined.[1] But India is not meeting its full potential and its demographic dynamics are more of a challenge than a dividend. There are also worrying signs – of rising protectionism – on the international trade front.

> "Almost half of the population of the world lives in rural regions and mostly in a state of poverty. Such inequalities in human development have been one of the primary reasons for unrest and, in some parts of the world, even violence."
>
> **A.P.J. Abdul Kalam**

> "I don't want India to be an economic superpower. I want it to be a happy country."
>
> **J.R.D. Tata**

India: Future GDP Scenarios				
		Reform Reversal	Muddle Through	Strong Reform
GDP Growth		**4%**	**6-7%**	**9%**
2030	GDP	**$4.3 Tr**	**$6-7 Tr**	**$9 Tr**
	GDP/capita	($2700)	($3750-4375)	($5625)
2047	GDP	**$8 Tr**	**$20 Tr**	**$40 Tr**
	GDP/capita	($5000)	($12500)	($25000)

[1] The latest data from the Multi-dimensional poverty index MPI shows that poverty decline has been fastest in the lowest income regions, among the SC/ST groups and among Muslim communities, where poverty rates were the highest.

Is India on the verge of another 25 years of rapid growth or are we overly pre-occupied with headline growth numbers of our GDP while our underlying fundamentals remain weak? Inadequate spending on education and health, high levels of corruption, and weakened financial system and institutions threaten the future. India's rankings on global competitiveness indices and the World Bank's ease of doing business have improved but India's external deficits have risen and once again pose a major challenge. Exports have been tepid and imports have surged. India has reacted by increasing import tariffs on a range of commodities to contain the deficit – but this may produce short-term gains at the cost of long-term competitiveness.

India is at crossroads and the stakes are high. If India reverses on its reforms, several experts have warned of growth slowing down. A drop to the so-called 'Hindu growth rate', coined by Prof Raj Krishna, of 4 per cent will take us only up to $4.3 trillion in GDP by 2030 – behind Japan. At the same time bold reforms in land, labour and capital markets could accelerate our growth to 9 per cent per annum which will make India a $9 trillion economy by 2030 (third largest after USA and China). The current 6-7 per cent will take us to $6-7 trillion[2].

The differences get starker by 2047 when India celebrates its 100th year of independence. While fast growth will make India an economic super-power it may still not be a happy country for which more inclusive job creating growth will be needed. And if we don't solve the issues of inequality and under-employment, future growth could be threatened.

The issue of jobs and competitiveness is inter-related. If India intends to be a competitive economy in global markets it should be able to 'Make in India' for both, the domestic market (import less) and for the global market (export more). Growth based on competitiveness should also lead to more jobs.

India's Competitiveness Scorecard

The most recent Global Competitiveness Index of the World Economic Forum for 2018 ranks India 58th out of 140 countries. This appears impressive at first glance but India's rank is lifted up hugely by its market size. If India was an average-sized country, its rank would drop closer to 70th, similar to Sri Lanka or Vietnam. The IMD competitiveness index[3], which does not include market size as a factor in its rankings, places India at 44th position out of 63 countries.

Unpacking these indices reveals a number of areas where India needs to focus in a coordinated manner. The WEF Global Competitiveness Index reveals areas where India lags behind. Among the institutional factors, the WEF Competitiveness Index identifies issues of quality of land administration and regulatory capacity. It also notes infrastructure, logistics, electricity connectivity and transmission as areas of focus. Health and education figure prominently in the weaknesses identified by the index. These include low average years of schooling, low teacher-pupil ratio, and deficiencies in higher education, and the lack of safe drinking water.

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[2] Note that even at GDP of $9 Tr the per capita GDP would be $5625, below China and Thailand today.

[3] Produced by the IMD Business School in Switzerland.

A surprising weakness identified by the WEF Index is Information and Communications Technology (ICT) adoption. High trade tariffs and service trade openness are also given low scores. Labour markets are identified as a major drawback for India, with high labour tax rates, restrictions in hiring and firing and low female participation rates. The financial sector with high NPLs and regulatory capital ratios are included as weaknesses, despite the Insolvency and Bankruptcy Code. Though there have been improvements in India's rank from 130 in 2017 to 100 in 2018 and to 77 in 2019 in the World Bank's Ease of Doing Business Index, the time it takes to start a business, the insolvency regulatory framework and trademark applications are highlighted for low scores. These are some of the areas where improvement would require coordinated efforts across several government layers and necessitate legal and procedural changes which would be complex. If ease of doing business is to be enhanced in the true sense, these are some of the areas that would need attention of policymakers.

The IMD index has many similarities to the WEF index: training and education, regulatory framework, technological framework, IT integration and adaptive attitudes are identified as low scorers. It also highlights city management (municipalities) and R&D per capita as additional important weaknesses. Despite progress, it identifies the need for improvement in e-government, smartphone and tablet access. It also places huge emphasis on greater public expenditure on education, higher education and women's education.

These global indices of India's competitiveness complement domestic business surveys which have identified many of these weaknesses, all of which hinder 'Make in India', and lead to insufficient employment for people.

The Employment Puzzle

How much employment is actually being generated remains an area of considerable dispute and controversy[4]. India's working age population will increase by around 12 million per year until 2030. India has a high labour force participation (LFP) rate for men, around 0.8 but very low for women – under 0.27. Surprisingly the rate for women has been falling and more and more women are dropping out of the labor force[5]. With an average LFP rate of 0.5-0.55, India will need to create 6-6.5 million jobs per year until 2030. India has been creating employment for about 5-5.5 million people every year. This means, every year, one million new entrants seeking employment cannot find productive work.

Another one million jobs per year is needed to absorb some of the people who could not find suitable work over the last decade or so. If India is to make full use of the female labour force, their LFP rate must rise to at least 0.5 which would make the average rate above 0.65. Adding it all up will mean India must increase employment by 8.5-9 million people per year until 2030.

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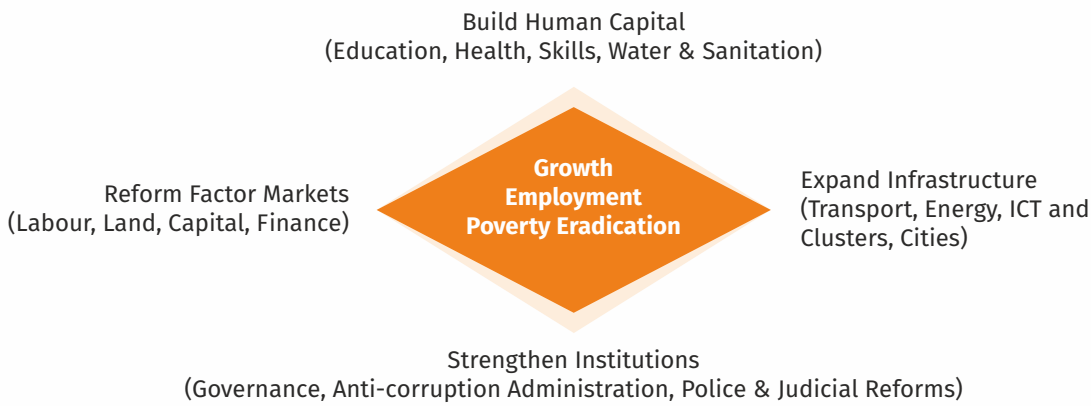
[4] Data on employment in India remains surprisingly weak and not updated. The census is every 10 years, the NSS employment survey every 5 years, and the last Labour Bureau employment survey was in 2015-16. The CMIE does surveys every four months. It shows 5.7 million jobs were created between January-April survey and September-December survey in 2016 but the May-August 2018 showed a dip of 3.5 million jobs from the previous survey. The government is using the Employee Provident Fund Organisation (EPFO) since last year but these may show job formalisation and not net addition to jobs. It is surprising that the Labour Bureau does not do more frequent surveys.

[5] India is a big outlier on its low LFPR even compared to Nepal and Bangladesh. More work is needed to understand the low LFPR for women – but societal attitudes, insufficient vocational training, greater wage discrimination in sectors in which women work, labour laws affecting women all have a role to play.

India has been creating 750,000 jobs for every one per cent GDP growth[6]. Creating 8.5-9 million employment would require a GDP growth of 12 per cent per annum – a tall order for India to achieve. Alternatively, India could reach that level of employment creation with a GDP growth rate of 8.5 -9 per cent per annum if it can improve the employment elasticity of growth. If India could create a million jobs for every GDP growth, even 8.5-9 per cent GDP growth would be enough to realise India's demographic dividend. This is an achievable goal over the next 10-15 years even in the difficult global environment.

Improving India's competitiveness and creating more employment - intensive growth is not rocket science, but it will require disciplined and coordinated actions on a variety of fronts. As India's competitiveness and job surveys show, a waterfront of issues must be covered. These can be summarized into a shared prosperity quadrilateral for India as seen in this picture; with four broad areas of emphasis: build human capital, expand infrastructure, reform factor markets and strengthen institutions.

India's Competitiveness Quadrilateral for Shared Prosperity



What to do? Where to focus?

1. **Health, Education, Water and Sanitation:** India is underspending hugely on health (public spending just over one per cent of GDP) and education (under 3 per cent of GDP). Fast-growing East Asian economies spent far more to build the human capital foundation for growth. India has expanded education but still remains behind others and the quality of education is abysmal[7]. Improving the pupil-teacher ratio is vital and will require hiring more teachers and thereby creating jobs. It's a win-win. India has two million unfilled jobs in the public sector. That could be used to hire more teachers and health workers. As India raises more revenue from the GST – which has also improved direct tax collection – it should use the fiscal space created to invest more in health and education.

[6] According to the World Bank "South Asia Economic Focus, Spring 2018: Jobless Growth?

[7] The World Bank's Human Capital Index ranks India 115 out of 159 countries , with ranks lower than Bangladesh, Nepal and Sri Lanka but higher than Pakistan. The government has rejected the index as flawed. The UNDP Human Development Index , which has been around since 1990 and also measures progress on health and education along with income growth ranks India 130 out of 189 countries and shows India's insufficient attention to these issues.

India has amongst the highest out-of-pocket (OOP) expenses on health and education in proportion of income. Major illness pulls many families back into poverty. The new Ayushman Bharat health insurance scheme has the potential, if properly implemented and funded, to help reduce OOP expenses in health. India has until recently ignored the importance of water and sanitation and its impact on health. This is beginning to change with Swachh Bharat-related schemes. Air quality, nevertheless, remains toxic with ten of the world's most polluted cities in India. Patchwork measures like odd-even and temporary bans on polluting industries will not help. A more holistic approach, like in Beijing and Mexico City, will be needed.

Another area where fiscal space could be created is subsidies. India spends close to 4 per cent of GDP on a variety of subsidies: food, fertilizer, electricity, fuel, etc. The government is gradually shifting to Direct Benefit Transfer (DBT) to reduce leakages. India could eventually reduce the subsidy costs by another 2 per cent of GDP, and thus release funds for health and education.

2. **Agriculture:** The agriculture sector absorbs almost 50 per cent of India's work force. But a more educated younger generation is unwilling to remain in farming. The recent agitations by Jats, Pattidars and Marathas is a sign of that disaffection. Having to absorb such a large workforce in agriculture is also hurting agricultural productivity. Subdivisions of land holdings have led to farmer destitution, leading to periodic loan waivers. The MGNREGA scheme – originally designed for droughts – has been expanded to provide relief to rural families permanently. These funds could be used to build more durable rural infrastructure rather than make work programmes.

Agricultural productivity is also hurt by arcane market laws (APMC), pricing and trade policies. Higher MSP's lock-in farmers to crops which are not needed or profitable, and in many cases ecologically unsound. India must shift to supporting farmers (through income support to small farmers) rather than supporting selected farm products. Distorted input subsidies and fertilizers are harming the soil and depleting valuable groundwater.

3. **Strategic Trade and Industrial Policy:** India's real effective exchange rate (REER) had been over-valued – by 15-20 per cent – for some time hurting India's competitiveness. The recent rapid depreciation of the Rupee has corrected a substantial part of this over-valuation. Of course inflation may once again erode some of this competitiveness. But, in the meantime, it will discourage imports and encourage exports. The content of India's exports remains low because India is not well integrated into global value chains (GVC), unlike many East Asian countries. This will mean India's traditional exports will benefit but to a limit.

India must develop a new trade and industrial policy to enter GVCs. Such a policy must address factors that inhibit domestic manufacturing. For instance, nearly 80 per cent of raw materials for our successful pharma industry come from China, proliferation of electronics hardware comes from China, Taiwan and Korea, and we are missing out on defence-related components and sub-assembly manufacturing. Additional measures such as engaging small business for building an 'eco-system', reducing import dependence, attracting FDI in strategic and hi-tech areas with condition of technology transfer to Indian companies and creating a technology fund are required. Special efforts to promote MSMEs must be made to make them competitive but at the same time remove restrictions on sectors for larger firms, which can help India compete internationally wherever suitable. MSMEs and large firms must work together in a

symbiotic relationship to improve competitiveness internationally just as was done in Japan, Germany and Korea.

While the recent exchange rate adjustment will remove the tax on exports due to over-valuation of the Rupee, much more will need to be done to boost exports to around $1 trillion by 2025. India remains a very small player in many export markets, including the EU, China, Japan and Latin America.

4. **Travel and Tourism (T&T) and Linked Services:** The tourism sector represents a low hanging fruit for India's growth and job creation. In 2017, India received 15.5 million visitors but after removing NRIs, this number dropped to 9.7 million. In comparison, France, Spain and the USA received more than 75 million, China 61 million, Turkey 38 million and tiny Morocco 11 million. In 2017, the T&T sector contributed 3.7 per cent of GDP and 8 per cent of total employment, and was India's third largest foreign exchange earner. Blue collar service jobs in logistics, warehousing, home services, mobility and retailing have good prospects and must also be encouraged and promoted by skilling.

5. **Finance for Growth:** In trying to finance infrastructure, India went in for public-private partnerships (PPP). But instead of attracting new private capital, India's public sector commercial banks were asked to finance this expansion. As projects went bust due to slow land acquisition, economic slowdown, and inadequate capacity of banks to review infrastructure projects, India is now left with a huge Non-Performing Asset (NPA) problem. This is hampering finance for new growth in the country and has left the tax payers with a huge bill to be paid from the budget, leaving less for public spending on health, education and infrastructure.

The Insolvency and Bankruptcy Code is a welcome development to try and resolve these issues but will take a long time for the clean-up. In any future scenario, India must end up with less public sector banks and more efficient private banks, which are screened from political interference. In the meantime, India needs to find new ways to finance future growth. Greater efforts to develop the bond market, the non-bank financial sector, and the stock exchanges are vital, and the need to establish long-term development finance institutions must be given priority. More aggressive privatisation could raise resources for social and infrastructure development. The cost and the terms of financial intermediation must be improved if India is to grow rapidly and competitively.

6. **Labour and Land Reforms:** Former Prime Minister Atal Bihari Vajpayee said it best: “Labour reforms are not anti-worker”. India's relatively low wages should make it a naturally competitive country. But this is not so because labour productivity is also low. China's labour productivity is 1.6 times higher than India's, other BRICS (2-3 times), ASEAN (1.3 times), Germany/ EU (5 times), USA (7 times) and Korea (4 times). There is also often a mismatch between skills and needs of business. Agile PPPs are needed for quick skill-building, based on demand not supply, such as the plan to skill 500 million over five years. The announcement of 500 new institutes for skill development have this potential. These agile public-private quick training programmes should be at state and district levels as local matching is needed. Bold labour market reforms are needed to increase flexibility in labour markets, reduce labour costs – for both employer and employee – through provident fund and ESI deductions so that they have the adequate take-home wages. The extension of fixed-term employment contracts is a welcome step. The Apprentices Act could be modified to hire younger workers. Labour laws could be relaxed for MSMEs.

Part of the problem of infrastructure and business development is land acquisition. Complex laws take longer time impacting project implementation, time and cost. Larger constraints for infrastructure building lead to hindrance in road building and freight corridors, and prevent India from entering global supply chains. The simplification of land acquisition laws, land pooling and land banks are needed, and States need to be on same page as the Centre.

7. **Infrastructure and Logistics:** India was not only underspending in health and education but also in infrastructure. As a result, logistics costs in India are around 14 per cent of GDP as against 8-10 per cent of GDP in most advanced countries. Road infrastructure has improved but needs to double. Road quality remains very poor and a truck lasts on average 60,000 km vs 200,000 km in developed countries. Considerable time is lost in inter-state check points. However, post implementation of GST, we do see a reduction in this. The turnaround time at ports has reduced but is still high at around 64 hours vs. Taiwan (10), Korea (12), Singapore (19), China (20) and Malaysia (22).

India has not created the fiscal space to pay for this infrastructure, and for health and education. It has instead been forced to encourage private participation in these areas with mixed results. India needs more roads and ports but also better efficiency in their use. Electricity connections have been expanded, especially in rural areas and power generation capacity has increased hugely. India now has an over capacity in electricity generation. But transmission and distribution remain huge bottlenecks. As a result electricity remains expensive for economic activity. More open access to sourcing electricity would reduce costs for economic players and improve competitiveness.

8. **Cluster development, ICT and Urbanisation:** Cluster development along with urbanisation is vital for many labour-intensive industries such as food processing, leather, footwear, wood manufacturing and furniture, textiles, apparel and garments. It remains badly designed and poorly funded. Cluster development together with greater focus on development of secondary cities and industrial townships, which can absorb rural-urban migration, along with major transport corridors are badly needed. The 14th Finance Commission shifted funds substantially to the states but municipalities remain starved of funds. The IMD index highlights the need for greater freedom and finance in secondary cities. Exploring avenues to raise funds will help municipalities finance local infrastructure that will in turn attract and nurture MSMEs and start-ups. Informal business should be encouraged to move to formality by improving skills, reducing regulatory burden and improving financial access, thus building on the Mudra scheme.

With new technology, digitisation and new approaches are needed to compete globally. But as all the surveys and indices show, India is lagging behind in ICT adoption – a surprising statistic for a country that is regarded as a world leader in ICT. The use of internet, tablets and even smartphones has been growing but still has huge potential to grow further. A major thrust must be given especially to the younger population to allow India to catch up in this vital area for innovation, connectivity, information and productivity enhancement.

9. **Maximizing Governance: Administrative, Regulatory and Judicial Reform:** For a long time after independence, India's institutional strengths gave it an advantage over others. But over time those have frayed and weakened. Without any upgrading, the administrative, judicial and infrastructural components are proving to be a hindrance than a positive aspect of growth. China, Malaysia, Korea and others pay as much importance to administrative and institutional reforms as they do to policy reforms. India needs a

substantial overhaul of the administrative system and major judicial and police reform.[8] India's government per se is not too large but has a large number of unproductive workers. Rationalisation of the administrative system for enhanced productivity is overdue. The regulatory system, which has grown haphazardly over the last 25 years after the 1991 liberalisation, with perhaps a few exceptions has overlapping jurisdictions and is more focused on controlling rather than encouraging growth of the sectors they regulate.

10. **Minimizing Government and Destigmatizing Capitalism:** Despite the fact that the last 25 years have seen a huge shift in the role of the State and the private sector, it has played a major role in India's growth story, yet there remains a sense that India is rife with crony capitalism because of a few bad examples. Dynamic new firms have emerged and some of the older ones have transformed into world class companies. Many smaller firms have made the MSME sector dynamic and cost-effective providers of goods and services. New professionally run stock exchanges have emerged. Yet capitalism in India remains stigmatised. Privatisation remains a bad word. It's still called strategic disinvestment and is opposed in many quarters, both in and outside the government. India must change its public sector balance sheet – from holding 250 odd central PSU's and over 1000 state level PSU's – by selling many of them and using the resources to finance more social and physical infrastructure. This will 'crowd-in' more private investment, both domestic and foreign, into India. India needs less not more government regulation and control to reduce the stigma of cronyism. More transparency and competition will level the playing field and reduce cronyism.

The remaining chapters elaborate further on these issues with concrete suggestions and analysis. But what is clear is that a vast country like India will need action on multiple fronts to grow rapidly at 9 per cent over the next decade and create enough employment to realise its demographic dividend. Moreover, actions must be taken at both the Centre and in the States in a spirit of 'cooperative federalism' now enhanced by the work of the GST Council.[9]

India has grown relatively rapidly, at around 7 per cent, but it has lost a decade on the employment front. It must not lose in the coming decade and must realise its youth dividend. It must also address huge gender disparities and create more opportunities and an innovative business culture. It will become the third largest economy by 2030 but also a happier country if its growth is inclusive and creates decent livelihood for 1.5 billion plus citizens.

[8] China carried out a major administrative reform in 1995 about 15 years after it started economic reforms. India too established an Administrative Reforms Commission which was ready in 2006 some 15 years after India started its reform but it languished – possibly also because of the global financial crisis in 2008.

[9] A new Finance Commission is expected to deliver its report soon and will have to tread a minefield of inter-state issues carefully.

1 Expanding and Improving the Quality of Education and Skills

India is a young country with a median age of around 26.7 years in 2015, and is projected to touch 28.2 years by 2020. To reap the benefit of this demographic dividend, it is important that our youth is imparted with an education that not only allows them to achieve their aspirations but also contribute effectively in enhancing the country's growth prospects.

Education, acquisition, creation and adaptation of new-age information, skills and values are key drivers of sustainable development. The job market is changing and by 2022, it is estimated that nine per cent of the workforce would be deployed in new jobs that do not exist today; 37 per cent in jobs that have radically changed skill sets while 54 per cent will fall under unchanged job category. To emerge as a dominant economy in the world, India must endeavour to develop a high-quality education system that produces 'new-age' skilled workforce.

At present, the Indian school system is one of the largest in the world. By 2030, the number of children in school in the age bracket of 4-17 years is estimated to be 300 million and 140 million in the age bracket of 18-23 years will be enrolled in colleges and universities. The Indian higher education system is also one of the largest in the world with over 860 universities and 34.6 million students.

India has also begun to correct its long-standing neglect of primary and basic education. According to the United Nations Development Programme's (UNDP) Human Development Index (HDI) – India's education score has improved rapidly from 0.409 in 2005 to 0.624 by 2015. As per the Annual Status of Education Report (ASER), 96.5 per cent of all rural children between the ages of 6-14 years were enrolled in school. Quantitatively, India is inching closer to universal education through the Sarva Shiksha Abhiyaan. At higher levels of education, the Gross Enrollment Rate (GER) increased to over 25 per cent.

> "Basic education links the children, whether of the cities or the villages, to all that is best and lasting in India."
>
> **Mahatma Gandhi**

> "It is a matter of concern that science departments in India's vast university system have suffered greatly due to lack of investments, both material and in terms of faculty."
>
> **Atal Bihari Vajpayee**

Even though India's literacy rate has risen over the decades, it remains at 74 per cent (with the female literacy rate at 64 per cent), as against the global average literacy rate of 86.3 per cent. There are also huge disparities with some of the fastest growing states in population like Bihar with a literacy rate of 64 per cent as compared to 94 per cent of a state like Kerala. This huge backlog of illiteracy, especially among women, creates difficulty in reaching out to people for social programmes, and has inter-generational effects.

There are multiple challenges facing the education and skill eco-system in India including that of capacity, scale as well as quality. For transforming Indian education to the needs of a well-equipped and skilled society of the future, there is a need for undertaking reforms in the sector both, at the Centre as well as State level, besides taking policy measures to encourage greater participation of private partners in the sector.

Increase the Public Spend on Education in India

The present public spending on education sector in India is low at around 2.9 per cent of GDP. It is recommended that overall public expenditure on education sector should be significantly increased, with spend on school education increased to at least 4.5 per cent and on higher education to 1.5 per cent of GDP.

Enhance Scale and Capacity in Both School and Higher Education

The existing infrastructure in India's education system is grossly inadequate, both in terms of physical as well as human resources. In India, the student-teacher ratio is very high as compared to certain comparable countries in the world. As per UN's Human Development report, the pupil-teacher ratio in primary schools in India is much higher at around 35, as against 12 for Malaysia, 12 for Germany, 13 for Finland, 17 for China and 20 for Russia. Hence, there is a need to recruit more quality teachers.

In case of higher education, Indian institutions have added to their capacity significantly. This has contributed to doubling the number of students in Higher Education Institutions (HEIs) to about 34.5 million currently. Nevertheless, if we aim to enhance the gross enrolment ratio in higher education to 30 per cent from the current level of 25 per cent, there will be a need to create additional capacity in institutes, which can come from greater private sector participation. The private sector has been playing an important role in India's higher education, accounting for over 80 per cent of the investment in professional education, 64 per cent of the total number of institutions and 62 per cent of enrolment.

Ensure Quality Education to Improve Learning Outcomes

In most of India's schools, educational quality remains unacceptably low despite increased outlays on education. Just before pulling out of the Programme for International Student Assessment (PISA) of OECD in 2009, in the same year, India was placed at the 72nd position among 74 participating countries. Assessment has revealed that around 50 per cent of 10-year-old children in India are unable to read at level expected of six-year-olds. Over 60 per cent could not do simple division. Teacher absenteeism, estimated at over 25 per cent every day, has been identified as one of the reasons for the poor quality of student learning outcomes.

Due to 'poor learning outcomes' in government schools, there is an increased enrolment in independent schools which today stands at 43 per cent in primary education, 54.4 per cent secondary education and 60.3 per cent at the senior secondary level. Hence, there is a need to relook at school education policies and devise a framework for improving learning outcomes through the mix of greater accountability, training as well as incentive mechanism to improve teaching standards and attract high quality teaching faculty. The government should consider creating a national campaign to lift the profile of teaching profession in line with what is done for defence services. Pathways need to be created to enable mid-career switch for professionals to take up teaching. A national level body like an Indian Institute of Education (IIE) can be set up as a Centre of Excellence for preparing world-class teachers. Additionally, a credible Third-Party Rating Mechanism can be created for schools both for government and private sector. This shall motivate schools to improve their quality.

Issues of quality surround the higher education eco-system as well. Most of the Indian universities do not find a place in the global top 200 institutes. Even the top-most institutions of India are ranked lower in the top global rankings. The government's recent announcement of bestowing autonomy to 62 institutions (though the Graded Autonomy Regulation 2018) and the Institution of Eminence (IoE) status to six institutions is a welcome move. However, given the size and scale of the higher education ecosystem, the number of autonomous institutions should be increased to 200 and Institutions of Eminence to 20.

Accreditation agencies were established in India in 1994 as a measure of quality assurance to enhance standards of higher education. However, the current accreditation mechanism is not equipped to assess the academic atmosphere in Universities/ Higher Education Institutes (HEIs). FICCI Vision 2030 for higher education has defined a three-tiered structure for higher education keeping in view the diverse HEIs and universities in the country. The three tiers are categorised as research universities, professional universities and HEIs and Foundation universities and colleges. Accreditation process for all three categories should be tailored to enable excellence in research, employability and life skills, respectively. Additionally, a third-party rating mechanism should be created, and universities/ institutions should be encouraged to participate in these ratings. These should be made public as this will create a healthy competitive environment.

Furthermore, several state governments – Andhra Pradesh, Haryana, Karnataka – have legislated state Private University Acts, through which various private universities (close to 270) have been established in

India. A Model Code based on best practices can be developed for rest of the country. The states' role should be limited only to ensuring that there is no exploitation or frauds in the system.

Improve Ease of Doing Business by Removing Regulatory Hurdles

Despite the huge potential and impact of private sector in imparting quality higher education, there is no clear policy for private sector participation in education. Issues of regulation, autonomy and fee structure have all been dealt with in an ad-hoc manner. It is time to re-imagine the existing heavily regulated and restrictive system to one that provides an enabling and facilitative policy framework. There is a need for a balanced framework for fee regulation, which on one hand takes care of parental interests and on the other, ensures sustainability for self-financed independent schools. FICCI's Alliance for Re-Imagining School Education (ARISE) has come out with a Model Code for Self-Financed Independent Schools. Uttar Pradesh Government Fee Regulation Act 2018 has been enacted based on the FICCI Model Code; likewise, Andhra Pradesh Government adopted the Code and has released it in public domain for feedback. Such a framework will not only incentivise and promote good performers but also handhold poor/average performers to do better.

There is a need to create an overarching and independent/autonomous regulatory body to facilitate growth of quality higher education in the country which is outcome–based, transparent, encourages innovation and self-regulation. At present, there are multiple regulators for higher education in the country, such as UGC, AICTE, MCI, CoA, DCI, etc. The proposal of Higher Education Commission of India (HECI) mooted earlier but later withdrawn by the government, needs to be brought back for further discussion. There is also a need for harmonising vocational and skills ecosystem through greater convergence between Ministry of Skill Development and Entrepreneurship (MSDE), Ministry of Human Resource Development (MHRD), Ministry of Labour & Employment (MoLE), Ministry of MSME and other core Ministries.

Embed Skilling with Education to Improve Employability

India continues to face the dual challenge of paucity of trained and quality labour force on one hand and non-employability of large sections of the educated workforce that possess little or no job skills, on the other.

Skill development in India is way below the requirements due to a lack of awareness on the type of courses as well as information on the probable career prospects. More importantly, there is limited acceptance of skill development courses as a viable alternative to formal education. Skilling is often viewed as the last resort meant for those who have not been able to progress in the formal academic system. This is partly to do with the lack of integration between the two options and also due to rising aspirations for white collar jobs which necessitate higher qualifications. Moreover, skill development is often associated with blue

collar jobs, which is largely perceived to be of low dignity and provides low wages/salaries. The perceived 'stigma' associated with skill development has resulted in low enrolments in vocational education courses. Mainstreaming of 'skilling and vocational education' into formal education from grade 9 onwards in schools and changing the narrative to make it aspirational for the society is urgently required.

There is a need to fast-track the implementation of National Skills Qualification Framework (NSQF), which was formulated as a nationally integrated education and competency-based skill framework that provides for multiple pathways, horizontal as well as vertical – both within vocational education and vocational training, and among vocational education, vocational training, general education and technical education – thus linking one level of learning to another higher level. This framework will enable a person to acquire desired competency levels, transit to the job market and at an opportune time, return for acquiring additional skills to further upgrade their competencies.

A concerted action is thus required on the supply side to ensure sustained employability of the youth. Extensive efforts to skill the workforce are required, both in quantity and quality. Transforming the skill development ecosystem and making it responsive to needs of both industry and citizens requires a scalable, efficient and comprehensive vocational training ecosystem to meet future requirements. It is critical to put in place an implementable strategy to bridge this gap.

There should be effective industry and academia engagement to increase employability of trainees. A National Research Institute of Vocational Education like Germany's BiBB should be set up to continuously conduct research on the demand side and advise on course up-gradation. Apprenticeship should be integrated across vocational and higher education. Additionally, Industry-linked State-of-the-Art Career Counselling Centres should be set-up along with an administered career guidance-cum-counselling programme. A policy on career counselling may be introduced to create a pool of accredited career counsellors.

Given the changing dynamics of jobs, there is also a need to create a mechanism to train the workforce on 'Future Skills'. New courses should be developed on emerging job roles and these can be integrated in existing curricula to train youth on 'Future Skills'. 'New-age learning labs' in educational institutions for hands-on training on advanced technologies should also be set-up.

Way Forward

A 'National Vision Document 2030' is the need of the hour for school education, which should be aligned with higher education, vocational education and skill development with a fresh and a contemporary outlook. The Education Policy must call for a paradigm shift in our approach to education that focuses on preparing citizens of tomorrow.

While the government needs to make efforts towards improving the quality of public education, there is a need to involve the private sector in making an effective turnaround of the current system. The possibilities of PPP models should be explored in the education sector. Such PPP models can be

implemented to unlock under-utilised national assets. Support of private sector/NGOs should be encouraged to enhance performance of government-run schools and a financially viable PPP model must be devised.

To enhance the scale and reach of quality education, we need to integrate technology in the current education set-up. Providing Online Degrees is a great policy to improve the gross enrolment ratio as well as to re-skill working professionals. Allowing more universities to provide such degrees will increase the number of learners willing to take up online courses and degrees. There is a need to create robust and transparent entry criteria and evaluate performance based on measurable outcomes for online education.

There is also a need to improve the research orientation of higher educational institutions. Special emphasis needs to be laid on encouraging greater academic research along with industry linkages. A National Science, Technology and Humanities Research Foundation can be created in line with National Science Foundation (NSF) of USA to promote research in public and private universities. Additionally, the government should allocate a corpus of Rs 1,000 crore for fostering doctoral research (both in basic and application-based). This can be made available to researcher/ eligible faculty for both public and self-financed institutions. An active research base at the academic level can lay the foundations for research and innovation in the economy.

2 Improving Health Outcomes: Health, Nutrition, Water and Sanitation

India has made steady economic progress over the years. However, in the healthcare sector it has not been commensurate with the rising economic strength and population of the country. Large improvements have been registered in maternal mortality ratio and under-5 mortality rate, however, life expectancy in India remains below countries at similar level of development. India ranks 125 out of 183 countries on Life Expectancy and 145 out of 195 countries on the Healthcare Access and Quality (HAQ) Index. The benefits of India's demographic dividend would be impaired if children are malnourished and do not grow into healthy youth.

The UN Sustainable Development Goals (SDGs) for health and wellness articulate the vision for 2030 as 'Healthcare for All'. However, India is still far away from the point of providing easily accessible and affordable quality healthcare to all. While India scored 41.2 points on HAQ Index 2016, a rise of 16.5 points from 1990, we are way below the global average and also behind other BRICS countries as well as immediate neighbours. For 16 per cent of the world's population, we have a disproportionately high share of global disease burden at around 21 per cent coupled with one of the fastest growing incidences of non-communicable diseases (NCD), mental illness and trauma. India ranks 128 in terms of meeting the UN health-related Sustainable Development Goals (SDGs) by 2030, with low scores on air pollution, sanitation, hepatitis B and child wasting.

It is now clear that countries much poorer than India have better health outcomes; India ranks lower on health outcomes than Bangladesh, Nepal, Cambodia, Vietnam and Myanmar and even African countries such as Ghana, Kenya and Tanzania. This is partly because the country's public spend on health is amongst the lowest at 1.4 per cent of GDP (2017-18) as against the global average of around 3.5 per cent. Moreover, it is only now that India has begun to understand that health outcomes are not just a function of healthcare but also depend on access to water and sanitation, educated mothers, nutrition and air pollution.

> "It is health that is real wealth and not pieces of gold and silver."
>
> **Mahatma Gandhi**

> "Sanitation is more important than political independence."
>
> **Mahatma Gandhi**

The government has launched major programmes in water and sanitation to reduce open defecation under Swachh Bharat, largely by building toilets and providing education on hygiene. Nutritional programmes for children aged 0-3 years have been initiated through free food rations, special nutrition programmes for Aanganwadi's for children aged 3-6 years old, and mid-day meals for all school-going children. However, these are only first steps and many more are required to ensure basic health, hygiene and nutrition to all citizens of the country.

The Indian healthcare sector continues to grapple with a plethora of challenges despite some major improvements and achievements. India needs re-engineering of its healthcare delivery system at systemic, financial and infrastructural level.

Bring Down the Dual Burden of Communicable and Non-communicable Diseases

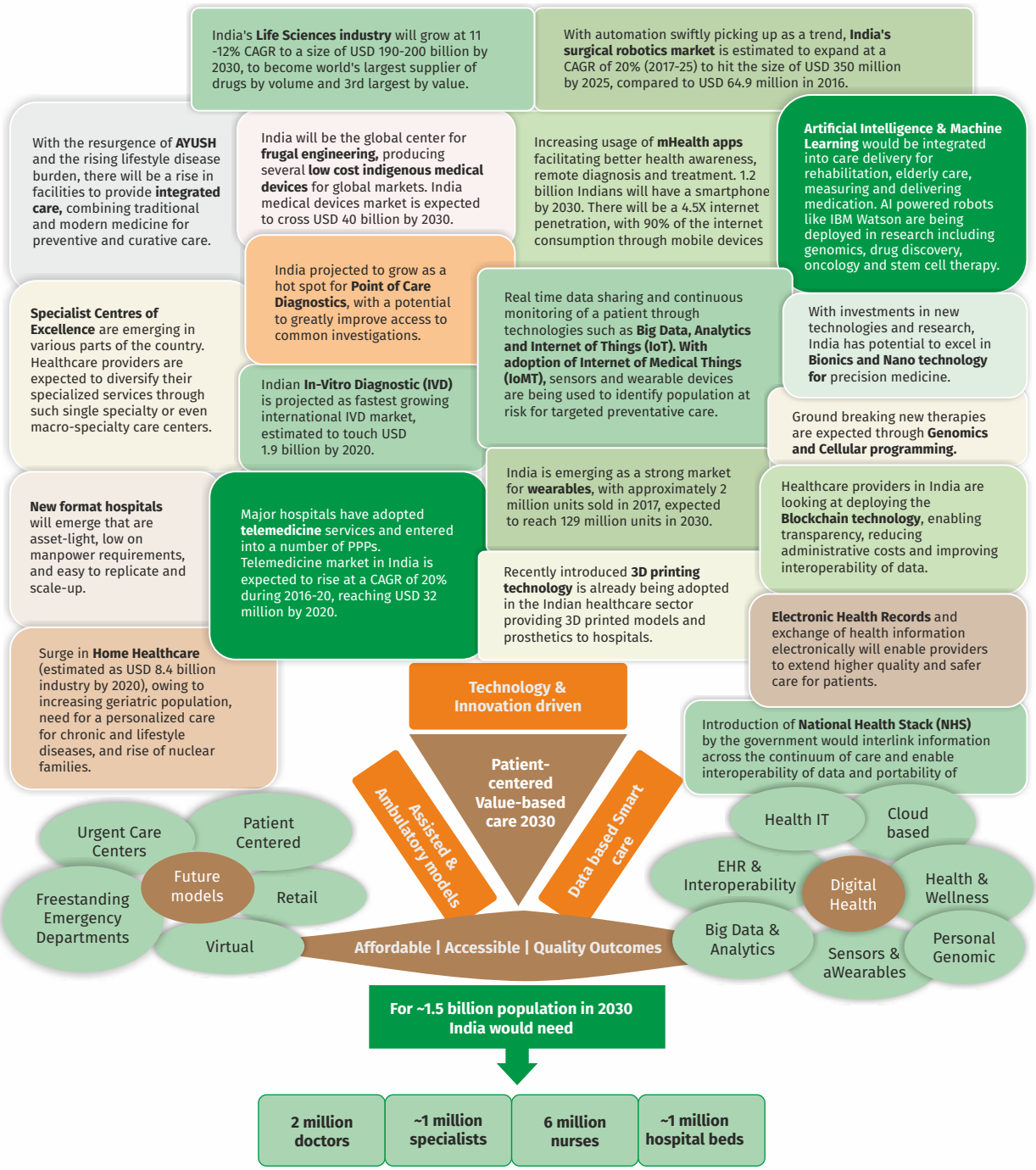
India accounts for a relatively large share of the world's disease burden and is undergoing a transition with the non-communicable diseases (NCDs) dominating over communicable diseases. The disease burden due to communicable (TB, malaria, neglected tropical diseases, HIV-AIDS, hepatitis and water-borne diseases), maternal, neonatal, and nutritional diseases, as measured using Disability-Adjusted Life Years (DALYs), dropped from 61 per cent to 33 per cent between 1990 and 2016, but over the same period disease burden from non-communicable diseases increased from 30 per cent to 55 per cent. While the former is due to lack of availability of safe drinking water, sanitation, under-nutrition, poor living conditions, poor implementation of public health programmes and limited access to preventive and primary health care, the latter is due to lifestyle changes and demographic transition. It is estimated that by 2030, NCDs will account for almost three-fourth of all deaths. There are more than 101 million diabetics (aged 20-79 years), which will result in a likely loss of $4.58 trillion.

The way to address this problem would be to devise a strategy to reduce the overall burden of diseases by half, through targeted national programmes to end the epidemic of common communicable diseases and reduce the burden of common NCDs with early detection and effective management.

Increase Public Spend on Healthcare and Improve Overall Healthcare Infrastructure

The existing health infrastructure in India in terms of capacity and human resources is inadequate to meet the needs of a growing population. The government both at the central and state level offer healthcare services and free treatment and essential drugs at government hospitals. However, these public health care institutions are suffering from inadequate spending and capacity constraints. This has resulted in too many people turning to private health care service providers, which also exhibit variation in quality of services and charges for different services.

Vision 2030: Universal Health Coverage for All Indian Citizens



India has grossly under-invested in primary healthcare sector, which can address around 90 per cent of the health needs as per World Bank estimates. India's hospital bed density of ~1.31 per 1,000 people, is way below the global average. Moreover, this is unevenly distributed with an over-concentration of beds in Tier I cities, where only 30 per cent of the population resides. Over the next 10 years, India will need 0.64 million additional beds with a marginal rise in hospitalisation rate to 5.5 per cent (increase from current rate of 4.5 per cent), and an average occupancy of 72 per cent and average length of stay (ALOS) of 8 days.

India has one of the lowest public healthcare spends in the world, which has increased only marginally from 1.2 per cent of GDP in 2013-14 to 1.4 per cent in 2017-2018. The public health spend in GDP should be increased to at least 2.5 per cent, as is also envisaged in the National Health Policy, 2017.

The out-of-pocket expenditure on health by household is nearly 62 per cent and is one of the important causes of immiserisation of the poor. The rising cost of treatment in India is also leading to inequity in access to healthcare services. Prior to the introduction of 'Ayushman Bharat - Pradhan Mantri Jan Arogya Yojana', about 86 per cent of rural population and 82 per cent of urban population had not been covered under any scheme of health expenditure support. Due to high out of pocket healthcare expenditure, about 7 per cent of households gets pushed below the poverty threshold every year. The world's largest public health insurance scheme can be a game changer and pave the way for transformation of healthcare access in India, provided it is implemented effectively. Effective implementation of universal health coverage would require extensive investments from the public as well as the private sector for infrastructure expansion and strengthening the healthcare workforce. It is estimated that 2500 modern hospitals will be built, following the launch of Ayushman Bharat, over the next three years. With limited public funds, government needs to provide appropriate incentives to channelise private investment in targeted areas specifically in Tier II and III cities.

Given the low public spend on healthcare and considering the rising population and the massive coverage required under the Ayushman Bharat PMJAY, the healthcare sector should be provided with appropriate financing options along with incentives and tax benefits to the private sector. Long-term financing options at concessional rates are still not available for healthcare providers, despite healthcare being included in the harmonised master list of infrastructure sub sectors by the RBI in 2012.

Measures which could be taken to address the financing issues in the healthcare sector include:

- Providing long-term financing to the healthcare sector, as provided to other sectors with the infrastructure status, with joint intervention of Ministry of Health and Family Welfare and Ministry of Finance
- Extending deduction under section 35AD of the Income Tax Act to hospitals incurring substantial investment in digitisation, implementation of Electronic Health Record (EHR), providing NCD care in remote areas, telemedicine, remote radiology, etc.
- Considering zero rating for GST for healthcare services (with the availability of input tax credit) instead of the current exemption or lower the tax rates for inputs for healthcare sector to five per cent.
- Specific funds such as Healthcare Infrastructure Fund and Healthcare Innovation Fund should be developed/created to encourage entrepreneurship, start-ups and newer business models, which are the need of the hour for improving access, availability and quality, especially in Tier II, Tier III cities and rural areas.

FICCI-EY 5P Framework to Draw Learnings from Global Universal Health Coverage Systems and the Indian Context

Plan	Pay	Pool	Purchase	Provide
Target 100% coverage with minimal out-of-pocket expenditure	Raising of sufficient and sustainable revenues from payers efficiently and equitably	Consolidation of raised funds at national level to facilitate equitable allocation to states as per respective needs, irrespective of fund contribution	Transfer pooled resources to service providers on behalf of the covered population	Ensure quality and adequacy of health care delivery with minimum waste of resources
• Target beneficiaries • Target coverage services • Method of extending coverage (broad then deep, deep then broad) • Target proportion of costs to be met	Quantum: Public spend as a % of GDP **Sources of financing:** • General taxes vs. premium contribution • Sector specific/sin taxes • Co-payments and supplementary insurance	Methods of redistribution of collected funds between high- and low-risk individuals (risk subsidy), high- and low-income segments (income subsidy) • Types of pool: single vs. multiple pool	Choice of purchasing model (direct by government, contract in services)• Empanelment of providers and reimbursement models	• Provision of supply-side financing incentives to promote private sector healthcare investment • "Efficiency" incentivization on provider and beneficiary front • Degree of standardization and quality of care

• **AB-PMJAY Cover:** INR 0.5 mn per annum per family; 40% of total population; 1350 procedures
• **Timeframe for achieving UHC in India:** 10 yr
• **Proposed approach:**
  • Cover breadth first, depth later
  • Broad based universal cover of INR 0.1 mn; rest INR 0.4 mn as fixed benefit cover for certain specific conditions or as ex-gratia limit to be approved on case-by-case basis or a combination of fixed benefit and ex-gratia limit
	• **Estimated public health expenditure required for UHC**
	  • As % of all healthcare spend: 70%–80%
	  • As % of GDP: 3.7%-4.5% of GDP by 2028
	• Consider the co-payment method initially, with minimal fixed co-payment (10%-20% of health expenditure) for the middle- and upper-class population, to be phased out eventually
		• Health is a **state subject**, with variations in income and risk profile across states
		• **Centralized pooling of funds for UHC at national level**
		• Allocation to states in alignment with their health risk needs, not their contribution to funds raised
			• Substantially **expand** network of private hospitals and strengthen public secondary and tertiary care hospitals
			• **Empanelment:** Mapping health facilities through **National Health Resource Repository (NHRR)**- a central online platform for healthcare services data across the country
			• **Reimbursements:** develop framework for standard package definition and reimbursement tariff determination **(differential reimbursement rates**; based on a scientific costing)
				• Focus on **patient centricity**
				• **Standardization** of care delivery through accreditation and continuous quality improvement
				• **Regulatory environment** that assures quality care delivery
				• Extensive investments in **healthcare infrastructure and workforce**
				• Incentives to **channelize private investment** in targeted areas specifically tier II and III cities
				• **Leverage technology** to provide out-of-hospital care, tele-medicine, mhealth and home care; establish the **National Health Stack**- platform for centralised health data
				• Enhancing **operational efficiencies and financial viability** of providers

- Build public platforms to promote better linkages between industry, academia and R&D laboratories by encouraging Centre of Excellence (CoEs) for research and education through private sector participation.

Strengthening Healthcare Workforce

India fares poorly even in the doctor-to-patient ratio; there is just one allopathic government doctor available for around 11,082 people across the country. Here again, there is wide disparity between the states with one doctor serving a total population of 28,391 in Bihar while in Delhi, one doctor serves a population of 2,203. Over 41 per cent of the primary health care centres in West Bengal, Chhattisgarh and Jharkhand have vacant positions for medical officers, while in Bihar it stands at 63.6 per cent. In terms of vacant specialist positions (medicine, surgery, obstetrics and gynaecology, paediatrics, anaesthesia, ophthalmology, radiology, pathology, ENT, dental, psychiatry), it ranges from a low of 16.7 per cent in Tamil Nadu (among the larger States clustering) to a staggering 77.7 per cent in Chhattisgarh as of 2015-16. There is an equal shortage of nurses at Primary Health Centres (PHCs) and Community Health Centres (CHCs). India will need around 2 million doctors and 6 million nurses by 2030.

Measures need to be taken to strengthen the healthcare workforce and these could be done through the following measures:

- Upgrade district hospitals to medical colleges in underserved areas or the aspirational districts through PPP or public spend.
- Incentivise all tertiary care hospitals for specialist, super-specialist and allied workforce training and encourage training facilities as a part of project design for new hospitals.
- Create provision for private medical colleges to partner with public and private hospitals for medical education, to optimise existing resources and avoid duplication.
- Formally recognise existing alternative used by heathcare sector to train and upskill healthcare professionals.
- Upgrade the nursing curriculum and faculty along with implementation of competency-based education and licensing exams.
- Expand healthcare skills-sets to include more of allied healthcare professionals such as physician assistants, nursing aides and technician assistants to help evenly distribute the burden of the healthcare workforce. Guidelines and standardised protocols need to be formulated along with a strong training and development framework to accentuate the role of these professionals.

Improve the Quality of Healthcare Delivery

The quality of healthcare and clinical outcomes has not gained adequate importance in healthcare programmes in India. The government of India encourages public health facilities across states to apply

for quality assurance programmes. However, only a few states such as Bihar, Kerala, Odisha, Tamil Nadu, Arunachal Pradesh, Manipur, and Delhi, have initiated accreditation under the standard quality assurance programme. Moreover, less than 15 per cent facilities have been accredited by any State. Of the nearly 79,000 hospitals operating in India, merely 1 per cent of the hospitals are NABH accredited, similarly less than 1 per cent of diagnostic labs are NABL accredited.

The aim should be to promote and incentivise improved patient outcomes across public and private providers with standardisation in clinical practice as well as other processes by robust implementation of Standard Treatment Guidelines, clinical audits, and accreditation. The government must upgrade all sub-district hospitals and above as per mandatory accreditation standards. The focus should be on ensuring NABH/NABL accreditation for at least 20 per cent of hospitals/diagnostic labs by 2030. Entry level NABH accreditation should be made mandatory for all hospitals and NABL accreditation for labs empanelled to provide services under any public healthcare programme. Quality of all public hospitals should also be brought up to NABH Standards.

Use of Technology to Enhance Reach and Outcomes

Technology can be leveraged to improve healthcare in India and improve health outcomes. Telemedicine and mHealth initiatives are already reaching remote areas in the country. These need to be strengthened further and healthcare providers should explore other innovative technology-enabled solutions for expanding access and quality of care – from technology enabled smart hospital rooms and advanced diagnostic to therapeutic care facilities supported by evidence-based advanced clinical decision support.

Innovative out-of-hospital care models (home healthcare, freestanding emergency departments, urgent care centers, etc.) should be developed/provided to reduce average length of stay in hospital. It would not only reduce costs but also improve availability of healthcare services to more people.

Technology is also being tapped to overcome another concern, which is the paper-based record keeping system, that often leads to delay in access to records, delay in diagnosis, thus impacting the quality of healthcare services. The rolling out of National Health Stack (NHS), using a standardised, integrated and interoperable EHR system would ensure availability of centralised healthcare information. Investing in exponential technologies will help reduce costs, increase access, and improve care. Artificial intelligence (AI), robotics, 3D printing and synthetic biology all have the ability to radically disrupt the system. Healthcare providers should also set aside a budget for innovations and espouse the use of successful innovations in technology and processes. The government can also consider setting up of special clusters/ zones for advanced medical technology development, research and innovation.

Regulatory Reforms and Transparency

The government should play the role of facilitator and regulations should not be restrictive for the growth of the sector. Currently, there are multiple licenses required to set up a hospital. The government needs to consider a single-window clearance and take up the role of a facilitator. We need to encourage and

recognise transparency, self-regulation and third-party ratings. Going forward, government should reward outcomes to help bridge the widening trust-deficit in the sector. Recently, FICCI has developed a *Code of Ethics* for Health Services Industry in consultation with various stakeholders that includes several aspects of ethical conduct.

Create a Robust Healthcare Eco-system by Strengthening Allied Sectors

There is a need to set up a multi-stakeholder Health Council (preferably at PMO) to view health sector holistically and effectively integrate other associated sectors' initiative to reduce the incidence of preventable diseases. With the underlying objective of providing access to affordable healthcare, medicines and good hygiene, targeted interventions are required in allied sectors such as pharmaceuticals, medical devices, alternative healthcare, and sanitation.

Pharmaceuticals

In terms of medicine availability, access to life saving drugs remains a challenge despite India being one of the largest pharmaceutical producers in the world. Self-reliance of major and crucial Active Pharmaceutical Ingredient (APIs) are essential for security of national health. Policy measures related to process, infrastructure and fiscal benefits need to be taken by government to ensure quality APIs and reduce reliance on imported APIs. The growth of sectors like pharmaceuticals and bulk drugs should be developed with a cluster-based approach which would also provide a conducive regulatory environment. In addition, an ecosystem should be developed for spurring R&D and innovation in India. A conducive ecosystem should be created for the biotechnology sector with an enhancement of the clinical trials landscape in India.

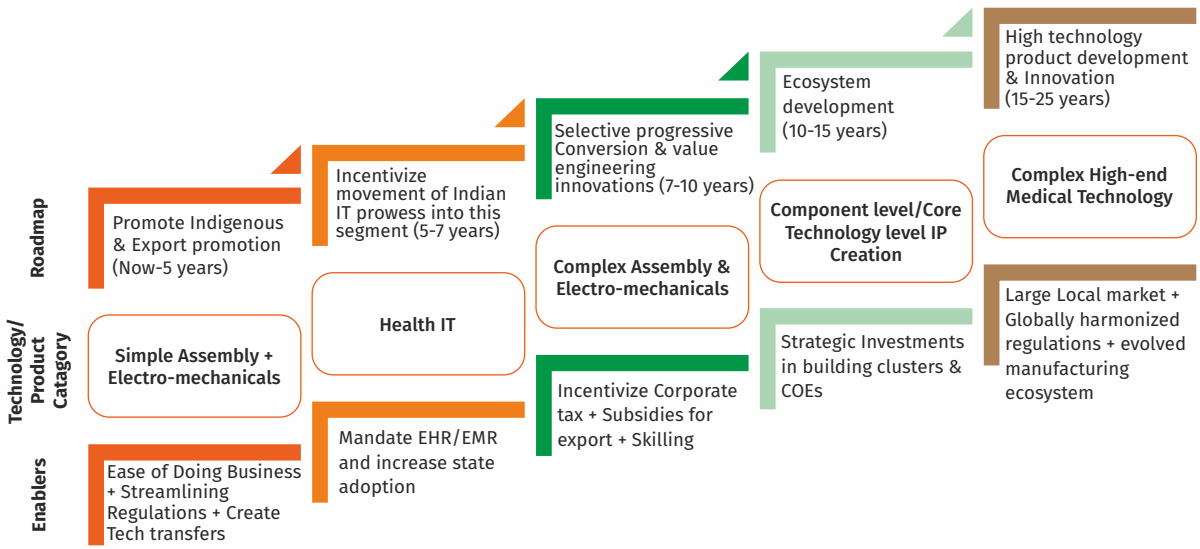
MedTech

At present, the medical devices market in India is valued at $4.9 billion and is growing at a double-digit rate. Though identified as a sunrise sector by the government, India currently imports around 80 per cent of its medical devices' requirement. There is a need to outline a long-term vision and roadmap for the MedTech industry, clearly separating medical devices from drugs, to make India one of the world's top five medical devices markets and manufacturing hubs. Also, there is a need to enhance and promote investment in R&D and innovation, and drive skill-up gradation in the MedTech sector. A globally harmonised approach should also be developed for regulation of life-saving medical devices to foster growth of this sector.

AYUSH

Healthcare sub-sectors like AYUSH should be encouraged. Greater efforts are required towards generating scientific evidence on safety of AYUSH formulations and therapies as well as guidelines for research methodologies used. This would help bring in standardisation and would be a critical step towards achieving quality. More funds should be provided for research in traditional medicine to make it evidence based.

A Roadmap for 'Make in India' for Medical Device Sector



Medical Value Travel

India has emerged as one of the leading destinations for high-end medical treatment on the back of tremendous capital investment being made in advanced diagnostic facilities as well as specialty centres. India should position itself as the most preferred destination for medical value travel by leveraging the availability of quality high-end tertiary and quaternary care at fractional prices. Income from the services provided by healthcare providers to foreign nationals in India who come for medical treatment should be treated as export of services and deduction should be given under chapter VI A.

Water and Sanitation

India faces a huge challenge of providing effective sanitation coverage and safe drinking water access to large sections of its population. According to Census of India, 2011, only 49 per cent of Indian urban household have access to the formal water distribution network and piped water supply. Traditional cultures and religious beliefs, lack of awareness towards health and hygiene, water crisis, inappropriate and technology challenged design of toilets along with a lack of participation, monitoring and support from both beneficiaries and the government are the biggest factors in slow progress of sanitation programmes implemented in India. There is a strong need to align various government programmes and policy at grass-root level. It is important to bring behavioural changes among people.

The government needs to come out with a comprehensive sanitation policy at the national level so that it covers both liquid and solid waste, and lays out clear guidelines for its implementation. Some of the specific measures that can be taken to improve water and sanitation scenario of India include:

- Consider liquid and solid waste management in a holistic manner and develop a clear-cut framework for its implementation. The greatest challenge is the integration of rural and urban sanitation, and developing a symbiotic approach in which both areas should be covered properly.

- Develop a framework to encourage participation of corporate sector in the entire value chain of sanitation across 'build, use, maintain, and treat', and encourage business models in sanitation.
- Devise a policy framework to encourage and facilitate markets for treated wastewater and private sector participation in wastewater treatment. The sewerage water use needs to be built up in the system and the sewerage water needs to be channelised properly after treatment for agriculture use, horticulture, and industrial use, and other uses in urban areas.
- There is a need to spread awareness and education on waste management. The following measures can be taken in this regard:
  - Include sanitation awareness programmes at primary school level.
  - NGOs should be encouraged to participate in sanitation drives with induction of Public-Private Partnership model and Information, Education and Communication activities.
  - Community sanitary complexes should get more priority, based on experiences from 'Sulabh Toilets' and the success of community toilets in Tamil Nadu.

3 Farm to Fork: Modernising Agriculture to Double Incomes

India is amongst the world's leading food producers today, but has low yield rates despite the green revolution. It is the second largest producer of rice and wheat in the world, but in terms of yield, it is ranked 60th. The agriculture sector in India still suffers from issues such as high dependency on monsoon, weak post-harvest infrastructure, low levels of agro processing and high food wastage, which together adversely impact productivity levels. This in turn explains why the contribution of the sector has declined to only 15 per cent of the national output, in spite of the proportion of people depending on it still remaining at about 50 per cent.

Income levels of farmers in India have remained significantly low. The National Sample Survey Office (NSSO) survey results show that in 2011-12, nearly 23 per cent of the farm households earned income less than the poverty line, with this proportion being much higher in Jharkhand (45 per cent), Odisha (32.1 per cent), Bihar (28 per cent) and Madhya Pradesh (26 per cent). Moreover, farm income levels have also been unstable, as they have mainly followed the pattern of food production which has fluctuated over the years primarily on account of varied rainfall received.

The changing climate has made rainfall more erratic and unpredictable in recent years and this has led to a substantial increase in cases of crop failures and caused widespread agrarian distress. This has led to repeated farm debt crisis and farmer agitations. Though farm loan waivers have been used to alleviate distress, it requires a long-term solution, addressing the deeper structural problems that have continued to plague the sector so far.

> "If agriculture goes wrong, nothing else will go right in the country."
>
> **M.S. Swaminathan**

Key Challenges:

Some of the challenges the sector continues to face include:

- **Low yield rates mainly due to the following factors**
  - Uneconomical size of land holdings – 85 per cent of land holdings in India are small and marginal with average size of 1.42 hectares and 0.39 hectares, respectively
  - Lack of access to quality inputs, modern farming technology and formal credit
  - Lack of irrigation facilities and heavy dependence on monsoon - > 50 per cent of country's farmland still has no access to irrigation
  - Deteriorating soil health - due to non-judicious use of fertilisers, excessive tillage, etc.
  - Climate change – resulting variability in rainfall and temperature are affecting yield rates adversely. Reports suggest that temperature rise reduces output by nearly 4-5 per cent, while variation in rainfall leads to about 13 per cent and 7 per cent decline in kharif and rabi yields, respectively.

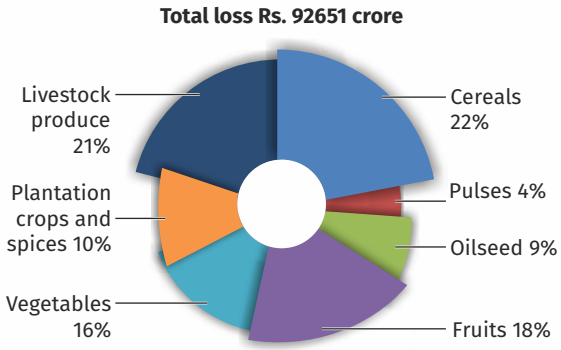
Yield Comparison – India v/s World (kg/hectare) - 2016

	World	India	Share in world production (%)	World Rank in production
Rice, paddy	4637	3695	21.42	2
Wheat	3405	3093	12.48	2
Pulses	731	452	23.23	1
Sugarcane	70615	70394	18.42	2
Groundnut (in shell)	1590	1182	15.60	2

Source: *FAO Statistics*

- **Weak post-harvest infrastructure and high food wastage** – About 35-40 per cent of the total food production in India is wasted every year. Part of the wastage takes place at the farm level due to pests, weeds and other diseases.

Harvest and Post-harvest Losses in India (Production of 2012-13 at 2014 Prices)



Note: *For 45 crops and commodities*
Source: *CIPHET report on post-harvest losses – 2015*

At the post-harvest stage, besides factors such as limited access to market and low level of processing, the prime reason for high food wastage is lack of adequate storage and transportation facilities available to farmers. There is a huge gap in the cold chain infrastructure available in India. Investments to the tune of Rs.893.8 billion are estimated for building specialised infrastructure for integration of cold chain.

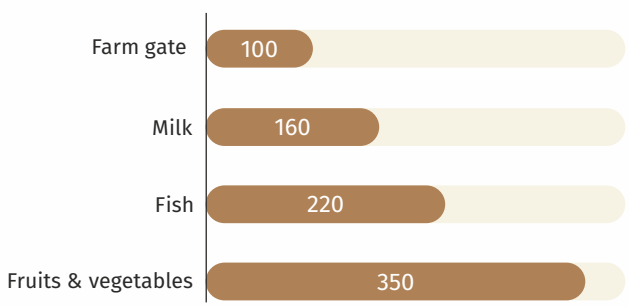
Cold Chain Infrastructure in India

Type of infrastructure	Unit	Infrastructure requirement	Infrastructure created	All India gap	% share of shortfall
Integrated pack-house	Nos	70,080	249	69,831	99.6
Reefer transport	Nos	61,826	<10,000	52,826	85.0
Cold storage (Bulk)	MT	35,100,662	31,823,700	3,276,962	10.0
Ripening units	Nos	9,131	812	8,319.0	91.0

Source: *Report on Doubling of Farmers Income*

- **Low returns on farm produce -** Inadequate infrastructure facilities coupled with poor market linkages has led to creation of multiple levels of aggregators/intermediaries in India who take care of transportation and distribution of food produce from farmland to consumers. With a mark-up to producer price at each aggregator interface, the gap between the farm gate price and consumer price widens, with farmers receiving much lower prices for their produce as compared to the price at which they are sold in the retail market.

Indicative Cost Build-up in the Supply of Agri-produce



Source: *Report on Doubling of Farmers Income, Volume III*

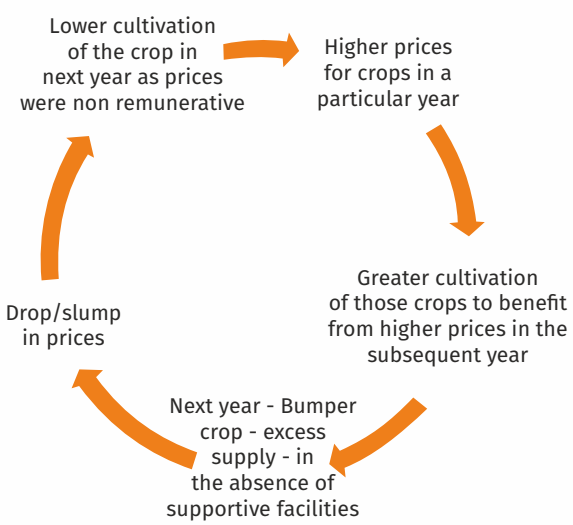
Indicative Cost Built-up



Source: *Report on Doubling of Farmers Income, Volume III*

Farmers also suffer on account of the cobweb phenomena. It has been observed in India that when prices of a commodity increase during a season of scarcity, farmers tend to increase cultivation of the same commodity, leading to a problem of plenty, which consequently leads to a decline in its prices, causing a huge loss to farmers.

Cobweb Phenomena



More factors responsible for constricting the returns on farm produce

- Inefficiencies in APMC Act limit the wholesale prices received by farmers: Traders in Agricultural Produce Market Committees (APMCs) have often been found to be forming cartels and obstructing transparent price discovery. Small farmers are offered lower prices while the same items are sold to large buyers such as rice/flour mill owners at higher prices. License fee in APMC markets is also highly prohibitive and restricts the entry of new buyers, resulting in continuation of existing traders and their cartels.
- Restrictive trade policies prevent exporters from tapping export opportunities - Continued restriction on exports during times of excess production leads to fall in farmer incomes. For instance, policy interventions have reportedly reduced gross farm revenues by over six per cent per year between 2014 and 2016.
- Domestic policies (MSPs) encourage production of locally consumed commodities and thus farmers fail to capture export opportunities present for commercial and horticulture crops, losing the opportunity to earn higher returns on these crops.
- Overstocking of foodgrains by Food Corporation of India locks a substantial quantity that can be made available for exports and can fetch higher returns for farmers.
- Shortcomings in agricultural policies - Though various government policies both at the State and Central level have been initiated with good intent, some of these have created adverse implications and hence should be assessed for their true effectiveness for the farmer community.
- The input subsidies (power and fertilisers) have led to a situation of deteriorating soil quality and drawing out of ground water in excess of the utilisable recharge resulting in fall in water table.
- While the soil health card scheme has shown positive results, there are concerns regarding inadequate infrastructure (laboratories, manpower).
- In terms of water availability, the drought proofing measures have been unable to enhance penetration level of micro irrigation.
- Minimum Support Price (MSP) measure taken to insure farmers against price crashes and ensure food security, has not been fully effective. The low level of awareness of the MSP scheme and procurement practices has hindered the effectiveness of the scheme. In addition, limited coverage of crops (23) under MSP and providing heavy subsidies for inputs such as fertilisers, seeds, and pesticides for certain crops have led to a skewed food basket and uneconomic cropping pattern, leading to large surpluses in some crops and shortages in other.
- Farm loan waivers have only provided short-term relief and could adversely influence the repayment culture and negatively impact the fiscal status of the exchequer.
- Frequent changes in the trade policy, which are used largely as a price stabilisation tool to provide necessary price support to farmers have restricted export growth.
- Heavy subsidies provided for inputs such as fertilisers, seeds, and pesticides are mostly enjoyed by large farmers only.

Way Forward

The agriculture sector is in dire need of transformation in terms of not only productivity enhancement but also for creating a robust eco-system right from the production to the consumption stage. This is critical for India's overall food security, better management of food inflation, as well as to meet the government's target of doubling farm incomes, while dealing with climate change.

Improve agricultural productivity

- ***Consolidate land*** by forming collectives/ farmer organisations/ co-operatives (on the lines of AMUL). This would help in achieving economies of scale for operation and provide farmers the wherewithal to tap into specific technological innovations and reach out to a wider consumer base. Another option which could be considered is long-term leasing of farm landholdings without alienating land ownership.
- ***Enhance level of mechanisation*** through adoption of Custom Hiring Model. Under this model, a group of farmers like Farmer Producer Organisations (FPO) and cooperatives purchase high-cost agricultural machinery which can be used by all farmers in return of a fixed payment. Local manufacturing of small and low-end agri machineries should be supported under the 'Make in India' initiative to restrain cost of production and price of machineries to improve affordability. Adequate service centers should be established in rural and remote areas to offer after-sales service. Financial assistance, loans, and subsidies for mechanisation should be continued.
- ***Encourage adoption of digital technology such as remote sensing (via satellites), use of drones, GIS, etc. for sustainable farming.*** Unmanned aerial vehicles with powerful cameras/drones can be used to assess the fertilisation status of crops. Sensor network can be developed using smart technology for continuous monitoring of farms and specifically the use of virtual fence technologies in livestock sector where movement of livestock can be monitored with the use of remote sensing signals or sensors. It would reduce the turnaround time to react or respond to different situations. Uptake of these technologies would enable farmers to earn higher yields, reduce chances of crop failures and earn higher and largely uniform returns. However, since the associated costs may not be affordable for individual farmers, cooperatives could be formed to take up such facilities.
- ***Provide real time information regarding weather patterns to farmers using digital and mobile technology*** to help them take better and timely farming related decisions and lower incidents of crop failures.
- ***Increase agriculture R&D to develop climate resilient*** and short-duration high-yielding crop varieties which are helpful in raising cropping intensity.
- ***Encourage adoption of modern farming techniques*** such as Organic Farming, Low External Input Sustainable Agriculture (LEISA) and Precision Farming (an information and technology based farm management system to identify, analyse, and manage variability within fields for optimum sustainability, profitability and protection of the land resource).
- ***Encourage adoption of smart irrigation techniques*** such as micro-irrigation or drip irrigation system which holds potential to double the yield using 50 per cent of the water required with traditional methods and helps in increasing efficiency of other farm inputs such as fertilisers, pesticides, and labour.

Reduce post-harvest losses through development of efficient cold chain infrastructure

- ***Strengthen and improve cold chain infrastructure in the country:*** Set up warehouses and cold storage facilities in each district to ensure that farmers have adequate access to such facilities. These facilities should be affordable, reliable and sustainable. Quality of existing facilities should be improved with the latest technology such as hermetic storage structures which can prevent storage losses, while maintaining freshness of fruits and vegetables and seed viability, and retain quality. Similarly, modern cold chains enabled with climate control technology can help in reducing the rate of metabolism in harvested fruits and vegetables and extend the shelf life of the produce. Use of Artificial Intelligence (AI) can be explored which allows monitoring of a large basket of agri-commodities and micro manage their storage environment remotely, with the use of sophisticated sensors and other equipment.
- ***Implement PPP based model for enhancing investments in agri supply chain*** including development and modernization of storage facilities as well as grading and standardization, quality certification, etc.

Improve price realisation through providing farmers access to market and improving marketing infrastructure

- ***Encourage states to adopt the model Agricultural Produce and Livestock Marketing (APLM)*** Act that proposes a liberalised marketing environment for agri-commodities and livestock. Specific incentives can be given to States adopting the model such as allocation of higher funds under Central Government schemes for agri-development.
- ***Increase the density of APMCs.*** The National Commission on Farmers has advised to establish a market within a radius of 5 km from a farmer's residence.
- ***Contract farming, direct marketing, and marketing through FPOs should be adopted*** to facilitate farmers connect directly with the buyers. This will eliminate the role of middlemen and help farmers understand market requirements, tailor production methods to suit market needs, and get better returns.
- ***FPOs need to be strengthened,*** through capacity building exercises, to equip them to take up marketing as well as primary processing, packaging, and secondary processing and other value addition activities.
- ***Farmers should be encouraged to take value-addition activities*** involving primary processing, packaging and branding. Basic value addition such as cleaning and grading of grains, sorting of fruits and vegetables and primary processing activities such as cutting, dicing and packing fruits and vegetables can help farmers raise their returns. Branding of farm produce should be encouraged.
- ***Equip all APMCs with proper infrastructure*** for quality testing, grading and certification to enable them to connect online on the eNAM platform, which will help farmers have access to a large online marketplace. All States should be encouraged to link their physical mandis to the system. APMCs should expand scope of services by providing linkages with financial service providers.

Increase farm income by encouraging farmers to diversify into allied and non-farm activities

- ***Encourage farmers to diversify into high value crops, floriculture and livestock rearing*** to enhance

their income. Floriculture has witnessed voluminous growth in production over the last 10 years and has exhibited resilience to drought and extreme weather conditions. Moreover it has immense potential for export earnings. Also, there is huge growth potential in the dairy, poultry and fisheries sectors.

- ***Excess labour in the farm sector could be deployed into non-farm sector*** or subsidiary activities (including labour market, salaried employment, and businesses), thus reducing excessive employment pressure on the agricultural sector.
- ***Facilitate investment in rural industrialisation:*** Scope for investment in rural industrialisation for local manufacturing of value-added products should be explored. This will require investment in improvement of value chains needed for rural industrialisation and on skill-development programmes to improve farmers' employability in non-farm activities.
- ***Provide strong push to agri exports:*** Adequate push should be given to increase agri exports which are only about $36 billion currently, while global agri exports is worth over $1500 billion. There is a need for strategic agri-trade policy based on demand and supply projections of agri-commodities over medium-long term, while factoring in various supply side exigencies.

Provide farmers access to credit

- Credit must be made accessible, need-based and adequate to fulfil specific individual requirements with focus on small and marginal farmers. Banks need to simplify loan processing and documentation, offer online loan application and develop products more amenable for commodity financing.
- District Central Cooperative Banks (DCCBs) and Primary Agricultural Credit Societies (PACS) should be strengthened and professionalised to better utilise lines of credit and extend farm loans.
- Credit rating tool should be developed for FPOs, which can help FPOs in accessing credit from financial institutions.

Addressing farmers' distress through Direct Income Support (DIS)

The subsidies currently given to farmers can be converted into Direct Income Support (DIS) which is easier to implement, more transparent, equitable and crop-neutral. DIS would also allow farmers to use the market information to determine their production. This will also encourage them to optimise the use of inputs. Subsidies on wheat and rice should therefore be gradually eliminated and should be used to support nutritious food production such as pulses, fruits, vegetables and dairy. The money saved from eliminating subsidies for cereals should instead be used to support value chains.

According to estimates, if DIS is implemented across the country at ₹10,000 per hectare, the total funds required could be in the range of ₹1.97 lakh crore. The amount could come down significantly if the scheme excludes farmers whose wheat and rice are procured by government agencies, sugarcane growers who are paid by sugar mills and those farmers growing non-MSP crops.

4 Strategic Trade and Industrial Policy

Exports-led development remains India's best hope despite an increasing hostile global environment. India is now the world's sixth largest economy but remains a small player in global trade. It must integrate more globally to make the next leap forward to becoming the world's third largest economy. Shrinking back to protectionism is not the answer at our stage of development.

A balance of payments crisis forced India to liberalise its economy in the early 1990s. As a result the role of the private sector expanded hugely. With a benign global environment between 2003 and 2013 non-oil exports grew by 18 per cent per annum and the GDP growth exceeded 8 per cent per annum – its fastest growth ever.

As a result, since 1991, India's combined exports and imports ratio of goods and services (to GDP) has risen enormously to around 40 per cent today (from 17 per cent in 1991). India's presence in global trade has also enhanced, with Indian share in global merchandise exports accounting for 1.7 per cent today as against 0.6 per cent in early 1990s and share in imports rising to 2.5 per cent (2017) from 0.6 per cent (1991). India's global exports share is much lower when compared to other export-oriented emerging economies such as China (12.8 per cent), South Korea (3.2 per cent), Mexico (2.3 per cent) and Singapore (2.1 per cent). Exports also played a key role in their quest to become manufacturing nations. Merchandise exports account for 19.7 per cent of GDP in China, 37.3 per cent in South Korea, 13.8 per cent in Bangladesh as against 11.4 per cent for India.

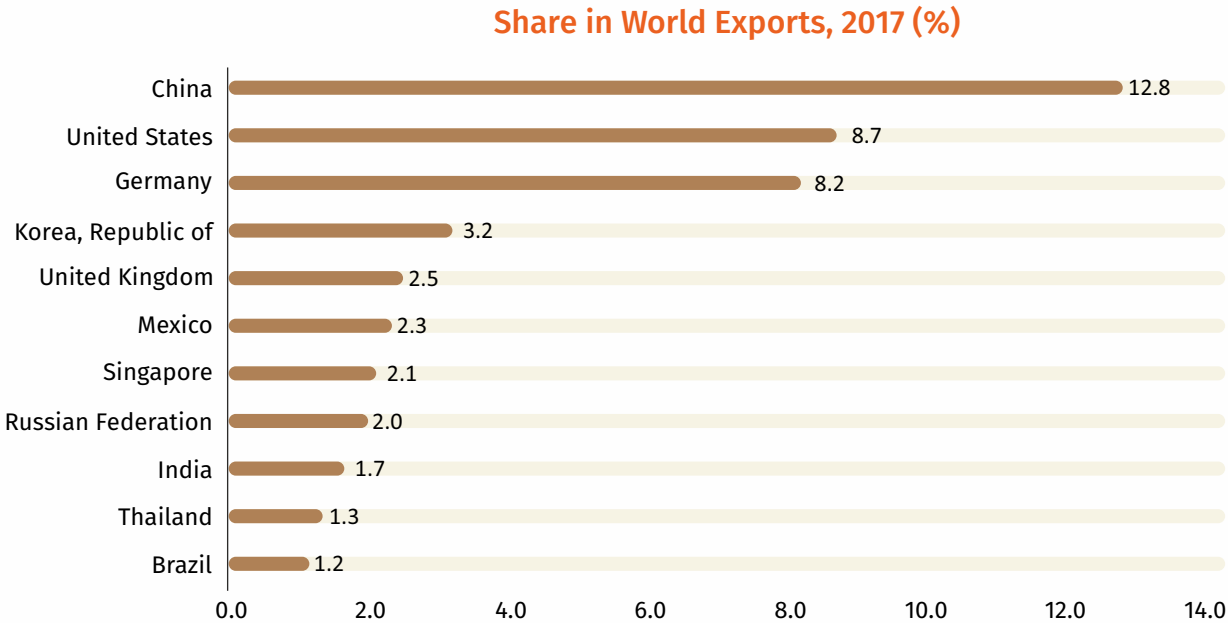
> "Our aim should be to make India a global R&D hub"
>
> **Atal Bihari Vajpayee**

> "Open markets offer the only realistic hope of pulling billions of people in developing countries out of abject poverty, while sustaining prosperity in the industrialized world."
>
> **Kofi Annan**

India's Integration with World Economy (Goods and Services)



Source: *World Bank, World Development Indicators*



Source: *WTO*

India has also seen a significant shift in this period in the composition of exports. Service exports saw a growth of 30-40 per cent in 2003-2008 but thereafter have largely plateaued. Within manufacturing exports also, India has lost share in textiles, leather, gems and jewellery but has gained ground in more capital intensive sectors such as auto, auto parts, engineering goods, electronics and pharmaceuticals. There is also a shift in our export markets towards Africa and Asia and much lower market share in Europe.

India's exports have witnessed a major slump in the recent years – with some sign of recovery this year. Share of exports (goods and services) in India's GDP that accounted for almost 25 per cent during 2011-2013 was affected by the global economic slowdown and fell sharply to 19 per cent by 2017. What explains this sharp slowdown? In a recent paper Chinoy and Jain of JP Morgan attribute at least half of this to the global slowdown and the sharp appreciation of the exchange rate of around 20 per cent from 2014 to 2017. The remainder is explained by temporary disruptions attributable to demonetisation and GST implementation. With the real exchange rate depreciating and the effects of the temporary shocks dissipating, exports are seeing some recovery.

But these will not be enough to get India back to the kind of export-led growth that drove the high GDP growth from 2003 to 2008. India will need a more strategic approach – especially with rising protectionism around the world. Given that India ranks at a low of 20 among the top exporting nations in the world, with a share of mere 1.7 per cent in global exports, there is a need to assess if India needs to change its market strategy and better align it with the current dynamics of global trade.

An analysis of the top 20 import markets of the world reveals that India is amongst the top five exporters only in one market i.e. UAE, and among the top 10 exporters in three more markets namely USA, Hong Kong

World's Top 20 Markets – Share in India's Exports and India's Share in These Markets

Share of Markets in India's Exports				
	Above 5%		USA Hong Kong	UAE
	3-5%	China United Kingdom		
	0-3%	Germany, Japan, France, Netherlands, Canada, South Korea, Italy, Mexico, Belgium, Spain, Taiwan	Turkey Singapore	
		0-2%	2-5%	Above 5%
		India's Share in These Markets		

and Turkey. In terms of market share of exports too, India has more than five per cent of market share only in UAE (6.9 per cent share in 2016). It has two to three per cent market share in four markets – Turkey, USA, Hong Kong and Singapore, and around one per cent share in six markets – UK, South Korea, Italy, Mexico, Belgium and Spain. In all other top 20 markets, India has less than one per cent market share. Clearly, there is a potential to increase India's share of exports in all these top 20 markets.

A mapping of the top 20 import markets (that account for almost 72 per cent of world's total imports) according to India's exports share in these markets and importance of these markets as India's major export destinations (matrix above), shows that while India is well positioned in import markets of UAE, USA, Hong Kong and Singapore as these are amongst India's top 10 export destinations, it should now attempt to build bigger exports share in these markets.

Some improvement can be made in China and UK markets, which are India's top export destinations but we have not been able to garner a significant market share in these countries. China has begun to lower tariffs on some Indian products and the UK post-Brexit maybe more conducive to trade arrangements with countries like India. Germany is another top export destination for India, but India has mere 0.8 per cent share in Germany's overall imports. Clearly, there is a room to enhance exports in this market. Likewise, there is a lot of catching up to do in all other top 20 import markets, as these neither figure in India's top ten export destinations nor does India have a reasonable market share in these countries. India exports can also increase in parts of the world which we have neglected.

Instead of exporting more to lucrative and developed country markets in recent years, India's exports have shifted, ironically, more to skilled labour and capital intensive products and from developed to developing country markets, especially in Africa and Asia. Of almost $2 trillion in EU imports, India supplies only a little over $40 billion. Of the total imports of Latin America and the Caribbean of over $800 billion, India supplies only $11 billion. This is where it must focus as well.

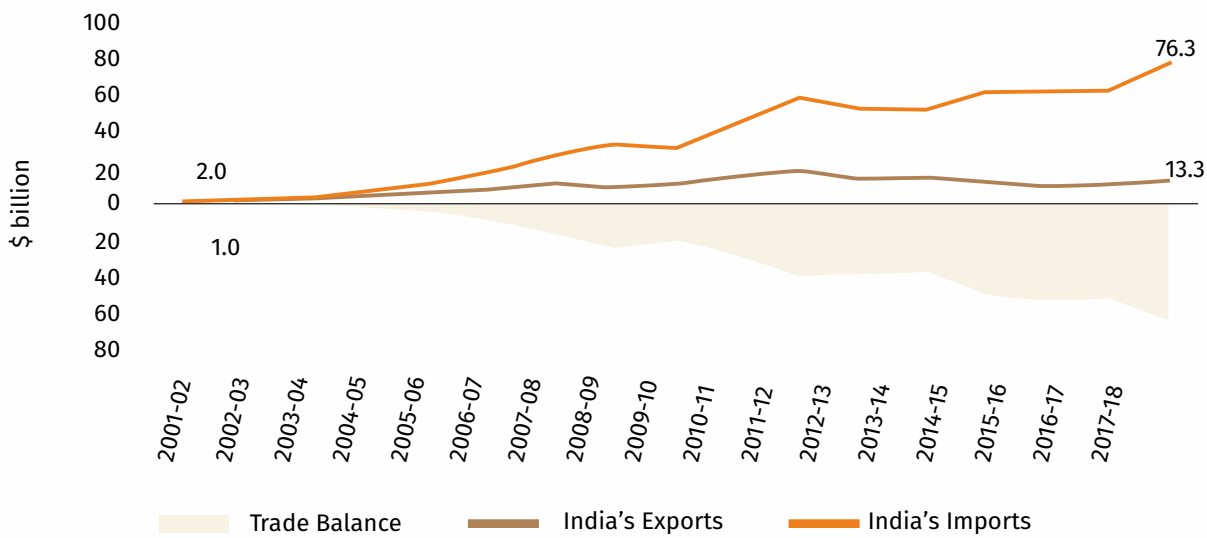
As global giants begin a trade war with each other, pygmies in global trade like India may be able to take advantage and increase their market share. India needs a much more aggressive market strategy to enhance its exports share in the world, especially by understanding the import dynamics of each of these markets. A more competitive exchange rate policy and improving logistics along with better regional trade arrangements can help India reach $1 trillion of exports of goods and services by 2025 even in a more difficult global trade environment. No harm trying as the autarchic approach will surely fail us.

Another area of concern is the rising growth in imports as against exports, which has widened the trade deficit. Imports running at $464 billion in FY2017-18 must be contained to $1.2 trillion by FY2025-26 which can be financed comfortably with export earnings and around $200 billion in remittances and FDI. This means making more in India not by increasing tariffs but by producing more competitively. A successful trade policy requires a competitive industrial policy. The two go hand in hand.

A major component of India's rising imports has been oil, which constitutes roughly 27 per cent of India's total imports. With rising oil prices, the oil import bill balloons and has an adverse effect on India's trade as well as current account deficit. Clearly, a long-term strategy is urgently required to reduce dependency on oil as the energy source of India.

India's non-oil imports too have risen steadily and while it is related to the rising growth of the Indian economy, a deeper investigation into source of rising non-oil imports shows that today China alone accounts for over 21 per cent of India's total non-oil imports. China had mere 5.4 per cent of India's non-oil imports in 2001-02. Over the last two decades, India's trade deficit with China has burgeoned and was nearly $63 billion in 2017-18.

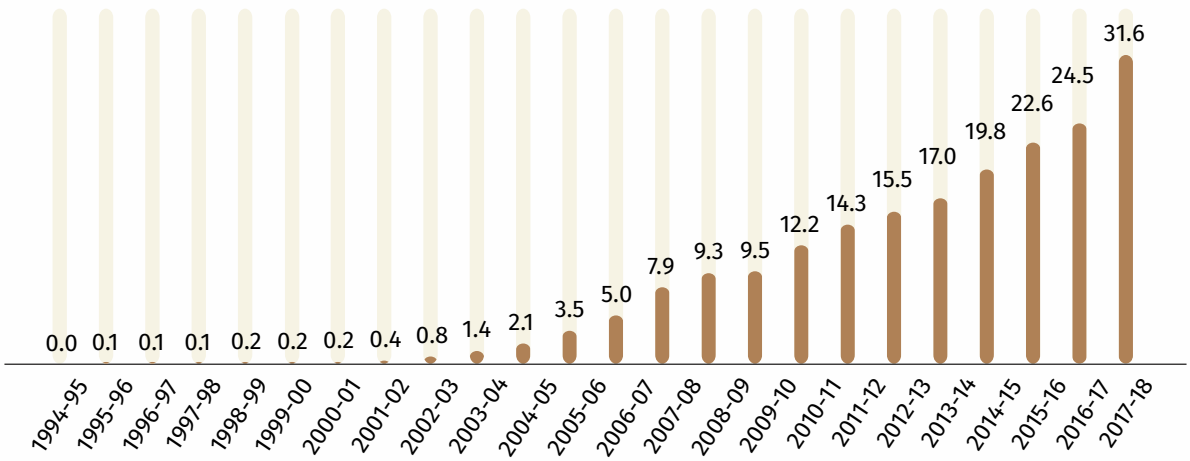
India's Trade with China



Source: *CMIE*

An analysis of composition of imports from China reveals that manufacturing imports account for 96 per cent of India's total imports from China, which primarily includes imports of electronic goods, engineering goods and chemical products. In fact, electronic goods imports from China have grown at a CAGR of almost 32 per cent since 2001-02. Electronic goods accounted for over 41 per cent of India's total imports from China in 2017-18. Almost half of these electronic goods imports from China constitute telecom instruments. Smartphone imports from China have swept the price-sensitive Indian consumer market over the last few years.

India's Imports of Electronic Goods from China ($ billion)



Source: *CMIE*

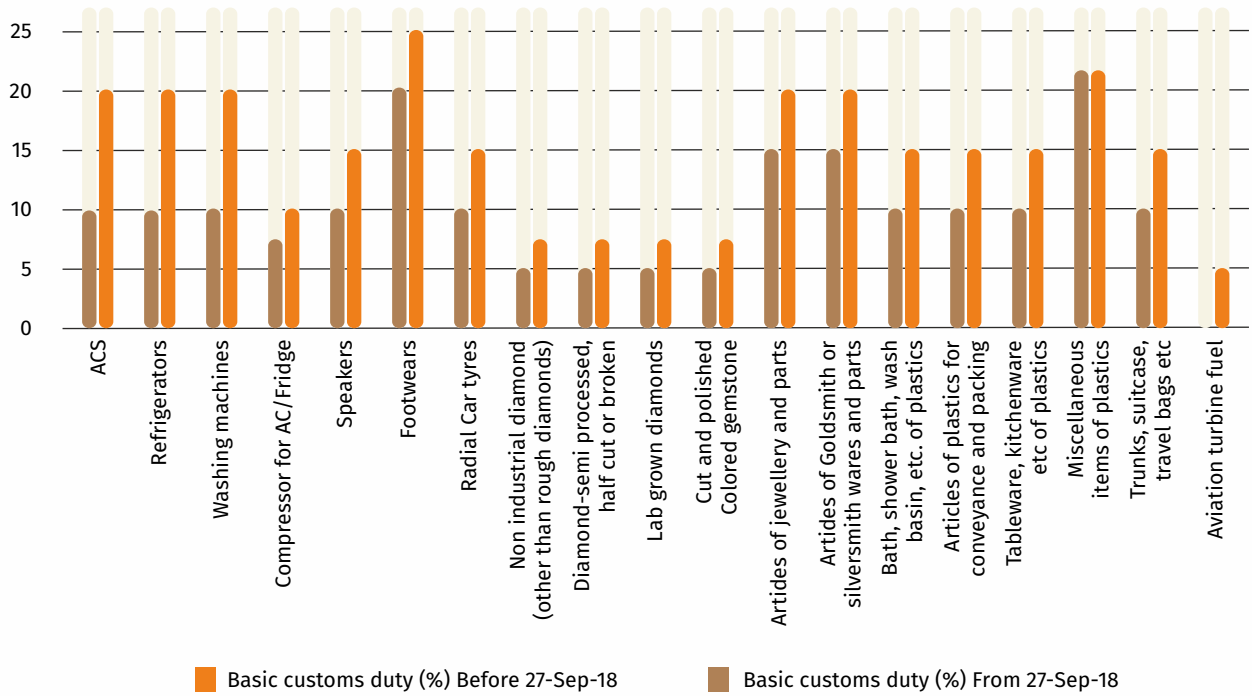
The rising trade imbalance with China is indeed a cause of worry and there is a need to reduce this deficit if India has to manage its overall trade balance. Given China's cost effectiveness and competency in consumer products like electronics, engineering goods, etc., one of the possible solutions is to have greater Chinese investments of these products in India. FDI inflows from China into India in 2017-18 were $350 million, accounting for mere 0.78 per cent of total FDI inflows in the country. Clearly, there is a need to do more and promote the Make-in-India scheme to Chinese manufacturing investors.

This year, the government has also resorted to increasing import tariffs on several items in wake of rising imports. Earlier this year, import duties were raised on almost 43 broad categories ranging from fruit juice to electronic goods, mobile phones, with a view to encourage domestic value addition and give a boost to 'Make-in-India' programme. In July, the government doubled the import duty on over 50 textile products, including jackets, suits and carpets to 20 per cent, and this was later followed by increasing duty rates on about 328 textile items in August, from 10 per cent to 20 per cent, primarily with the objective of lowering imports from China, that had witnessed significant rise last fiscal year. While imports of these items from Bangladesh had also seen a rise but change in duty rates would not have any impact of imports from this country since it enjoys duty-free access under the FTA.

Another round of tariff imports hike was seen in September 2018, when the government increased basic customs duty on 19 items including electronic goods such as air conditioners, refrigerators, washing

machines and other items, with a view to curtail imports and contain the rising current account deficit. Valued at about Rs 86,000 crores (almost 2.8 per cent of India's total imports), the tariff hike may have only modest impact on current account deficit. Moreover, since some of these items are eligible for benefits under FTAs, this may not be effective measure of lowering imports of non-essential items.

Hike in Basic Customs Duty of 19 Items to Control CAD (on 27-Sep-2018)



Source: *PIB*

Lowering import dependence and pushing domestic manufacturing of such non-essential items requires strategic policies directed at incentivising manufacturing of these items on a large scale to 'Make for India' as well as for exports.

India has largely missed out on the trade in networked products (NPs), where it exports only $25 billion (0.5 percent of global trade in NPs), both in assembled export products $15 billion and in Parts and Components (P&C) $10 billion. As against this, China's share is 20 per cent, Korea's 5 per cent, Singapore 3.5 per cent, Malaysia 2 per cent, Thailand 2 per cent and even Vietnam at 1 per cent. Our dismal showing in entering global value chains (GVCs) is due to poor logistics, unpredictable power supply and comparatively greater labor disputes.

But even in this scenario, India did succeed in selected products, not by just liberalising trade but by deliberate industry specific strategic policies from which there are lessons.

For example, India has had some success in assembled Automobile Exports but this was not accidental. It came through a strategic 10-year plan Automotive Mission Plan (AMP) 2006-2016 which targeted $150 billion production by 2016 and make India a preferred destination for automobile assembly in selected segments. National Automotive Testing and R&D Infrastructure Project (NATRiP) then added R&D to

provide Global Excellence behind this plan. Faster Adoption and Manufacture of Electric Vehicles (FAME) adopted in 2015 hopes to make India an electric vehicle hub in the future.

Like in automobiles, India could become a preferred destination for assembly of electronics, telecom hardware, electrical machinery, computers and office machines, if it made a similar strategic plan to increase its exports from $15 billion to $150-$200 billion by 2025, especially as China looks to move out many of these. It will need much better logistics, skilled mid-level management, predictable power supply and R&D. At the moment India does not figure as a destination.

India is becoming somewhat of a hub for aeronautics and automobiles parts through a conscious effort to attract FDI (not FPI) but with an offset policy which requires 30 percent is domestically sourced. India could be a P&C supplier for a range of industries and could increase its exports from $10 billion to over $100 billion in developed markets and enter global value chains (GVCs) with a strategic plan.

India's pharmaceutical industry also did not grow by accident but because India enacted a non-TRIPS compliant patent policy in 1970. This allowed the pharmaceutical industry to grow stronger so that by 2005 when TRIPS Compliant Act was introduced, its internal R&D capacity could allow it to remain competitive in global markets.

India is a major supplier of IT services for design, architecture, accounting, logistics but uses very little of these in its domestic industry and manufactured exports. India could bring its edge in services to a range of industries in electronics and electrical machinery, defense equipment and green technology. There are some who say India should focus on services as against manufacture or SMEs vs large firms.

These are false choices. India's edge in services should be used in manufacturing as well – especially in networked products. Likewise, India needs faster growth in firms of all sizes and a cascading system of contracts between large, medium, and small firms with synergy across them. India badly needs more middle-sized firms employing 100-500 workers, the missing middle for which labour reforms are needed.

India has unfortunately started losing out on its traditional labour-intensive exports – textiles & apparel, leather and footwear – which have fallen to around $39 billion. India's competitors have taken away our markets through policies which gave them better access to logistics, credit, land, lower taxes and more competitive exchange rates.

Strategic trade policy does not mean just opening up our markets. It means using access to our markets to pry open others as well. Reviewing and renegotiating the India-ASEAN Free Trade Area is perhaps needed if the premise of the original agreement – that freer trade in services would follow free trade in goods – has not happened. Anti-dumping may require temporary tariffs or better yet the threat to impose tariffs all within a WTO framework, which India must try and preserve.

To reach $1 trillion, exports must grow by 18 per cent per annum up to 2025-26, the same growth rate as in the golden period between 2003 and 2013. Some say in today's difficult global markets the era of export-led growth is over. But with abysmally low export shares the upside for an export-led growth strategy for India is huge even if global trade grows more slowly.

What a New India needs some 25 years after liberalisation is a 'Strategic Trade and Industry Policy', which revives traditional labour-intensive exports, makes major inroads in networked products, avoids an overvalued exchange rate and pursues smarter trade agreements. And finally, the government and the private sector working closely together to take on the world and Make in India.

5 Leveraging the Services Sector for Employment Generation: The Low Hanging Fruit

> "To other countries, I may go as a tourist, but to India, I come as a pilgrim."
>
> **Martin Luther King Jr.**

The services sector has been the largest contributor to India's GVA growth and is among the biggest employment generator in the country. Information technology, banking and financial services have been classic examples of high employment intensity service sectors for India. Given our demographic profile as we continue to add millions to the workforce every year; job creation persists to be one of the biggest challenges for the country.

The rapid disruptions in technology is opening new avenues in the services sector and has the potential to create significant opportunities in both high skill and low skill-based jobs. While we still need to fully leverage the potential of traditional service segments like tourism, hospitality and logistics for job creation; new age sectors like e-commerce, service aggregators are also very promising as far their employment generation capacity is concerned.

Travel and Tourism

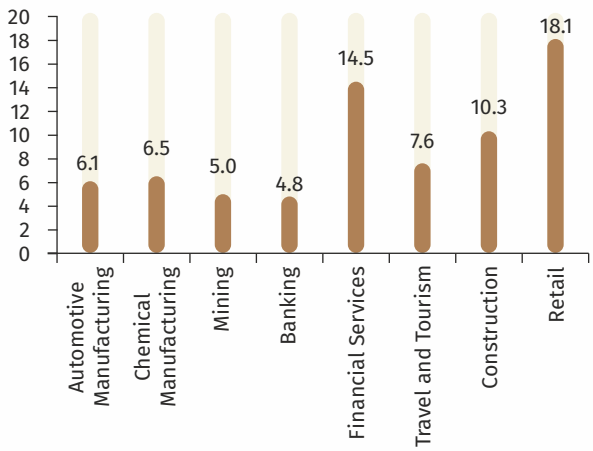
Travel and tourism is among the fastest growing sectors today with significant backward and forward linkages. The rise in disposable incomes and a huge bulge in the aspirational class has led to an exponential increase in the pool of people willing to spend on a new 'travel experience'. Over the last two decades, the number of international travelers across the globe has increased and it is expected to go up further in the near future. According to the UN World Tourism Organization, the number of international arrivals increased from over 600 million in 2000 to 1.3 billion in 2017, and this number is expected to touch 1.8 billion by 2030.

The total contribution (direct and indirect) of travel & tourism sector to global GDP stood at 10.4 per cent in 2017, which is expected to increase to 11.7 per cent by 2028. Also, the sector's share in jobs created worldwide was reported at 9.9 per cent of the total employment in 2017.

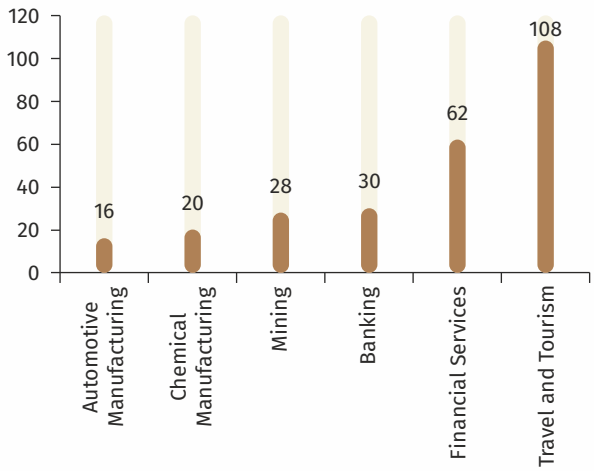
Over the past decade, one in every five jobs created worldwide was in the tourism sector and estimates by World Travel and Tourism Council (WTTC) indicate that about 100 million jobs could be generated in the sector over the next decade. The sector is a huge employment churner. For every million rupees of investment, 78 jobs are created in the tourism sector, compared to just about 18 jobs in manufacturing and 45 jobs in agriculture.

How does Tourism Compare to Other Sectors?

Sector Wise GDP in 2016 – $ trillion



Direct Job Creation in 2016 – in million

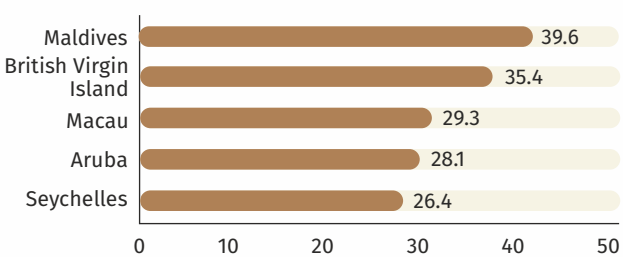


Source: *WTTC Benchmarking Report, WTTC, December 2017*
Retail GDP represents retail without wholesale

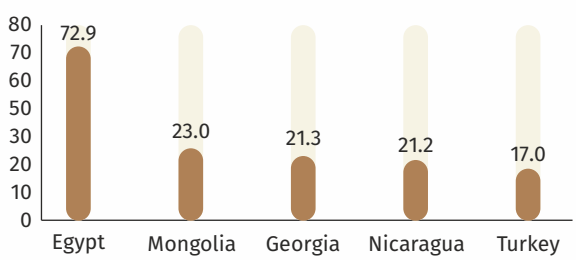
Given the sector's massive ability to contribute to growth and job creation, travel & tourism has been a key focus area for several countries around the world. Moreover, the advent of internet and greater digitization has proven to be a boon for both travel companies and travelers. In fact, it has also led to the strengthening of the travel start-up ecosystem. There has been a huge flow of capital investments in the travel start-up space - about $30 billion has been raised in the past two years (almost equivalent to the cumulative amount raised over the last decade).

Countries Most Reliant on Tourism

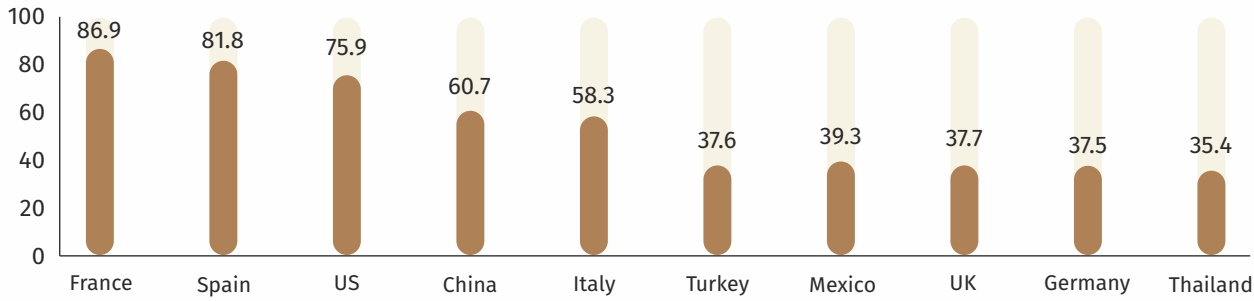
Direct Contribution of Travel & Tourism to GDP (in %): 2017



Fastest Growing (in %): In which countries did the direct contribution of travel & tourism to GDP grow fastest in 2017?



World's Most Visited Countries (Tourist in Million): 2017



Source: *Country League Table Summary, WTTC*
UNWTO Tourism Highlights 2018 Edition

Tourism – The next growth frontier for India?

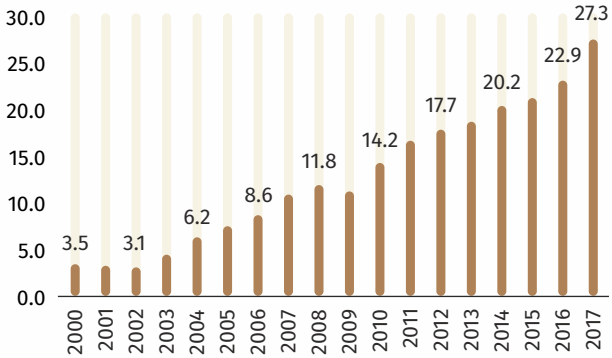
Travel & tourism is a low-hanging fruit for India and given its huge untapped potential, the sector is considered to be among the top sunrise sectors of our economy.

The sheer diversity of the country, which varies from natural beauty to rich cultural heritage, is mind boggling. India has some of the most beautiful beaches, most scenic hill stations, has over 100 national parks and 500 wildlife sanctuaries, and is home to some of the most mystique historical and spiritual sites. With so much to offer, there is tremendous scope for India to further enhance its value proposition. It is also encouraging to see various new themes that are shaping inbound tourism in India. Some of these are in the areas of Medical & Wellness Tourism, Spiritual Tourism, Meetings-Incentives Conventions & Exhibitions (MICE), Adventure and Wildlife.

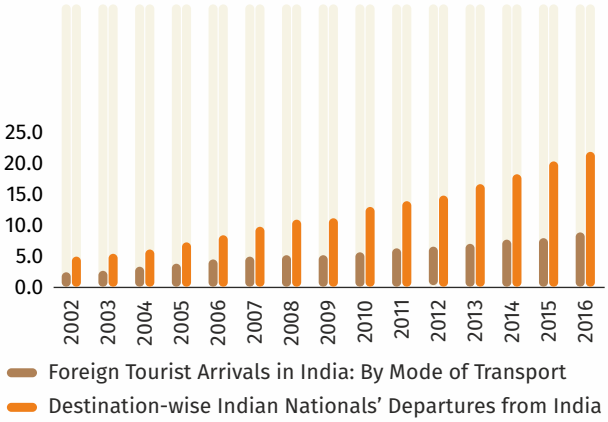
Even as India moves ahead to fully leverage its tourism potential, it may be pointed out that the World Travel & Tourism Council's (WTTC) Travel & Tourism Country Power and Performance Ranking, 2018, identified India as a tourism powerhouse. India was ranked among the top three countries behind China and USA in the Power Ranking.

Furthermore, as per the WTTC 2018 report, travel & tourism contributed 9.4 per cent to India's GDP and accounted for 8 per cent of the total jobs created in 2017. India's travel & tourism sector ranks seventh in the world in terms of its total contribution to the country's GDP, and is also a major source of foreign exchange earnings for the country.

Foreign Exchange Earnings from Tourism ($ million)



Tourist Arrivals in India & Departures from India ($ million)



Source: *CMIE*

India has witnessed an improved ranking in the Travel and Tourism Competitive Index of the World Economic Forum - moving up 12 places to 40th position in 2017 from 52nd position in 2015. India has cumulatively improved its ranking by 25 places in the last three years (2014-17).

Tourism has been one of the key focus areas for the Government of India and was recognized as one of the major components to build 'Brand India' in 2014.

Several initiatives have been announced by the government to promote the sector. Initiatives such as Swadesh Darshan (focusing on theme-based tourist circuits), PRASHAD (Pilgrimage Rejuvenation and Spiritual, Heritage Augmentation Drive), e-visa facility, e-ticketing and HRIDAY (Heritage City Development and Augmentation Yojana Scheme) are all aimed at further strengthening India's position as a major tourist destination. The regional connectivity scheme, UDAN, launched by the government is also likely to play its role in increasing footfalls to unexplored places.

Some Achievements in the Tourism Sector



Source: *PIB*

Way Forward

India has successfully positioned itself as a promising tourist attraction witnessing a significant increase in footfalls over past few years; however the reality is that we have only touched the tip of the iceberg. The sector will be able to take the next leap forward only when some of the most pressing and basic issues are addressed. While we have been able to create sufficient interest by promoting India as a great tourist destination, however, it remains critical that the supporting supply side is strengthened to meet the rising demand. Inadequate infrastructure, lack of skilled labour, inadequate hygienic and comfortable accommodation for the tourists continue to hamper the growth of the industry.

Destination infrastructure, skilling and technology will be the founding pillars that will drive the next stage of growth in the tourism sector.

Infrastructure Support

- Develop one or two international airports as major global transit hubs (similar to Dubai/ London) by easing norms and providing incentives to airlines.
- Develop a roadmap for development of Greenfield ports for cruise tourism including facilities for seaplanes and leisure yachts.
- Identify 20-25 potential tourism development destinations across the country and accelerate connectivity projects in those regions, especially development of roadways, railways, airports and waterways. Ensuring last mile connectivity at major tourist destinations is most critical.

- Foreign tourists rely heavily on the India tourism offices as well as social media, thus, it is important that a policy be drafted to strengthen India's tourism offices.

Human Resource Development

- As a part of the Skill Development Mission, the Ministry of Tourism has set a target to train 5 million people by 2022. In accordance to this, the Ministry has initiated several skill programmes, however, the scale of these initiatives needs to be improved.
- There is a need for stronger public-private collaboration that creates robust on-the-job training and apprenticeship models.
- Travel and tourism is a people-centric industry and thus the focus on imparting soft skills remains very important.

Targeting 20 Million Foreign Tourists by 2020

- The government has set the target of doubling foreign tourist arrivals in India from 10 million in 2017 to 20 million in 2020. It might be noted that international arrival data of similarly-sized economies across the world averages around 31.5 million international tourists.
- At present, inbound arrivals in India can broadly be classified into two categories of tourists – those who seek a luxury experience and backpackers. India, as a destination, is missing out the chunk of middle-class travellers from other countries, who are opting for destinations such as Thailand, Indonesia and Cambodia. It is important that this segment is tapped by making provisions for adequate facilities such as transport and accommodation.

Leveraging Technology

Advent of technology is disrupting several sectors and tourism has not been left out. Today, digital technology has become a basic requirement for travel and tourism industry. In fact, the government has already undertaken several initiatives – e-ticketing for monuments, e-visa, multi-lingual helpline – to give an impetus to digital travel in India. Moreover, in 2017, India was projected to have accounted for 3.7 per cent of the global digital travel sales — making it the third-largest market by value in the Asia-Pacific region.

There is an urgent need to ensure that high-speed internet connectivity, seamless digital payment solutions and a robust regulatory and policy framework is in place. At present, India ranks low on these parameters.

- Enhance the options for customer registration for mobile banking services
- Enable wider access to mobile banking services in multiple languages for non-smartphone users
- Encourage innovative mobile-based payment solutions
- Ensure data security

France Enabling E-tourism

France is one of the major tourist destinations and the country's tourism council has been focusing on the digital aspect. E-tourism in France is growing fast, resolving challenges for travellers who are becoming increasingly mobile. A stable public telecommunications infrastructure, together with digital tourism projects, has helped tourist regions in the country to offer richer experiences to people visiting their area.

For instance, fibre optic connections for seven ski resorts in the Hautes-Pyrénées allows tourists at these remote ski resorts to access internet speeds similar to those in urban and well connected areas, with guaranteed service availability and secure connections. To ensure this, additional network infrastructure of almost 100km has been laid to interconnect these resorts using fibre optic or microwave links.

Source: *Expedition 3.0: Travel and hospitality gone digital, FICCI-KPMG Report, March 2018*

Ease of Doing Business (EoDB) in Tourism

EoDB Tourism State Rankings' can be introduced by the Ministry of Tourism and NITI Aayog, where each state clearly defines and publishes the list of all approvals required by various agencies (including local bodies) for various types of tourism projects.

Land Bank Repository & Investor Facilitation

Availability of suitable land is one of the main concerns for investing in tourism projects. The government should consider developing more tourism-specific land banks. Also, a nodal officer/ land officer should be appointed to facilitate investor site visits and address queries.

Developing Meetings, Incentives, Conferences and Exhibitions (MICE) Infrastructure

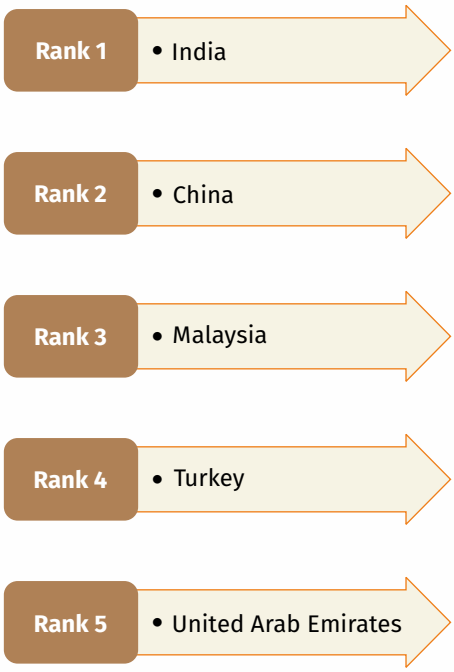
While MICE sector is experiencing growth in the Indian sector over the past decade, however, India still has less than 0.5 per cent share of the world meetings and conventions market. Creating more world-class infrastructure can enable India to attract global conventions and meetings in tourism as well as other fields to create a rich pool of ideas and business linkages.

Undertake deeper engagement with local communities in areas of art and culture, skill training, environment protection while undertaking tourism projects.

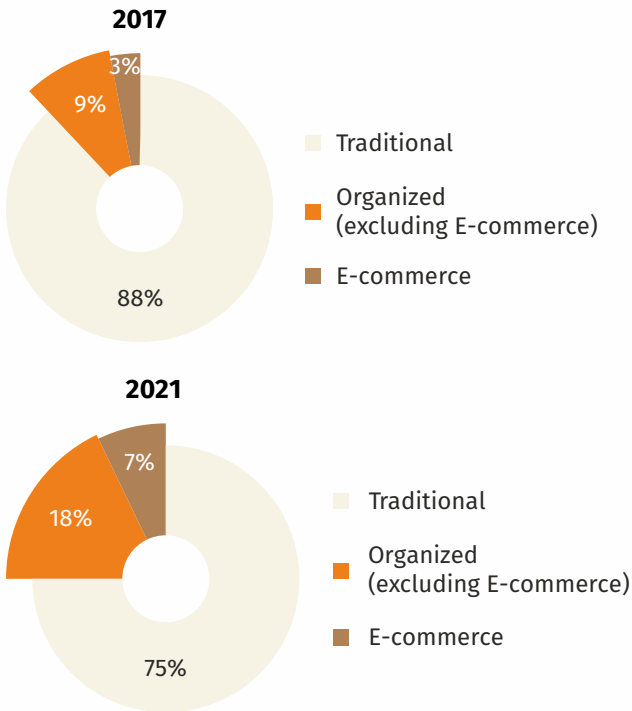
Retail and E-commerce

The retail sector has witnessed significant growth in India over the past decade. Factors such as robust growth, expanding middle class, increase in discretionary spend, favourable demographics - position India as one of the most promising retail destinations. In fact, the latest AT Kearney Global Retail Development Index 2017 ranks India at the top position among top 30 developing countries for retail investments. The total market size of the retail sector was valued at $795 billion in 2017, which is forecasted to reach $1.2 trillion by 2021.

AT Kearney Global Retail Development Index



Composition of Retail Market - India (share in %)



Source: *AT Kearney Global Retail Development Index*
Consumer LEADS, FICCI-Deloitte Publication October 2018

Even though the retail sector in India is dominated by the unorganised segment (which has a share of almost 90 per cent); modern organised retailing formats are assuming significant importance. Moreover, the rapid diffusion of technology has created significant disruptions in the retail sector – today modern retail is standing on the cusp of a paradigm shift with e-tailing/m-tailing becoming the new buzzwords. E-commerce has created a revolution in the retail sector and India is fast emerging as the world's biggest e-commerce market. The value of Indian e-commerce market is expected to reach $200 billion by 2026 from $24 billion in 2017.

Drivers of E-commerce in India

Growing internet penetration	Internet penetration to increase from 30% in 2016 to 59% in 2021
Increase usage of smart phones	Smartphone users in India are expected to increase from 260 million in 2016 to around 450 million by 2021
Rise in number of online shoppers	Number of online shoppers would increase from current 15% of the online population to 50% of the online population by 2026
Change in payment landscape	Total Digital Payment Market in India to grow to 1 trillion dollars by FY23 led by mobile payments

Source: *Consumer LEADS, FICCI-Deloitte Publication October 2018*

Even though India has the second highest number of internet users in the world after China; the digital buyer penetration in India is about 43.6 per cent, compared to about 69 per cent in China and 60 per cent in Brazil. With an average of 40 million new internet users added annually in India since 2013, the e-tail sector will only continue to grow going ahead. India is still in the process of putting an e-commerce ecosystem in place, which would help leverage full potential of the sector while creating massive number of job opportunities. In fact, according to a recent report by PwC-NASSCOM, the e-commerce sector has the potential to create over 1 million jobs by the year 2022.

Moreover, campaigns such as Digital India, Start-up India, Skill India, etc display the focus of government to capitalise on the wave of digitisation. Also, the government has increased the limit of foreign direct investment (FDI) in the e-commerce marketplace model to 100 per cent (in B2B models) and is also working on a draft e-commerce policy.

However, it remains critical that the e-commerce readiness challenges are addressed on a priority basis. For instance, even though the use of information and communication technology has increased by leaps and bounds, basic challenges like poor physical infrastructure, costs, privacy and security concerns continue to remain. Also, the e-payment ecosystem needs to be made robust and local supply chain linkages need to be strengthened on a priority basis.

Some key recommendations:

- Put in place a national e-commerce policy
- Provide impetus to cross border e-commerce
- Improve last mile delivery

Logistics & Warehousing

Logistics and warehousing are the lifelines for any economy and the sector is in fact one of the primary determinants of a country's industrial competitiveness. Logistic costs in India have remained quite high and this has been one of the key deterrents in positioning India as a global manufacturing hub. Estimates put India's logistics cost between 14 per cent of GDP compared to a ratio between 8-10 per cent for countries like the US, Hong Kong and France. Furthermore, warehousing which constitutes for about 25 per cent of the logistic costs is marred with significant issues in India. At present, the warehousing segment is highly fragmented in India due to dominance of unorganised players – the latter has a share of almost 90 per cent in the warehousing space.

Transport & Logistics Efficiency Indicators

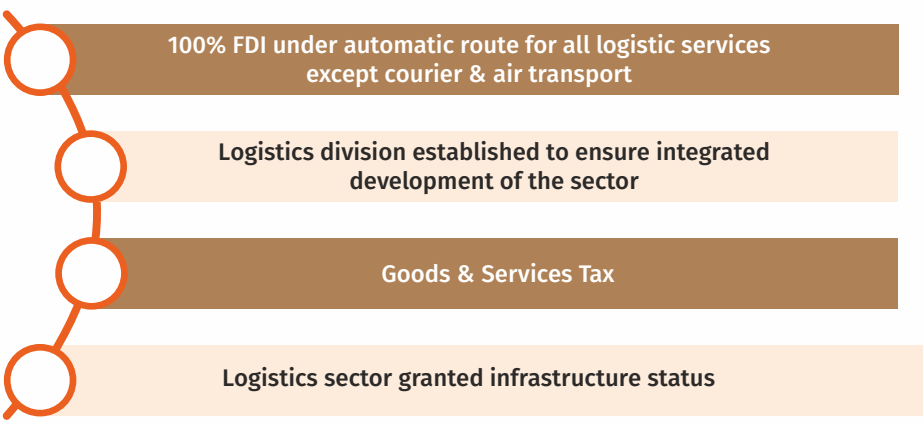
	India	Global
Total Highways (in kms)	56,03,293	67,02,178 (USA) 44,63,913 (China)
Share of Paved Roads (in %)*	~ 62.5%	65.9% (USA) ~ 85% (South Korea) 100% (France)
Average truck speed (in kmph)	30–40	60–80
Average time taken to clear exports through customs (in days)	5.8	1.9 (Thailand)
Turnaround time at ports (in hours)	~ 64	0-24
Annual container handling capacity	15.3 million TEUs	~ 200 million TEUs
Logistics cost as % of GDP	14%	8-10% (developed countries)

***Note:** The quality of road network makes comparability difficult.*
***Source:** Ministry of Road Transport & Highways, World Bank, India Container Market Report, Various Press Articles*

Moreover, the advent of e-commerce/cross border e-commerce makes the need for a seamless logistics and warehousing ecosystem all the more critical. Putting in place a multimodal transport network in the country is the need of the hour as we cannot afford to miss the next big opportunity arising from the digital revolution.

India was ranked 44 among 160 countries as per the World Bank Logistics Performance Index 2018, which was an improvement of 10 ranks from a position of 54 in 2014. The government has been making a conscious effort to undertake policy measures to give a thrust to the logistics and warehousing sector, which is in line with its vision of promoting 'Make in India'. Also, the line up of huge infrastructure projects like Dedicated Freight Corridor, Delhi Mumbai Industrial Corridor, Sagarmala and Bharatmala are expected to impact growth in the sector.

Government Initiatives to Give an Impetus to Logistics & Warehousing Sector



Demand drivers for the logistics sector - such as increase in organized retail/e-commerce, trade growth, globalisation of value chains - are likely to be in place going ahead and will in fact gather further momentum. However, integration and consolidation of the sector will be extremely important to reap the actual benefits.

Also, the logistics and warehouse sector has a huge potential to generate job opportunities. In fact, according to a Team Lease Report on the logistics sector released earlier this year, public investment and improved consumption & industrial activity will result in 3 million new jobs by 2022 in sub-sectors like road, freight, warehousing, waterways, air freight, packaging and courier services. The employment numbers will go up to 13.9 million by 2022 from 10.9 million at present.

Some key recommendations:

- Target a logistic cost to GDP ratio of less than 10 per cent to be achieved in less than a decade
- Create Warehousing Promotion Zones
- Greater adoption of information technology in the sector
- Create a pool of competent and specialised workforce to meet the persisting skill gap

Aggregator Services Sector

Technology has brought millions of consumers to the virtual world of online shopping. And this online channel has not only created a remarkable avenue for the sale of a whole gamut of goods/merchandise products but also for a huge range of services. The emergence of online applications like AirBnB (hospitality), Ola, Uber (taxis), Instacart (groceries) has changed the way people are availing traditional services – resulting in an exponential growth in the 'on-demand services' segment.

A study by PwC projects the global revenue from the 5 key sharing services sectors (automotive, hospitality, finance, staffing and media streaming) is likely to reach $335 billion by the year 2025.

The aggregator service platform, though is relatively new in India, it is already witnessing mammoth growth and more significantly is successfully creating millions of jobs. With the requirement of minimal investments, it has opened up a huge channel for individuals to capitalise on their skills and come forth as first time entrepreneurs. It has given a new lease of life to the idea of self-employment.

- Uber signed a memorandum of understanding with the Government of Tamil Nadu in 2015 to create tens of thousands of work and entrepreneurship opportunities, foster technical innovation and support development in the state.
- The Housing and Urban Affairs Ministry signed a MoU with online service aggregator Urban Clap in 2017 to generate jobs with minimum assured monthly wages for the urban poor skilled under a national livelihood mission. Urban Clap assured a minimum monthly earning of Rs 15,000 for plumbers, electricians, and carpenters and Rs 25,000 for appliance repair technicians, beauty therapists, and spa therapists.
- Ola Cabs has signed a Memorandum of Understanding with the Maharashtra government in 2018 to create 10,000 job opportunities in the state.

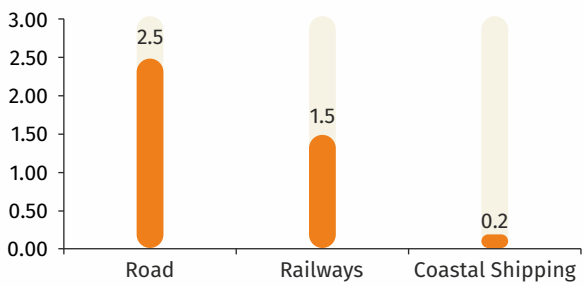
Source: *Various Press Articles*

6 Addressing the Energy, Housing and Infrastructure Gap and Improving Logistics

India has been making steady progress at scaling up its infrastructure which is visible in faster expansion of road network, rising renewable energy capacity, introduction of metro train projects in various cities and decreasing power deficit. However, infrastructure gap is still huge with imbalances and lack of integration amongst the different modes of transport, leading to sub-optimal utilisation of infrastructure available. This is reflected in their economic contribution. India generates 4.6 billion tonnes of freight shipments, translating into a transport task of 3.1 trillion tonne - km at a cost of $1,043 billion with a conversion ratio of around one dollar of GDP/tonne-km as compared to other countries, which generate over $10 of GDP/tonne-km.

> "You and I travel by road or rail, economies travel on infrastructure."
>
> **Margaret Thatcher**

Cost of Different Modes of Transport (Rs. per tonne-km)



Source: *Inland Waterways and Coastal Shipping – Issues and Endeavours, The Institute of Development and Policy Studies*

Infrastructure bottlenecks continue to adversely impact the cost of doing business in India, hurts competitiveness and makes it difficult to achieve the objectives of 'Make in India'. Logistics costs in India is around 14 per cent of GDP as against 8-10 per cent for other developed economies. Logistics and power shortages are cited as major challenges by almost all business surveys. They are also the key factors why India has had limited success in accessing global value chains, to become a hub for export of assembled export products as well as parts and components, which have been the hallmark of rapid growth in several East Asian countries. Infrastructure bottlenecks as a whole is estimated to be pulling down India's GDP by nearly 4-5 per cent per annum.

Status of Infrastructure Facilities

Roads: In spite of rapid expansion of road network in recent years, share of surfaced roads in total road length is only 62.5 per cent, lower than in other countries. Also, while national highways constitute only two per cent of the total road length, they carry over 40 per cent of the total traffic leading to heavy congestion and delays. Maximum highway speed for trucks and buses is estimated to be only 30-40 km per hour. According to studies, traffic congestion on Delhi roads alone costs around $10 billion annually on account of fuel wastage, productivity loss, air pollution and road crashes.

Railways: India has the third largest rail network in the world, but there is huge capacity deficit. Railway tracks and rolling stocks are overburdened leading to congestion and compromising on safety aspect. Around 40 per cent of the line sections of Indian Railways are operating at beyond 100 per cent when technically capacity utilisation of 90 per cent is considered saturated, as revealed in a 2015 Indian Railways report. Average freight train speed at around 24 kmph and average passenger train speed (excluding suburban trains) at around 44 kmph starkly contrasts with global averages. The considerable technological gap between India and the world with respect to railways makes India heavily reliant on global technological partnerships.

Ports: In terms of performance, Indian ports are far behind other ports in the region, including that of Hong Kong, Singapore, Sri Lanka and China. The combined containerised cargo capacity of India's 12 major ports (about 8.75 million TEUs) is less than one-fourth of the capacity of Shanghai port (36.5 million TEUs). In India, only two ports, Kandla and Mundra, can handle capacity of over 100 million tonnes, while China has six cargo ports that can handle over 500 million tonnes per annum and eight ports that can handle more than 100 to 500 million tonnes. Indian ports also fare poorly in terms of quay capacity. Other challenges for the sector include excess human intervention causing delays, low labour productivity, and lengthy documentation process increasing the lead time.

Aviation: In India, only 139 million people travelled by air in 2017 compared to 551 million in China and 849 million for the US. In terms of air transportation of freight, India's volume was only 2.4 thousand tonne-km compared to 23 for China and 41 for the US. The sector faces capacity constraints. Airport infrastructure is jammed to capacity with airports bursting at their seams. Safety and security are the other biggest challenges facing the sector. It is also suffering on account of high operation costs and competitive air fares making it unsustainable for airlines.

Power: India now has excess power-generation capacity but transmission and distribution (T&D) losses (both technical and non-technical) have remained high at around 23 per cent. Moreover, supply of erratic and poor quality power hampers productivity. Businesses have to incur huge costs to mitigate problems arising from power outages or poor power supply. High power tariffs also pose a challenge for businesses. Green technology is an area where India has high ambitions (40 per cent power to be generated from non-fossil fuels by 2030) but these have to be implemented as per the schedule to meet the country's obligation at the Paris Accord and the SDGs.

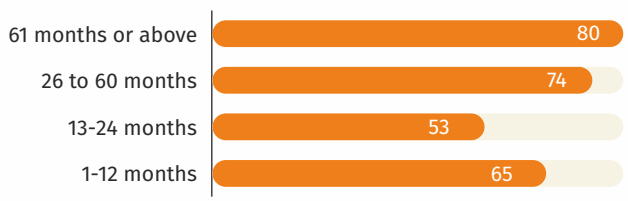
India is also urbanising at a rapid rate but the process has been quite haphazard. More than 51 per cent cities in India have one million plus population at present. India needs a comprehensive and highly integrated physical, institutional, social and economic infrastructure development plan. Though India has embarked on a programme to upgrade 100 smart cities, the progress on this front has been quite slow. There are recent signs that large businesses are moving away from larger cities to rural and smaller urban locations, which will help decongest cities and create more employment in rural areas.

Housing: While numerous policy actions have been taken with respect to improving the housing availability in recent years, the segment has not gained the right momentum required to bridge the housing gap. Major hindering factors have been lack of funds, rising land and construction costs, multiple approvals needed, lack of private participation, and lack of skilled labour.

Major Challenges Towards Infrastructure Development

India has increased the pace of infrastructure investment over the years and has initiated several infrastructure projects. However, progress of these projects has been majorly affected by time and cost overruns. The report of Infrastructure and Project Monitoring Division of Ministry of Statistics and Programme Implementation shows that around 26 per cent (357) of the 1362 central sector infrastructure projects (costing Rs. 150 crore and above) are experiencing cost overruns (as of June 2018) and 272 projects are delayed. The anticipated completion cost of the 1362 projects is likely to be Rs. 20.43 lakh crore, 19.91 per cent (Rs. 3.4 lakh crore) higher than the original cost of implementation of Rs. 17.03 lakh crore.

Time Overrun of the Projects (272)



Note- *with respect to original schedule*
Source: *MOSPI - Infrastructure and Project Monitoring Division*

Sectors with Major Time Overruns in Projects

Sector	No of projects	Range of T.O.R (months)
Power	63	1-135
Road transport and highways	30	2-118
Coal	34	12-144
Railways	66	3-374
Petroleum	25	1- 74

Note *- with respect to original schedule*
Source: *MOSPI - Infrastructure and Project Monitoring Division*

Sectors with Major Cost Overruns in Projects

Sector	No of projects	Cost overrun (%)
Railways	216	150.04
Power	46	38.21
Road transport and highways	43	27.52
Petroleum	17	24.39

Some of the factors which have led to this delay and cost overruns include land acquisition issues, delay in obtaining environment clearance and other regulatory approvals, financing constraints and limited success of the PPP model in India.

Reasons for Time and Cost Overruns

Time overruns	Cost overruns
• Delay in land acquisition • Delay in regulatory approvals - forest clearances, others • Changes in scope/delay in finalisation of the scope • Industrial relations and law and order problems • Court cases • Contractual issues • Right of Use/Right of Way problems • Funding constraints • Geological surprises, geo-mining conditions • Delay in supply of equipment • Shortage of labour • Ineffective procurmeent and planning	• Time overrun • High cost of environmental safegarud and rehabilitation measures • Higher cost of land acquisition • Changes in duties and exchange rate changes • Change in the scope of the project • Under-estimation of orginal costs • General trend in increase in prices

Source: *Study on Project Schedule and Cost Overruns, Knowledge Paper by KPMG-PMI 2012*

Additionally, ***different agencies handling different sub segments at the urban administration level*** has further slowed the pace of progress. Other than transport facilities, water and sanitation have been a key area of concern in urban areas. Though demand for water has been growing rapidly in cities, access to dependable sources of water remains limited, with quality of water remaining a worrisome factor. Only three per cent of the population living in urban areas has improved access to safe water sources, while this is 13 per cent in rural areas (UNESCAP, 2014).

Management of water resources has not been very efficient. Moreover, with financial health of municipalities being poor and lower recovery of operation and maintenance costs from users, very little room is left to further finance and incentivise users to conserve water. Facilities for sewage treatment are low with capacity to treat only around 36.8 per cent of the sewage generated.

Over the years, the government has allocated substantial public resources for overall upgradation of infrastructure facilities in India. However, ***private participation has been waning mainly due to financing constraints.*** Mobilisation of long-term debt has become a daunting task for private developers due to factors such as lack of equity capital in the market, high level of stressed or non-performing assets (NPAs) in the banking sector limiting the capacity of banks to further extend funds for infrastructure sector, underdeveloped debt market in India, and low participation of pensions and insurance funds in financing infrastructure projects.

It is estimated that **India would need around $4.5 trillion worth of investment for infrastructure development till 2040,** of which $3.9 trillion could be garnered, leaving a gap of $526 billion (nearly Rs. 35 trillion). Both public and private resources will have to be deployed to achieve this target.

Besides lack of funds, ***PPP projects are also facing implementation and management issues*** due to shortage of skilled professionals to manage these projects, absence of any independent regulator to oversee the progress of PPP projects and an underdeveloped dispute resolution mechanism in India.

Absence of an overarching policy framework for administering the overall development of the sector has also led to an uneven development and slowed the pace of growth.

Way Forward

To develop strong infrastructure in India, the issues that the sector as a whole is facing should be resolved and some of the immediate steps which can be taken in this direction are mentioned below:

- Set up a dedicated Ministry for Infrastructure sector which can be an overarching ministry to monitor the overall infrastructure development in the country, including both transport and urban infrastructure, and work with a comprehensive policy framework for the sector.
- Set up independent regulators for each sub-sector. This is important as the existing authorities in the transport sector are playing the roles of both regulators and executing agencies. Also, there are gaps and overlaps in roles and functions of some of the regulatory authorities.
- Resolve the issues related to land acquisition by taking the following steps:
  - Create new generation Land Bank Corporations at Centre and State levels
  - Expedite digitisation of land records
  - Undertake comprehensive review of the 'Right to Fair Compensation and Transparency in Land Acquisition, Rehabilitation and Resettlement Act' and associated rules to make it practical and equitable.
- Fast track environment clearance and post clearance process as per the recommendations of the environment ministry
- Adopt single window clearance system to expedite the regulatory process for infrastructure projects
- Resolve financing constraints - India needs to develop an efficient and innovative financing mechanism, and frame suitable policies to tap the emerging funding options while expanding the scope of the existing ones including the traditional sources of funds. Some of the ways this can be achieved include:
  - Deepen the Indian Corporate Bond Market
  - Encourage the adoption of new variants of bonds such as Green bonds and Masala bonds

- Enhance the level of participation of insurance and pension funds in infrastructure projects – the investment and exposure norms posed by the Insurance Regulatory and Development Authority (IRDA) and Pension Fund Regulatory and Development Authority (PFRDA) should be relaxed in a way which could encourage these funds to actively participate in infrastructure projects.
- Strengthen the Infrastructure Development Funds (IDFs) sector
- Promote Infrastructure Investment Trust (InvIT)

- Revive the Public Private Partnership (PPP) Model
  - Establish Infrastructure PPP Project Review Committee (IPRC) and the Infrastructure PPP Adjudicatory Tribunal (IPAT) as per the Kelkar Committee suggestion
  - Set up 3P India as a dedicated institution to oversee and guide the sector
  - Establish mechanism to keep a check on aggressive bidding. Authorities should be able to determine the range or limit within which bidding parameters can vary, and they should be given the power to reject the bids falling outside the prescribed range.
- Focus should be on better preparation of Detailed Project Report (DPR) as this can significantly reduce the cost overruns of projects. In-house value engineering teams should be developed for this purpose and performance tracking and incentive mechanisms should be put in place.
- Introduce an effective dispute resolution mechanism for infrastructure projects

Power sector issues can be resolved through:

- Privatisation of power distribution companies which continue to face power theft (responsible for high level of T&D loss), billing inefficiencies and regulatory delays in tariff increases, which result in financial losses. It can help these entities overcome these challenges and reduce their losses.
- Examining all options through triangular framework of affordability, reliability and sustainability as we move towards the goal of 24x7 power for all
- Simplifying tariff structure and establishing few major tariff categories, phasing out cross-subsidy between categories; towards development of cost reflective and affordable tariffs
- Developing Power Markets to enhance cross-border Power Trade with neighbouring countries

Develop urban infrastructure through an integrated planning approach:

- Resolve housing issues:
  - Rope in National Buildings Construction Corporation (NBCC) to complete stalled projects
  - Allow banks and Housing Finance Companies (HFCs) to fund land purchase which can bring down the cost significantly
  - Adopt innovative technologies such as automation in construction, designs, sustainability to expedite the development. GIS software can be used for mapping and recording of land and

real estate property developed, while Blockchain can be used to reduce paperwork and make the recording process more efficient.

- Strengthen transport infrastructure in urban areas by adopting modern transport systems:
  - Create unified land transportation agency and multi-utility infrastructure for efficient use of city spaces, assets and resources
  - Create unified Traffic & Road Engineering agency
  - Cyber security requires more focus under the current design of smart cities initiative and other parallel urban missions
  - Enhance skills of city administrators in terms of technical know-how and inter-operability of smart technologies through organising knowledge sharing and capacity building programmes.
- Improve sewerage, drainage and water supply, power distribution, and solid waste management:
  - Make water a tradable commodity in the form of 'Water Credits' on the lines of 'Carbon Credits'.
  - Recognise opportunities in water management and developing financing models
  - Adoption of 3T model (Tariffs from users, Taxes on the society as a whole and Transfers in form of aid & philanthropy) for industrial and domestic users
  - Implement a Public Goods Charge (PGC)
  - Introduce water specific bonds and climate adaptation funds
  - Develop appropriate and cost-effective technologies for treatment and reuse of municipal wastewater
  - Develop framework for using the sewage water in other sectors and for release of wastewater in river and lakes
  - Develop and implement Sanitation Value Chain
- Strengthen the national and local governance framework for urban development highlighting the role for government at national, state and city level and the process for setting standards for each type of infrastructure

Going forward, as India develops the basic infrastructure facilities, the efforts will have to be gradually directed to the next level i.e. towards building smart and sustainable infrastructure. For instance, in the power sector, sustainability should assume prime importance while adding new capacity and attempt should be made to abide by the promise of achieving 40 per cent of power capacity through renewables. In the real estate sector too, policymakers along with developers should focus on 'sustainability' keeping our natural resources in mind. Energy-saving strategies for construction must be used, cities must be built as per geographical requirements, leverage transit-oriented developments, sustainable and healthier communities must focus on increased residential density, integrating transportation and land-use, providing car-free areas, locally owned stores, walkable neighbourhoods and accessibility.

7 Lowering Financial Intermediation Costs and Enhancing Financial Inclusion

> "The lesson of history is that you cannot have sustained economic development if your financial system is in a crisis."
>
> **Ben Bernanke**

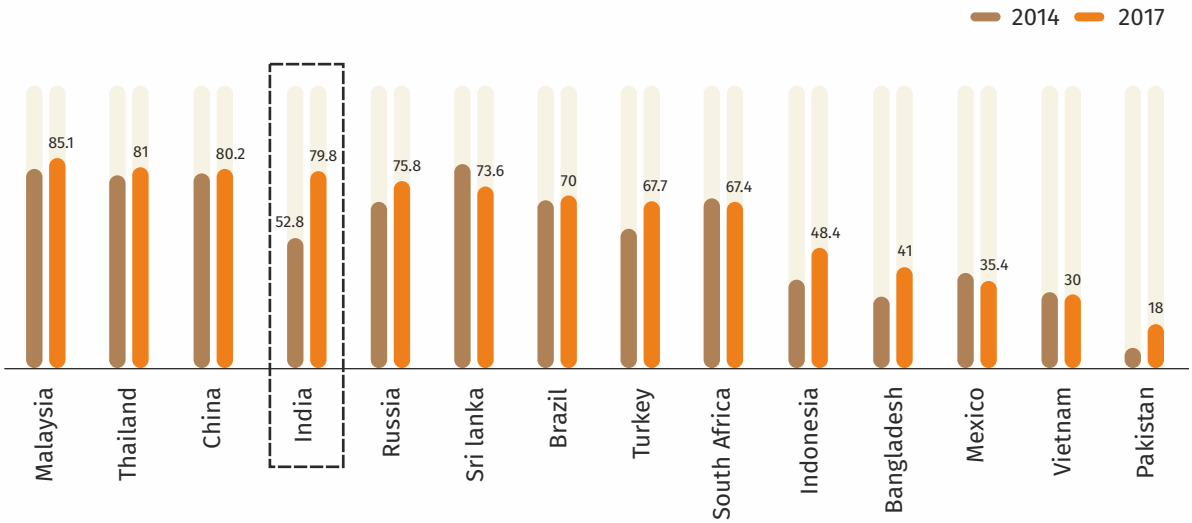
> "Financial inclusion helps lift people out of poverty and can help speed economic development. It can draw more women into the mainstream of economic activity, harnessing their contributions to society."
>
> **Sri Indrani Mulyawati**

One of the foremost conditions needed to move towards the goal of high economic growth is to have a robust financial sector. Various studies across countries have shown that financial development and economic growth are co-related. For India, financial development entails improvement in following areas: (a) enhancing financial inclusion (b) enhancing efficiency of financial intermediaries and (c) fixing the banking problem and the so called "twin-balance sheet" problem. India has made some improvement on all of them, but there is still a lot more to do.

Enhancing Financial Inclusion

There has been a considerable push towards financial inclusion in India during the last four years, especially with the implementation of Jan Dhan Yojana and associated social security measures. The linkage of subsidy through bank accounts under the Direct Benefit Transfer has also been a significant effort in encouraging financial inclusion while also reducing the fiscal leakages through better targeting. India has, in fact, seen a significant rise in proportion of adult population getting access to formal banking channel and almost 80 per cent of adults today have an account at a formal financial institution. This is far better than several other peer countries such as Russia, Brazil, South Africa, and Sri Lanka.

Percentage of Population (15 years +) with an Account at Formal Financial Institution



Source: *World Bank*

Yet, a lot more needs to be done to improve access to financial services in India. Despite the availability of mobile-banking services and increase in the number of account holders, few account holders are using facilities available to them. As per the latest Global Findex Survey (World Bank, April 2018), India's progress on several financial inclusion parameters needs to improve significantly to be at par with some of the peer economies such as China, South Africa, Sri Lanka, and Malaysia.

Even in terms of insurance penetration, there is a long way to go. India's insurance density at $59.7 is way below the world average of $638. To improve this, there is a need to have active involvement of all stakeholders. Unique models would be required that can adopt a push-and-pull drive towards insurance and other financial services. Leveraging mobile technology for increasing the access and utilisation of financial services will be crucial for enhancing financial inclusion. The launch of India Post Payments Bank provides an excellent opportunity in taking formal financial services to the remotest corners of India.

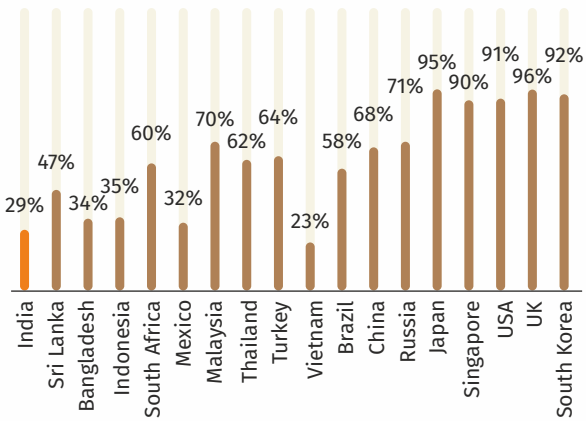
Additionally, there is a need for widespread financial literacy. The awareness needs to be created at the school level. Building financial skills related to savings as well as investments right from childhood would help them understand its benefits and encourage them to access various financial services when they become adults.

Access to Financial Services by MSMEs (especially credit) in India is also a key area of concern. It is estimated[10] that only about 16 per cent of small firms in India have accessed a bank loan or line of credit from a formal financial institution. With MSMEs contributing to nearly one-third of India's GDP, addressing the financing challenges and hurdles faced by MSMEs is a must for accelerating economy's growth. Despite the fact that MSMEs are eligible for priority sector lending, public sector banks fell short of

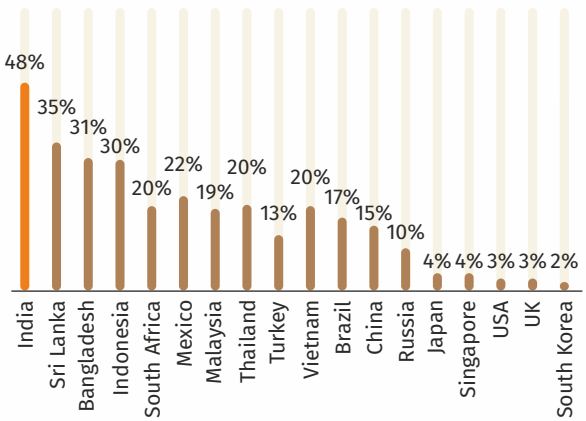
[10] Enterprise Surveys (2014 data), World Bank

Performance of India vis-à-vis Other Countries on Financial Inclusion Indicators

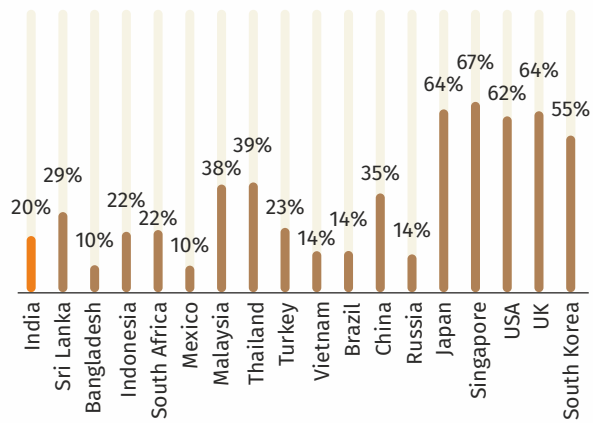
Made or received digital payments in the past year (% age 15+)



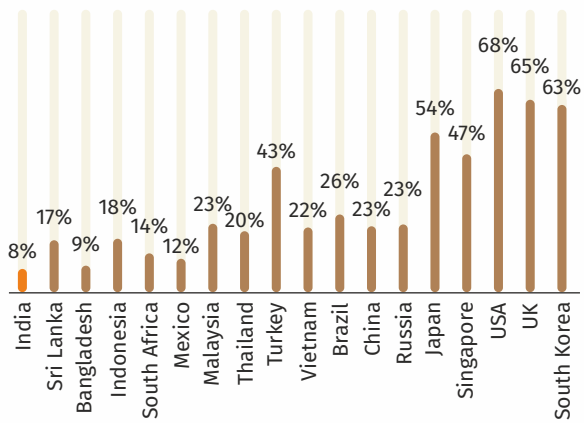
No deposit and no withdrawal in the past year (% with a financial institution account, age 15+)



Saved at a financial institution (% age 15+)



Borrowed from a financial institution or used a credit card (% age 15+)



Source: *Global Findex Survey (Apr 2018), World Bank and FICCI Research, data corresponds to year 2017*

meeting the set target of 7.5 per cent for this segment in 2016-17. The latest 'MSME Pulse' report by SIDBI however does show an improvement in turnaround time for lending to MSMEs over the last few years (from 32 days in 2016 to 26 days in 2018). With greater formalisation and availability of credit information on MSMEs, this trend is expected to improve in years ahead. Given the huge MSME financing gap in India, estimated to the tune of 11 per cent of GDP, there is a need for much greater efforts from all stakeholders towards enhancing awareness of MSMEs, strengthening capability and capacity of banks, greater use of technology for due diligence, risk management and greater transparency, and encourage alternate and innovative means of financing.

Lowering Financial Intermediation Costs

India has high financial intermediation costs partly due to inefficiencies in the financial system, the predominance of state-owned banks and partly due to financial repression, which has also hurt the development of the non-bank financial sector. The cost of intermediation in India is quite high, at above five per cent and hence there is a need for revisiting the structure of interest rates to ensure that the spreads are minimised. The key reason behind higher cost of bank intermediation is the problem of non-performing assets, which has grown immensely over the last few years.

Bank Lending-Deposit Spread for India vs Other Countries

Country Name	2014	2015	2016
India *	**5.3**	**5.6**	**5.6**
Russian Federation	6.0	5.4	5.3
Singapore	5.2	5.2	5.2
Myanmar	5.0	5.0	5.0
Hong Kong	5.0	5.0	5.0
Mexico	2.8	2.9	4.8
Indonesia	3.9	4.3	4.7
Bangladesh	3.1	3.5	4.2
Philippines	4.3	4.0	4.0
Pakistan	4.5	4.2	3.9
Sri Lanka	0.3	1.0	3.4
South Africa	3.3	3.3	3.3
Australia	3.0	3.3	3.3
Thailand	3.3	3.3	3.1
Israel	3.0	3.0	3.0
China	2.9	2.9	2.9
Canada	2.5	2.7	2.6
Vietnam	2.9	2.4	1.9
South Korea	1.7	1.7	1.8
Malaysia	1.5	1.5	1.5
Japan	0.8	0.7	0.7

Note *- * Effective interest rate spread for India for financial years FY15, FY16 and FY17 respectively*
Source: *World Bank, RBI, FICCI Research*

One of the critical immediate challenges faced by the Indian economy is the twin balance sheet problem, with balance sheets of public sector banks as well as some large corporates facing deep trouble. So, the key question that needs to be answered is how to fix the banking problems that India is currently facing?

A. Fixing the Banking Sector Problem

That India was able to avoid the Asian financial crisis and the global economic crisis is often cited as a sign that our financial system is solid. But the slow spreading malaise of Non-Performing Loans (NPL) and scams if not dealt with could prove damaging to India's ambitions to be a global economic power.

So far, we have dealt with our banking crisis with palliatives - the weak Indradhanush scheme, a non-functional Banks Board Bureau, a promising but complicated to implement Insolvency and Bankruptcy Code (IBC) along with Asset Resolution Companies (ARC), and a missed reform opportunity with the bank recapitalisation scheme - when the issue of the number of public sector banks needed was not resolved. In February 2018, the RBI announced a strict timetable to bring assets over a certain value to the Insolvency and Bankruptcy Code. As this may prove too tough, the government had announced an alternative route called Project Sashakt, which has two features - an inter-creditor agreement to speed up the IBC process and the option to set up Asset Management Companies (AMC) to get these companies back to health before moving them to ARCs.

For now, Sashakt is on the back-burner but the exchange between RBI and the finance ministry is a signal that the financial problems run deep and that the regulatory system itself needs a major overhaul. The government wants the RBI to go softer on the PCA framework for the state owned banks, allow more credit to NBFCs and also provide capital from its reserves to finance bank recapitalisation and other budgetary needs.

Growing Banking Crisis and Measures Taken Since 2014

	NPA (Rs Trillion)	Government Fix
August 2015	3.30	Indradhanush/Bank Board Bureau
Dec 2015	4.00	Draft IBC
March 2017	6.80	New Bank Ordinance; IBC; ARC
October 2017	8.40	Bank Recap Scheme (Rs 2.2 Tr) + strong IBC
June 2018	10.30	Sashakt: AMC, Inter-creditor agreement
December 2018	12.0	Demand on “Excess Reserves” of RBI

The Rs 2.2 trillion recapitalisation plan announced by the government, though sizable, may not be sufficient to address the NPL problem (which exceeded Rs 10 trillion) in entirety. If the bulk of the funds were used to recapitalise the better performing banks first and these banks could then also raise private financing, the credit cycle would have revived quickly.

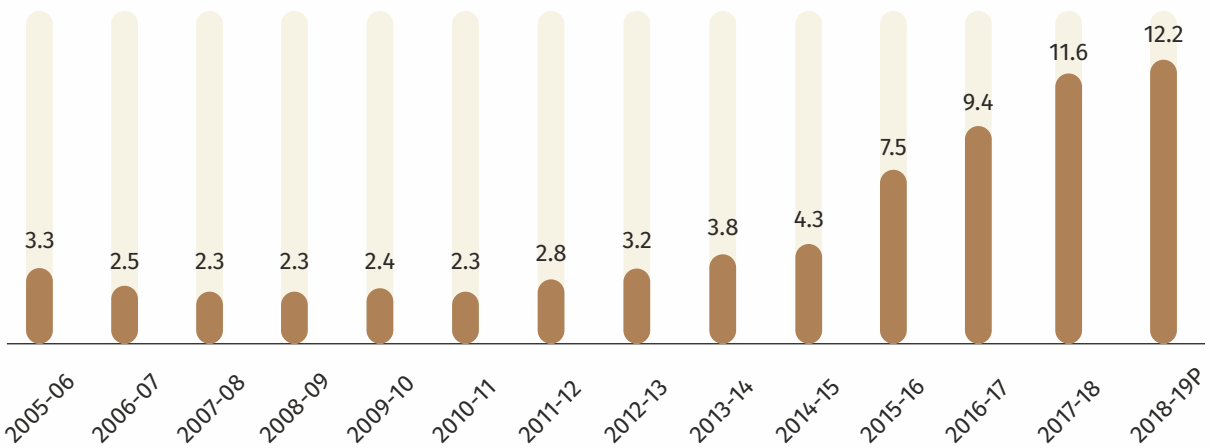
However, the allocation of funds has been spread across PSU banks including the weaker banks. With some of the state banks seeing cases of misappropriation of funds, the capital requirement has only further increased while the ability to raise money from the equity markets has weakened. This has slowed down the lending activity of the banks as it has had a direct bearing on their risk appetite.

It is important that alongside recapitalisation of the banks, equal emphasis should be placed on the HR and governance reforms of the PSBs. Government should also consider further consolidation of PSBs, having at the most 5 to 6 large public sector banks. There is a need for government to divest its stake in the public sector banks to enable them to raise capital from the market. FICCI has suggested that government can consider having 26 per cent share as a floor and bring in the concept of a golden share to exercise control over critical decisions.

NPAs and Stressed Assets: Is the Worst Over for Indian Banks?

The banking sector in India continues to be burdened with rising non-performing assets in the system. The gross non-performing assets (GNPA) ratio of scheduled commercial banks rose to 11.6 per cent at the end of 2017-18 as against 9.4 per cent in 2016-17 and 7.5 per cent in 2014-15. As per the latest Financial Stability Report of RBI, the GNPA ratio may worsen to 12.2 per cent by March 2019. In fact, for Public Sector Banks under the Prompt Corrective Action Framework (PCA PSBs), the GNPA ratio may rise to 22.3 per cent by March 2019 from 21 per cent in March 2018. The rise in NPA ratio can technically be attributed to the tightening of NPL recognition norms by the RBI over the last three years.

SCBs Gross NPAs Ratio (%)

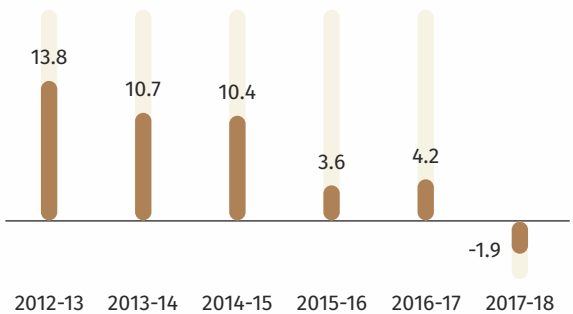


**2018-19 P – Projected*
Source: *RBI, Financial Stability Report (June 2018)*

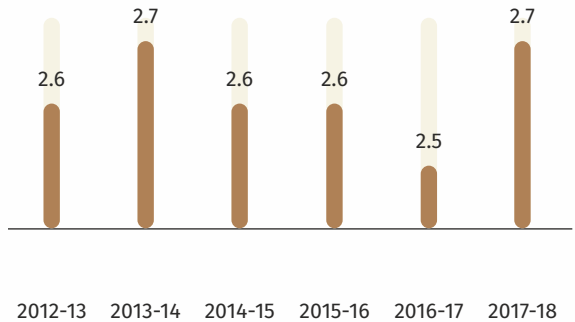
Profitability of scheduled commercial banks (SCBs) has also declined, which can be partly attributed to the increased provisioning for NPAs. SCBs' profit after tax declined mainly due to higher risk provisions. The profitability also took a hit as the cost of interest-bearing liabilities as well as the return on interest earning assets for SCBs declined in 2017-18 as compared with 2016-17.

Profitability Indicators of SCBs in India

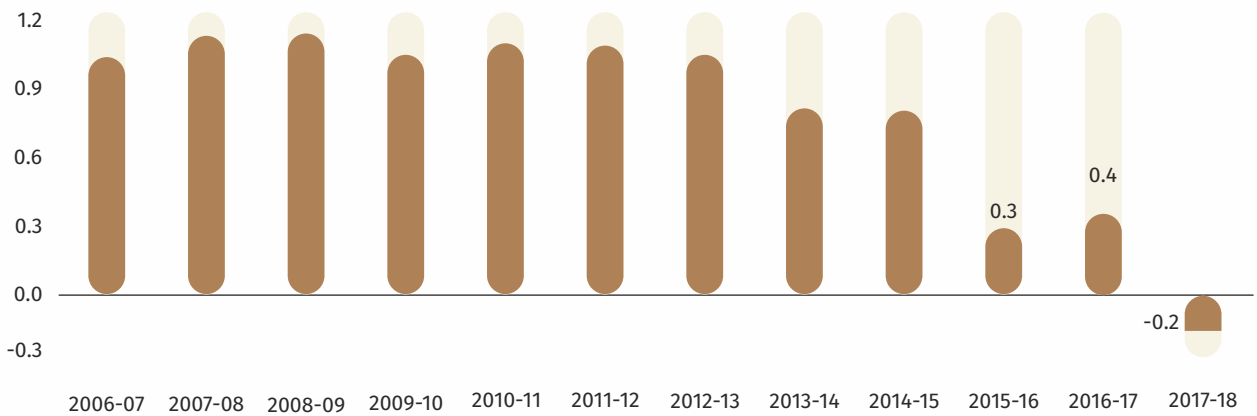
SCBs Return on Equity - RoE (%)



SCBs Net Interest Margin - NIM (%)



SCBs RoA (%)



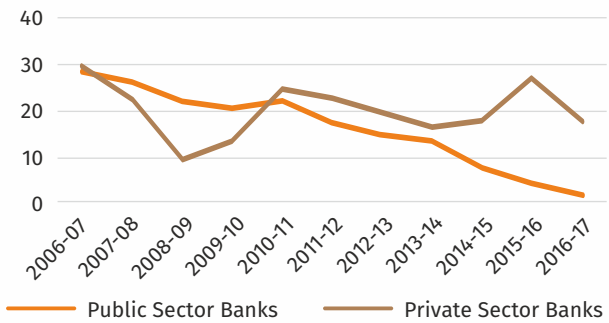
Source: *RBI, CMIE*

The note submitted by Dr. Raghuram Rajan to the Parliamentary Committee on Bank NPAs cites a number of factors for the steady deterioration in asset quality of banks, including (a) over-optimism of banks during the high-growth period of 2006-2008 that led to higher lending without due diligence (b) slowdown in domestic demand and growth following the global slowdown (c) regulatory hurdles and slow pace of policy decisions leading to stalled projects (d) evergreening of loans by banks in absence of a strong legal recourse like the Insolvency and Bankruptcy Act (e) malfeasance and (f) fraud.

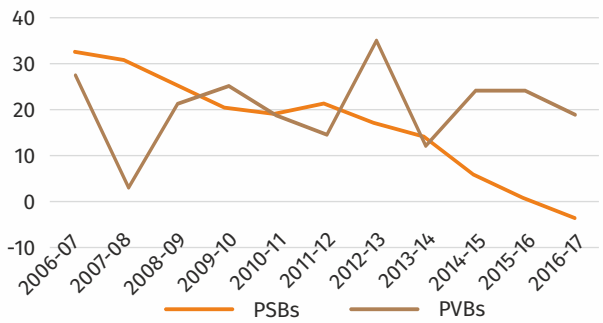
One of the reasons that is often cited for slowing of credit growth over the last few years relates to forced NPA recognition by the RBI. However, Dr. Rajan in his note shows that the slowdown in non-food credit

growth had already started (from early 2014) in case of Public Sector Banks (PSBs), including towards the MSME credit. In fact, the growth in credit to agriculture sector also slowed down for the public sector. He further argues that the slowdown in credit of PSBs can be best attributed to over-burdened balance sheets of PSBs and growing risk aversion among the public sector bankers. In contrast, the credit growth in private banks was not majorly affected.

Overall Credit Growth by SCBs (y-o-y growth %)



Bank Credit to Industry (y-o-y growth %)



Source: *RBI, CMIE*

Though GNPA ratio of scheduled commercial banks is projected to rise to 12.2 per cent by March 2019 as per RBI's stress test, some experts believe that India is now at the tail-end of NPL recognition and this cleaning up of the Indian banking sector will strengthen the Indian banking system in a few years. The stress on banking sector is however expected to continue for another year, with possibility of 'haircuts' and greater provisioning. Even though IBC is fully operational now, the recovery rate for banks may not see significant improvement immediately.

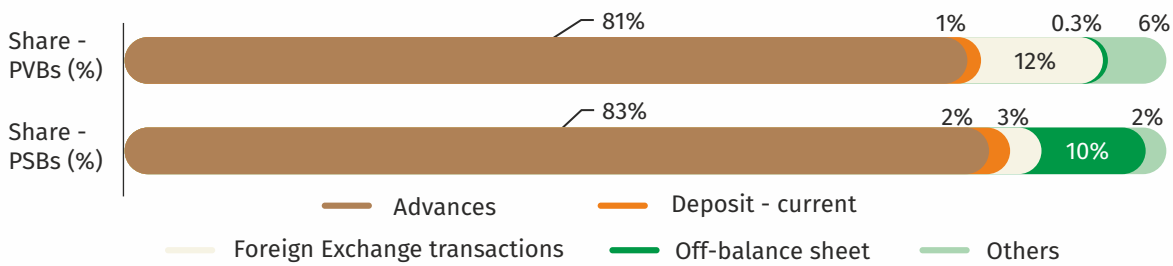
With some sectors seeing economic recovery (like cement and steel) and corporate performance also improving, the banks may get some reprieve on their stressed assets. The data too shows that the share of large borrowers in banks' GNPAs has declined marginally in the year ending March 2018. Large borrowers accounted for 54.8 per cent of gross advances and 85.6 per cent of GNPAs in March 2018, as against 56 per cent share in gross advances and 86.5 per cent share in GNPAs in March 2017. Currently (as of March 2018), the top 100 large borrowers account for 15.2 per cent of gross advances and 26 per cent of GNPAs of SCBs. As per a report by S&P Global, even the number of highly indebted corporates are expected to reduce over the next two years.

Bank Misappropriation

In India, as far as known, the main type of bank misappropriation is of that of loan fraud, which is usually committed by false information or circumvention of bank processes often with help from bank insider. This is the traditional type of fraud. It is possible that the other types of fraud (identity theft and cyber theft) are also prevalent but the systems to detect them are very weak. We may eventually find that the latter types of fraud were under reported.

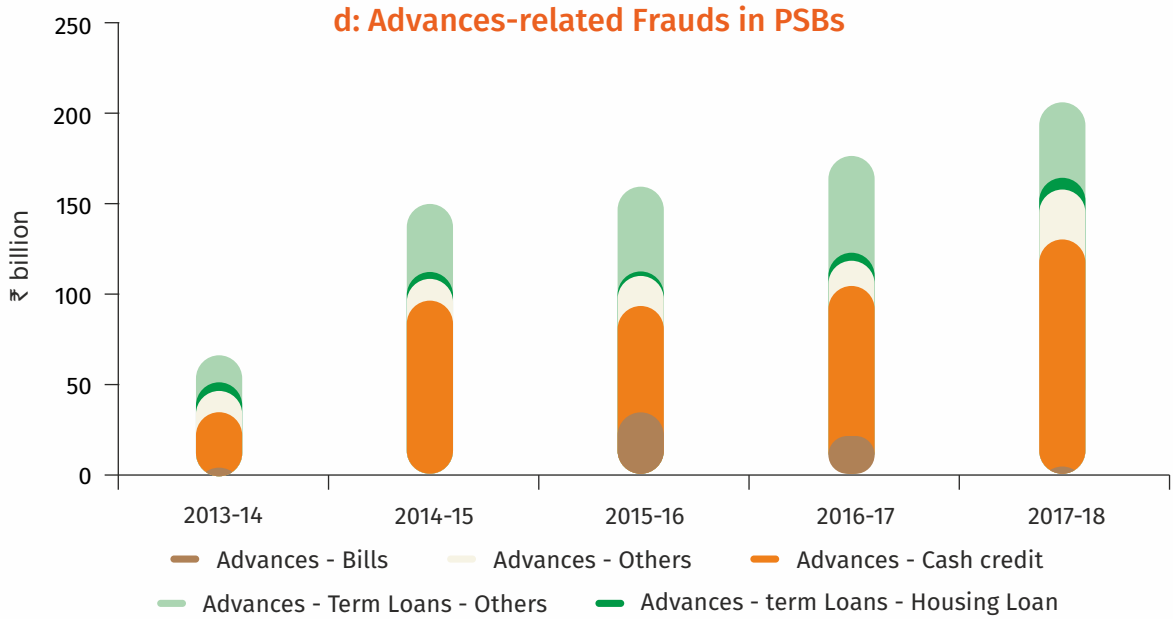
As per the Financial Stability Report of RBI (June 2018), banks in India registered about 6,000 cases of fraud (of Rs 1 lakh and above) in FY18, leading to a total loss of more than Rs 300 billion. Of these, majority of reported fraud cases are with respect to advances. The RBI report shows that within the advance related fraud cases for PSBs, cash credit transactions constitute the largest type of fraud and there has been a rise in same over the last three years. It highlights that even though the operational risk oversight frameworks of PSBs and PvBs is not different structurally, yet there is a stark difference in operational risk in the two type of bank entities and points towards coordination issues in PSBs in implementing the 'three lines of defence architecture'. Deterioration in asset quality in PSBs can be largely attributed to poor credit screening, deficiency in oversight of the account by the lead bank and information asymmetry between participating banks in multiple/consortium arrangements.

Relative Share of Fraud-types in Overall Fraud Amount Involved (FY13-FY18)



Source: *Financial Stability Report (June 2018), RBI (PSBs = Public Sector Banks, PVBs = Private Banks)*

d: Advances-related Frauds in PSBs



Source: *Financial Stability Report (June 2018), RBI*

The RBI had issued guidelines for strengthening bank supervision and internal procedures including Know Your Customer (KYC) and Anti-Money Laundering (AML) guidelines but these are still in process and many recent bank frauds continued despite these guidelines. Data shows state owned banks are more vulnerable to fraud but it is not unknown in private banks.

The RBI has argued it has less control over the state owned banks and have argued that they should have as much control over them as they have over private banks. But the issue is much bigger than this as the culture of compliance and rigour is absent in many state owned banks. There is a sense of mechanical appliance (checklist approach) of rules and regulations, especially among lower management, but without any sense of the bigger picture. Many of the issues that led to fraud were 'flagged' but not 'fixed' in audit reports and by the regulator.

Effects on Trade and Finance

There are several channels through which bank misappropriation will affect trade and finance. There will be an impact on the amount and the cost of credit. It will also affect banking income as fees from trade finance form a significant source of banking income, other than interest income. The effects could be huge and long lasting but we will not know that for some time.

In the immediate, Letters of Undertaking (LOUs), which were key to the most recent banking fraud at PNB have been banned. Some LOCs have also been banned. The premium on Indian paper has increased by 10-50 basis points. There is a slowdown in loan applications and credit availability but how much exactly can be linked to bank misappropriation is difficult to determine as the banking sector is also facing much broader problems of increasing NPLs, navigating the IBC and tightening regulations. Many of the banks are also being recapitalised and are changing management.

The effects of bank misappropriation may also be felt more strongly in certain sectors. The jewellery industry (which accounts for over 13 per cent of India's exports) is most directly affected as the latest large bank fraud occurred in that sector, but more broadly in any sector dominated by movable assets the effects could be large. The ban on LOUs will affect imports as well as exports.

More Broadly the Bank Misappropriation May Signal Bigger Problems

First, the extent of frauds is likely to be much higher and this will be a factor in the market perceptions of state owned banks and the banking sector more broadly. The current estimate of NPLs of $150 billion (Rs 10.3 trillion) may go as high as $200 billion (Rs 13 trillion).

Second, now that it is clear that very little of the fraud is recoverable, the estimate of loans that will have to be written off will go up, at least to around 65-70 per cent.

Third, some of the state owned banks that were already struggling may have to be bailed out. LIC money had to be used recently to bail out IDBI bank.

Fourth, the Rs 2.2 trillion recapitalisation scheme may now prove inadequate to sufficiently clean up the banking system to resume lending strongly enough.

Fifth, tighter regulatory standards and less forbearance will mean much higher NPLs but also much less credit. Bank loan growth that averaged around 18 per cent growth a year during 2011-14 fell to under 12 per cent in 2014-15, stayed at about 10 per cent in 2016, and at 5 per cent in 2017. Some of the recent drop can be attributed to demonetisation. But much of the earlier drop is due to the growing bad loan problem. There was a surprising uptick in March 2018 but over the year it remains at levels last seen in 2014-15.

Sixth, the real side effect of the banking sector crisis is a sharp drop in private investment, especially corporate investment, which has fallen by around 7 per cent of GDP, hurting growth, which, in turn, has further reduced demand for credit.

Finally, the much anticipated and desired credit rating upgrade that India wants will now be delayed since it is not clear how big the problems are in the banking sector. This will affect inflow of funds into India more generally and lower India's outlook internationally.

B. Strengthening Alternative Finance Mechanisms to Lower Burden on Banking System

India has seen liberalisation of financial sector over the last decade with several reforms in the non-banking finance areas including Non-Banking Financial Company (NBFCs), insurance, pension and capital markets, however, the overall financial system remains heavily skewed towards banking. A healthy and resilient financial sector requires not just an efficient banking system but also a well-established and active non-banking system that supports the real economy through efficient flow of funds.

Address the recent liquidity concern in NBFC sector

A slew of recent events including payment defaults by major NBFC – IL&FS has triggered a severe liquidity crunch for the NBFC sector. Mutual funds as well as banking sector's exposure to NBFC have been significantly constrained. Banks and mutual funds are the two main sources of funding for NBFCs accounting for over 90 per cent of NBFC borrowings. With these two major sources of borrowings nearly frozen, NBFCs face major difficulty in extending any new credit. The current liquidity situation needs to be addressed by a coordinated regulatory and government response, else it may lead to a collapse in credit extension to the MSME and consumer sectors, and lead to inevitable asset quality deterioration across the wider ecosystem.

Some of the immediate steps that can be taken include: opening a short-term liquidity window for NBFCs; allowing NHB and SIDBI to buy CPs and NCDs from HFCs and NBFCs; continued disbursals by banks to NBFCs; revisiting definition of NBFCs to exclude government financial institutions, which will help in freeing up some of the limits on existing lending caps; and encouraging large-scale securitisation of NBFCs assets.

Deepen the bond market

Bond issuances in India have grown at a compounded annual growth rate of 15 per cent over the last five years and outstanding issuance, as on March 2018, stands at $385 billion. Despite a good growth and shift of investors to debt markets, there is a need to further improve investors' participation in the corporate bond market which is still dominated by government issuances. A well developed and active corporate bond market enables market forces to assert themselves, thereby reducing systemic risk and lowering the probability of NPA led crisis.

- Industry, government and regulator should jointly work to promote awareness about capital market products amongst retail investors, particularly, in small towns and cities.
- There is a need to encourage provident and pension funds to actively participate in the equity markets. This would also reduce the dependence on speculative FIIs.
- The limits and range for insurance companies to invest in corporate bonds could be enhanced by reducing their current allocation towards central and state government securities and allowing them to invest in lower-rated investment grade corporate bonds.

C. RBI and Banking Regulation

Disentangling the nested and overlapping relationships between RBI and the finance ministry is needed to modernise the financial regulatory system. RBI officials continue to sit on the boards of PSU banks that makes it complicit in the internal decision-making. The RBI needs to strengthen its supervisory capacity.

It has also resisted giving up its role as the public debt manager that can create huge conflict of interest, to the functioning of independent monetary policy. The debt management function should be either in the finance ministry or under an independent public debt management agency. But such a move would also need to be accompanied by eliminating the Statutory Liquidity Ratio (SLR) for the banks and by reducing public ownership in the banking system. For now, it would be better to establish an independent department in the finance ministry to handle both internal and external debt reporting directly to the finance minister. The regulator has been much too focused on its independence in running monetary policy and its role as inflation fighter, at the expense of the real economy.

India needs to strengthen its banking regulation and bring about serious reforms in the PSU banks along with steps to strengthen the non-banking financial ecosystem if it wants to become a $9 trillion economy by 2030.

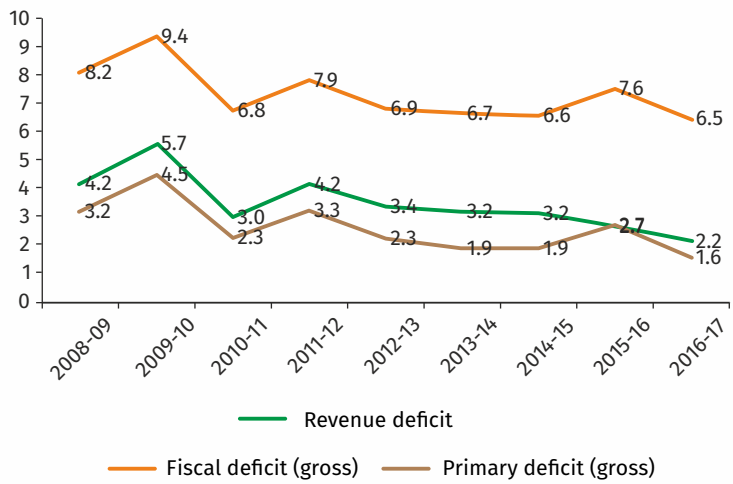
8 Fixing Public Finances for a Developmental State

> "Thus a wise collector general shall conduct the work of revenue collection... in a manner that production and consumption should not be injuriously affected... Financial prosperity depends on public prosperity..."
>
> **Kautilya in Arthashastra**

> "A national debt, if it is not excessive, will be to us a national blessing."
>
> **Alexander Hamilton**

India has been on a path of fiscal consolidation with the gross fiscal deficit being steadily brought down since the global financial crisis of 2007-2009. The central fiscal deficit has gradually been reduced from 6.4 per cent of GDP in 2009-10 to 3.5 per cent in 2016-17 and 2017-18. Total fiscal deficit (centre and states combined) has also decreased to 6.5 per cent in 2016-17 from as high as 9.4 per cent in 2009-10. Corrective measures have been taken on both the expenditure as well as revenue side to contain the fiscal deficit following the directions of the FRBM Act to create a better fiscal balance.

Deficit Scenario (as % of GDP)



Source: *India Public Finance Statistics 2016-17*

A deeper analysis of the way public finances are managed in the country, however, raises some questions. The revenue side analysis clearly shows that India collects very little in the way of revenues, while spends a large proportion of it on activities, which do not directly contribute to the productive capacity of the country. Policies related to public finance on the contrary are expected to play an important role in raising and allocating enough funds to areas which have the potential to accelerate growth, promote human development, create employment, and reduce poverty.

Status and Issues with Public Spending

The long-term data shows that public expenditure (net of lending) as a proportion of GDP in India has remained range bound at around 27-29 per cent since FY91. The central government expenditure in fact has been shrinking lately, which fell from about 15.6 per cent of GDP in 2009-10 to around 13 per cent in 2016-17. Though at the state level, there has been an increase during the same period from 14.8 per cent to 18 per cent respectively.

In terms of central government spending, not only the quantum, but also the quality of spending is something to worry about. The central government spends nearly 58 per cent of its total expenditure in non-developmental activities such as interest payments, defence and other administrative services, while states together spend a lower proportion of about 34 per cent on these activities. Together, the combined expenditure on non-developmental activities stands close to 47-50 per cent of total expenditure.

On the other hand, India spends less on developmental activities especially social services and physical infrastructure. The combined expenditure in the area of healthcare (and water supply and sanitation) is particularly low at only about 1.4 per cent of GDP as discussed in the previous chapter on healthcare. This is less than half of the global average norm of 3.5 per cent that is spent on healthcare.

Public Expenditure in India: as per cent of GDP (%)

	1990-91	2000-01	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17
Developmental Expenditure (including loans & advances: gross)											
- Education, Art & Culture	2.96	2.93	2.85	3.11	3.20	3.24	3.22	3.17	2.86	3.19	3.24
- Healthcare	1.12	1.12	1.08	1.17	1.11	1.09	1.09	1.07	1.08	1.31	1.38
- Social & Community Services	5.28	5.24	5.93	6.39	6.36	6.43	6.61	6.34	5.80	6.95	7.26
- General Economic Services	0.85	0.20	0.35	0.28	0.51	0.43	0.36	0.39	0.27	0.66	0.65
Total Dev. Expenditure	**14.32**	**11.55**	**14.15**	**14.17**	**14.18**	**14.47**	**14.23**	**13.50**	**12.82**	**15.52**	**15.69**
Revenue Expenditure	20.97	22.29	22.92	23.80	22.92	23.09	22.85	22.53	21.71	23.73	24.38
Capital Expenditure	5.15	2.80	3.96	4.21	4.18	3.92	3.77	3.76	3.81	5.45	4.72

Source: *Indian Public Finance Statistics 2016-17*

Similar is the case with education, with expenditure in this area (including art and culture) at around 3.2 per cent of GDP. This is seen as grossly inadequate for a country that aspires to create a pool of skilled workforce to drive its economic growth.

The combined capital expenditure as a ratio of GDP which mainly drives the development of physical infrastructure in the country including roads, railways, ports, power, irrigation and urban development and aids in accelerating economic activity has also been low at around four per cent. This is grossly inadequate given the mounting pressure on the existing infrastructure which has been a major reason for lower competitiveness of the Indian manufacturing sector.

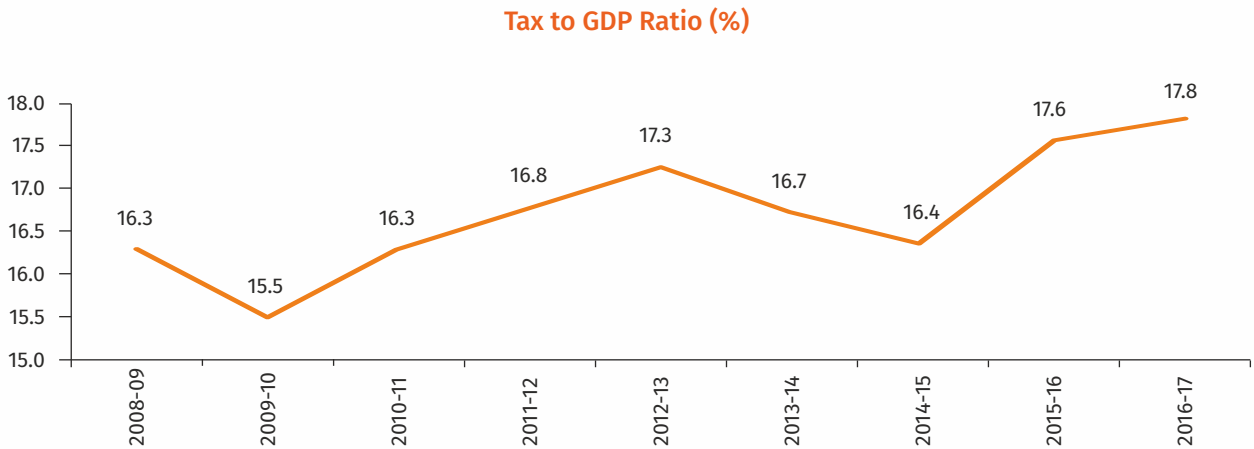
While capital expenditure by the central government has remained low at around 1.5 per cent of GDP over the years, capital spending by states has shown an increase from about 1.6 per cent of GDP in 2000-01 to about 3.2 per cent of GDP in 2016-17. Moreover, capital spending as a proportion of total expenditure has remained low at around 14-16 per cent and this need to be increased.

But there has been substantial increase in spending on subsidies and transfers over the years. Subsidies form around 3-4 per cent of India's GDP. There are also a range of other welfare schemes which further add to costs. Subsidies and transfers which are extended by the government to provide at least a minimum standard of public services to the masses have failed to achieve their desired results as is evident from the poor outcomes in the areas of education and health. Hence, there is need to increase the allocation as well as quality of spending in the area of social and physical infrastructure development.

Status and Issues with Revenue Collection

India has been able to finance more than 70 per cent of its public spending through revenues collected from tax and non-tax avenues, with tax revenues accounting for nearly 85 per cent of the total revenue. Given that taxes are the major sources of finance for the government, tax policies have always assumed greater importance in India and these policies have been reformed from time to time to enhance collections. However, despite numerous reforms, the tax system in India has not been able to generate the required revenues.

India's tax to GDP ratio (combined) though has improved over the years (from 14 per cent in 2000-01 to 17.8 per cent in 2016-17) is still much lower as compared to other countries. For instance, the average tax to GDP ratio for the OECD countries was around 34 per cent in 2016. In the BRICS bloc also, other four countries have higher tax to GDP ratio in 2016-17 - Brazil (32 per cent), South Africa (26 per cent), Russia (22 per cent), and China (20 per cent).



Source: *India Public Finance Statistics 2016-17*

Given the need to increase expenditure on developmental activities in India while keeping borrowings low as prescribed by the Fiscal Responsibility and Budget Management (FRBM) Act, it is imperative to increase the overall revenue collection which can primarily be achieved by further improving the tax – GDP ratio.

Several factors have kept the tax revenues low in India. Prime among these is the narrow tax base and lower level of tax compliance in the country. India's large unorganized sector experiences high levels of tax evasion. Moreover, per capita income in India is low which keeps a large proportion of people outside the tax net. The tax policies are also responsible for a lower tax base, making the tax system ineffective. For instance, agricultural income is still fully exempted from taxes (except for income from plantation crops). It is estimated that agriculture income tax can contribute to as much as 0.6 per cent of GDP. Secondly, a number of exemptions and deductions are given to direct and indirect taxes which reduce the overall tax collection.

Other than raising revenues, the tax system in India attempts to achieve various other objectives like encouraging savings, promoting exports and investments in infrastructure, employment generation etc. This makes the tax laws complicated which create avenues for tax evasion and avoidance. This in turn leads to a large proportion of tax money getting stuck in disputes. Poor capacity of tax administration is also partly responsible for the huge build-up of tax arrears.

On the indirect tax front, introduction of GST has led to substantial increase in tax revenues, but its implementation still faces certain issues. A FICCI survey conducted in July 2018 reveals that the major concerns are with respect to the GSTN portal and refund claims. Other problems include cumbersome procedures and documentation; cost of compliance and lack of IT infrastructure as per the survey. 71 per cent of the respondents to FICCI survey reported to have faced issues in claiming refund of GST and the important reasons for the same were technical issues in the GSTN portal and, mismatch between relevant GSTR and shipping bill which requires significant efforts in follow-up.

The survey further reveals that for 70 per cent of the respondents it took more than 90 days from date of submission of application to obtain GST refund, and for half of these respondents it took more than 180 days.

The government has been fairly responsive to queries raised by industry and suggestions given by them and taken adequate steps regarding change in rates and providing clarity on various issues through rules, notifications, issuing FAQs and guidelines. Some cost advantages in terms of lower supply chain cost have also been observed after GST implementation.

An important development in public spending is the intrusion of Central Government into several state subjects through various central schemes. Since 2014-15, all grants for programmes are channeled through states' budgets. Also, the inter-state differences in per capita spending on social and economic services exhibit wide variations and the gap has been increasing over the years. This is despite development expenditure in low per capita income states increasing at a faster rate than the advanced states. One major reason for the variation is the difference in their capacity to raise revenues and inability of the transfer system to offset fiscal disabilities. These states would need significant improvement in the level of public services to reap the demographic dividends. The disparity in devolution of taxes from the Centre to states is another area of concern for the states.

Issues with Municipal Finances

Municipal finance in India has not increased in proportion to the expenditure requirements of cities. This is primarily due to insufficient revenue tools available to the Urban Local Governments (ULGs) as though they have been given lot of functional autonomy, they have not been provided with commensurate financial autonomy. As a result, they have a narrow revenue base, which has increased their reliance on the external sources (states and centre) mainly for infrastructure financing. The share of revenue generated through own sources in the total municipal revenue has in fact declined from 56 per cent in 2007-08 to 44 per cent in 2015-16.

For instance, property taxes, which is the prime source of municipal finance, account only for around 0.2 per cent of GDP mainly due to factors like poor assessment rate of properties, poor collection efficiency and problematic valuation methodologies used.

Moreover, the fiscal powers of ULGs vary significantly across different states. Expenditure potential also thus varies from state to state with cities with more than one million people having much higher share of municipal finance.

Financial management is another issue faced by the ULGs. Most cities follow incremental budgeting (fixed addition over last year's figure) system, which does not take into account the actual expenditure requirement and availability of funds, which shows the actual expenditure significantly lower than the budget estimates. This adversely affects the maintenance, replacement and repair activities, and the overall delivery of services.

Status of Fiscal Deficit and Debt

Despite the passing of the FRBM Act, containing the fiscal deficits and managing the mounting debt continues to be a major challenge. Though the fiscal deficit has come down over the years, India has witnessed significant slippages in achieving fiscal consolidation at the Central level. The resulting high fiscal deficits have led to accumulation of huge debt (Central and State) which was more than 70 per cent of GDP in 2016-17. At this level, India's debt to GDP ratio is much higher as compared to countries with similar sovereign rating. For instance, Moody's in one of its report has stated the median debt-to-GDP ratio of 10 countries rated Baa2 (including India) is around 42.8 per cent. Of all the countries in the group, Bulgaria is the least indebted with a ratio of 26.2 per cent. The Philippines, the only other country in the Asia-Pacific region in this category, has a debt-to-GDP ratio of 37.2 per cent.

Higher levels of debt translate into higher interest payments thus diverting resources from spending on developmental and productive activities. In addition, countries with higher levels of deficit and debt are often perceived to have the risk with respect to balance of payments and tend to be viewed at higher risk by credit rating agencies which results in higher borrowing rates in the international markets.

Debt to GDP Ratio in India

(Rs crore)

	1999-2000	2000-01	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17
Centre	1021029	1168541	2837425	3159178	3529960	3938774	4517252	5070592	5669429	6242519	6892212	7438481
% of GDP	**50.7**	**53.9**	**56.9**	**56.1**	**54.5**	**50.6**	**51.7**	**51.0**	**50.5**	**50.1**	**50.8**	**49.4**
State	279199	355492	1183205	1326324	1505496	1684800	1850369	2065434	2325454	2556592	3013621	3425098
% of GDP	**13.9**	**16.4**	**23.7**	**23.6**	**23.2**	**21.6**	**21.2**	**20.8**	**20.7**	**20.5**	**22.2**	**22.7**
Total Debt	**1300228**	**1524033**	**4020630**	**4485502**	**5035456**	**5623574**	**6367621**	**7136026**	**7994883**	**8799111**	**9905833**	**10863579**

Source: *India Public Finance Statistics 2016-17*

Way Forward

The suggestions highlighted below should be considered to address the issues related to public finance in India as mentioned in the earlier sections of the chapter:

- **Increase public spending on developmental activities**

Given that much is left to be achieved in terms of development in India, the focus of public spending (particularly that of the Central Government) needs to be changed with greater attention given on developmental expenditure. Government must attempt to allocate more funds for building social and physical infrastructure in the country, as this can lead to enhanced economic activity and help in creating employment opportunities which is a pre-requisite for bringing people out of poverty.

Spending in areas of health and education should not only be increased substantially, but the quality of spending must also be improved. This is critical for the empowerment of the poor through human development and for reduction of inequality. Overall, expenditure on core development including spending on health, education, capital and others should be raised to 60 per cent of total government spending.

On the other hand, in place of giving out incentives directly to the masses in the form of subsidies, the approach of direct transfers could be adopted which are easy to administer and are more effective.

- **Increase tax revenues through strengthening the tax system**

The Indian tax system should be strengthened by removing the current distortions and by increasing the revenue productivity. Attempts should be made to increase the current tax-GDP ratio through measures such as widening of tax base, simplifying the tax laws by having minimum rate differentiation and making the tax system more transparent and simple, and minimising the collection and the compliance cost. As substantial amount of revenues is foregone on account of various tax concessions given for specific purposes, there is an urgent need to examine these tax preferences closely for their relevance as this can increase the tax-GDP ratio by at least one percentage point.

India also needs to build its tax administration capacity to frame better laws, and enhance the overall competency of staffs which can help in the reduction of incidents of tax evasion and in bringing down the tax arrears. Various reports such as the Report of the Tax Administration Reforms Commission have suggested series of reforms to be undertaken to improve India's tax system. These suggestions should now be implemented at the earliest.

- **Reduce corporate tax**

Corporate tax rate cuts can play an important role in boosting investments and encouraging job creation, without having significant impact on the budget deficits. In the medium term, a cut in corporate tax can also help in raising revenues. As per a study[11] on Corporate Tax Cuts in 39 Advanced Economies which have seen 94 cases of tax cuts since 1986, it was observed that revenue rose within three years after the change in 48 cases of tax cuts, did not change in 10 cases, and went down in 36 cases.

[11] http://www.lse.ac.uk/fmg/dp/discussionPapers/fmgdps/DP764.pdf

Reduction in corporate tax is also important in light of the recent tax revisions initiated by countries like the US and Canada. While the US has reduced the corporate tax rates from 35 per cent to 21 per cent, Canada has recently announced corporate tax breaks worth $10.5 billion, primarily in response to the US tax cuts and restore its competitiveness. A study conducted in 2017 by Tax Foundation, a tax policy non-profit organisation based in the US highlights that the worldwide average corporate tax rate is around 23 per cent, measured across 202 tax jurisdictions. As against this, India is ranked 18 amongst the 20 highest corporate tax rates in the world. Thus, the necessary tax reforms in the corporate tax structure in India can bring the country in line with other global competitive nations, which will help in maintaining India's attractiveness as one of the prime investment destinations in the world.

- **Improve GST framework**

GST framework should also further be improved by taking necessary changes. Some steps to resolve the problems related to the GSTN portal could be through increasing the bandwidth and the capacity of the server, simplifying the process of filing returns and providing the portal a more user-friendly interactive interface. Moreover, systems should be fully tested before implementation of any change made in any process relating to GST.

The mechanism of Authority for Advance Ruling (AAR) under the GST regime should also be improved. An independent high level central body (similar to the one under the erstwhile indirect tax regime) can be constituted as 'Authority of Advance Ruling' under the GST regime.

Rationalisation of tax structure for various components under GST could further be considered. The reverse charge mechanism on purchases from unregistered dealers should be reconsidered as it would increase the compliance burden and also have negative impact on business of small dealers and may not lead to incremental revenue for the government.

The GST law should be made more tax payer friendly and some of the suggestions for the same are:

- Minimise the number of returns to be filed
- Provide appropriate and adequate training to the personnel to resolve issues and have an effective issue resolution mechanism
- Rationalise levy of compensation cess
- Refund procedure including submission of documents should be made online
- Converge the existing band of GST rates to fewer rates which would reduce complexity and eventually lead to simplification

- **Resolve the issues of Municipal Finances**

Steps should be taken to grant enough fiscal powers to the ULGs to enable them access more avenues to raise enough funds to finance their expenditure needs. Reforms are needed to enhance revenue collection form existing avenues. For instance, a simple flat rate linked to occupancy, size, use and effective service delivery can be adopted to determine the property tax. Estimates suggest that such a move can not only make the system more efficient but can also generate higher revenues.

ULGs would also need to be provided with support towards adopting prudent financial management system. To raise more finances, the Urban Local Bodies should be encouraged to access the capital

markets and one of the options for this is issuance of municipal bonds. However, since the bonds will eventually require to be repaid through cash flows, the ULGs will have to strengthen their revenue base significantly. Also, the risks attached to the municipal bonds will have to be reduced through corrective policy interventions till the market gets matured.

- **Reduce Debt to GDP ratio to 60 per cent by 2023**

As recommended by the Fiscal Review Committee (2017), the level of debt should be reduced in India to 60 per cent of GDP by 2023, the Central and State debt should be 40 per cent and 20 per cent of GDP respectively. This has been suggested to be achieved by reducing the fiscal deficit to 2.5 per cent by 2023.

- **Set up an independent Fiscal Council**

The frequent adjustments in targets for fiscal deficit necessitate the need for a robust institutional arrangement to forecast, monitor and review fiscal rules both at the Centre and State level. A 'Fiscal Council' can therefore be set up for this purpose. However, to maintain its independence, the council should be appointed by the Parliament and report to the Parliament only. The council will undertake ex-ante assessment of budget proposals and to ensure their consistency with fiscal policy and rules. It would monitor the adherence to fiscal rules and submit periodic reports to the legislatures in an attempt to ensure a stable and sustainable public finance policy in the country.

9 Maximising Governance, Reducing Corruption and Streamlining the Regulatory System

> "In framing a government to be administered by men over men, the great difficulty lies in this: You must first enable the government to control the governed, and in the next place oblige it to control itself."
>
> **James Madison Federalist Papers**

> "The bigger the corruption – the more numerous the laws."
>
> **Tacitus**

> "Corruption is the world's biggest disease, but there is a solution – transparency."
>
> **Bono**

The overall business environment in India has witnessed some improvement in recent years aided by reforms undertaken by the government. This is mirrored in India's World Bank-Ease of Doing Business ranking which has moved up by 23 places to 77. However, India is still far behind many emerging economies including Indonesia, Russia and China.

Doing Business 2019 – Comparison Amongst Countries

	United States	India	China	Russian Federation	Brazil	South Africa	Indonesia	Nigeria
Ease of Doing Business Rank	8	77	46	31	109	82	73	146
Starting a Business								
Time (days)	5.6	16.5	8.6	10.1	20.5	40	19.6	10.9
Cost (% of income per capita)	1.0	14.4	0.4	1.1	5	0.2	6.1	27.6
Enforcing contracts								
Time (days)	420	1445	496.3	337	731	600	403.2	453.7
Cost (% of claim)	30.5	31	16.2	16.5	22	33.2	70.3	38.9

	United States	India	China	Russian Federation	Brazil	South Africa	Indonesia	Nigeria
Registering property								
Time (days)	15.2	69.1	9.0	13	31.4	23	27.6	91.7
Cost (% of property value)	2.4	8.3	4.6	0.1	3.6	7.8	8.3	11.3
Resolving insolvency								
Cost (% of estate)	10	9	22	9	12	18	21.6	22
Recovery rate (cents on the dollar)	81.8	26.5	36.9	42.1	14.6	34.5	65.2	27.5

Source: *Doing Business 2019, World Bank*

India also continues to rank very high on global corruption indices - higher than China but better than Indonesia, Brazil , Russia and other major emerging economies. There is a perception that in India corruption is dysfunctional and a huge tax on the poor as it extends across all levels of activity.

Governance Indicators 2018 – Comparison Amongst Countries

	Voice and accountability	Political stability and absence of violence	Government Effectiveness	Regulatory quality	Rule of Law	Control of corruption	Ease of Doing Business Rank
United States	82.27	59.05	92.79	92.79	91.83	88.94	8
India	60.10	17.14	56.73	42.31	52.88	48.56	77
China	7.88	36.67	68.27	48.56	44.71	46.63	46
Russian Federation	18.72	21.43	50.48	32.69	22.12	17.31	31
Brazil	61.58	31.43	41.83	51.44	43.75	36.06	109
South Africa	68.97	35.71	65.38	62.50	52.40	56.73	82
Indonesia	50.74	29.05	54.81	51.92	40.87	48.08	73
Nigeria	34.98	5.24	16.35	16.83	18.75	12.50	146

Source: *Worldwide Governance Indicators Project, World Bank*

Efforts have been made to reduce discretion and improve transparency through e-services across a range of activities and increase competition. Tax compliance enforcement, actions on benami transactions, the use of DBT, etc. are major efforts underway to stop leakages and avoidance in the system. But yet the perception is that corruption remains a huge issue. There is a need for clean-up of the system if democracy has to survive and India is to prosper and emerge as a more "Nek Bharat".

Index of Economic Freedom 2018 – Comparison Amongst Countries

Country Name		United States	India	China	Russia	Brazil	South Africa	Indonesia
World Rank		18	130	110	107	153	77	69
2018 Score		75.7	54.5	57.8	58.2	51.4	63	64.2
Rule of Law	Property Rights	79.3	55.4	46.7	48.7	55.8	67.7	49.3
	Judicial Effectiveness	76.9	54.3	65.4	46.9	55.5	65.9	45.2
	Government Integrity	71.9	47.2	47.3	38.1	31.4	45.4	42.8
Government Size	Tax Burden	65.1	79.4	70.4	85.8	70.6	62.5	83.7
	Gov't Spending	56.5	77.7	71.6	62.5	50.7	68.1	90.7
	Fiscal Health	54.8	13.2	85.9	87.7	7.7	74.6	89.4
Regulatory Efficiency	Business Freedom	82.7	56.4	54.9	77	58.6	65.1	57.3
	Labor Freedom	91.4	41.8	61.4	52	46.8	60.1	50.3
	Monetary Freedom	78.6	75.9	71.4	60.8	71.4	74.6	81.6
Open Markets	Trade Freedom	86.7	72.4	73.2	79.4	68.5	71.6	80.5
	Investment Freedom	85	40	25	30	50	50	40
	Financial Freedom	80	40	20	30	50	50	60

Source: *2018 Index of Economic Freedom, The Heritage Foundation*

Unlike China which performed a major modernisation of its administration, which reduced government payroll substantially about 15 years after it started its economic reforms, India still struggles with the same burdensome administrative procedures, overlapping laws, and a bureaucracy overloaded with lower level clerks and non-technical staff. At the higher level sits a competent top-level but without specialisation unsuited to the needs of a modern 21st century economy. India set up an administrative reforms commission but its findings have not been implemented fully. This is an important agenda which could be taken up after the 2019 elections.

Police System in India

Judicial and police reform are also badly needed for a modern 21st century state. India has witnessed an increase in all kinds of crimes like alcohol prohibition crime, theft, kidnapping and abduction, crimes against women and cheating. The crime rate (measured as crime per lakh population) for more serious offences or cognizable crimes such as murder and rapes has increased by about 28 per cent over the 10 year period between 2005 and 2015. The National Crime Records Bureau reportedly recorded over 73 lakh complaints of cognizable crimes in 2015 alone. Police is mostly blamed for this rising incidents of crimes and often criticised for their inability to properly investigate these cases. In 2015, out of all cases, convictions were secured in only 47 per cent cases registered under the Indian Penal Code, 1860 and one of the reasons for this had been poor quality of investigations.

Issues and Challenges

Inadequate infrastructure, be it personnel, weapons or physical infrastructure has been the major constraints for the police force, and is largely responsible for its operational inefficiencies.

The state police force has remained largely understaffed. The sanctioned police strength was 181 police per lakh persons in 2016, while the actual strength was only 137 police persons, which was far below the 222 police per lakh population ratio recommended by the United Nations. Police personnel lacking expertise in conducting professional investigations and inadequate cyber and forensic infrastructure and capabilities are also responsible for delay in investigations. The complexity of crimes has also increased with more instances of cyber-crimes and economic frauds being reported in recent times, further adding to the delay.

On the other hand, under-utilisation of funds has led to shortages in weaponry and even basic physical infrastructure such as vehicles, with a 30.5 per cent deficiency in the stock of required vehicles with the state force. The situation is grave with some police stations still not having vehicles (273), telephones (267) and wireless connectivity (129). In 2015-16, only 14 per cent of the funds meant for modernisation were utilised.

The police-public relation is also in an unsatisfactory state with incidents of misconduct of the police towards the public often being reported.

Way Forward - Police Reforms

The above challenges can be addressed through the following steps:

- Improve the infrastructure of the police establishments by judiciously utilising the funds allocated for the sector and equip them with modern weapons and efficient communication facilities.
- Expedite the crime investigation process by imparting training to police personnel to enable them conduct professional investigations, and strengthen the forensic, cyber and other related infrastructure needed for performing speedy and efficient investigation.
- Reduce the burden of the police force by redistributing or outsourcing some non-core police functions (such as traffic management, disaster rescue and relief and issuing of court summons) to government departments or private agencies.
- Specialised investigation units with the requisite expertise and training to solve the increasingly complex crime cases should be set up within the police force.
- Police should be made accountable for their actions by creating an independent oversight authority to ensure that the power vested with the police is only used for legitimate purposes. The political executive's (ministers') power of superintendence over police forces should be limited and exclude activities that interfere with the due process of law or that influence operational decisions.
- Police-public relation can be improved through adopting 'community policing model', wherein the police can work with the community for prevention and detection of crime, maintenance of public order, and resolving local conflicts, with the objective of providing a better quality of life and sense of security.

Judiciary System in India

India needs an independent, impartial, faster and efficient judiciary system to maintain law and order in the country and put a break on the rising crime by taking tough action against those violating laws, while protecting the interest of the law abiders. On the contrary, Indian judiciary system is extremely slow and inefficient. There are over 27.7 million pending cases in India, 8.3 per cent of which have been pending for more than 10 years. Thus the system has been unable to keep pace with the rapid increase in cases. Inefficient judicial system is also largely responsible for the delay in 'enforcement of contracts', and thus adversely affects the performance of the country on the ease of doing business ranking.

Issues and Challenges

Shortage of judges has been the biggest constraint for faster disposal of cases. As against the approved strength of 1079 Supreme court and high court judges, the working strength is only 645, a shortfall of almost 40 per cent as of October 1, 2018. The shortage is much more at the sub-ordinate court level - a

short fall of 4,382 judges against an approved strength of nearly 20,558 judicial officers. This shows some sort of lethargy with respect to appointment of judges.

Corruption level in the judiciary is also perceived to be high. Some surveys show that nearly 45 per cent of Indians believe that the judiciary is corrupt, and corruption has spread at both the lower as well as higher level of judiciary. India also does not have sufficient number of courts. For instance, while we have 29 States in addition to the 7 Union Territories, there are only 24 High Courts.

Moreover, the judicial procedure is very complex and costly, sometimes making it unaffordable for the poor to avail these services.

Way Forward - Judicial Reforms

There is an urgent need to make the judiciary system efficient for faster delivery of justice.

- Steps need to be taken on an urgent basis to fill up the vacancies at the various judiciary levels, which could help in reducing the time required to solve cases and expedite the entire judicial process. Number of judges should be increased and judiciary procedures should be streamlined using information technology.
- Time limits for taking decisions should be prescribed broadly according to the type of the case. Similar practice is followed in Slovak republic where cases are disposed in less than 60 days.
- Courts should be set up in every district to reduce the case load per judge to a reasonable level and case hearings should happen continuously without any long postponements thus enabling to achieve speedy verdicts. Fast track courts should be set up to hasten the process of solving cases.
- A Performance Commission with powers to take action should be set up to examine the complaints against judges. Similar commissions are there in various states of the US.
- Alternative dispute resolution mechanism should be explored to reduce the burden on the judiciary.
- An efficient administration set up needs to be built in the judiciary system. The registry currently focuses on day-to-day processes and does not have the tools or capacity to focus on policy level data collection, analysis or reforms, which needs to be strengthened.

Regulatory Framework in India

The Indian regulatory regime too is complex and marred with several deficiencies. The approach for setting up regulators and formulating regulations in India has been uneven and unorganised, with regulatory bodies for different sectors being established at different times. The industry specific regulatory authorities have been given varying degrees of autonomy, functions and power which has resulted in a plethora of regulations across sectors which, at times, are ambiguous.

Issues and Challenges

Lack of regulatory independence - Despite legislative provisions, regulators in India do not enjoy complete independence. They face interference from respective sector ministries due to overlaps in function of ministry and regulator, and also because they are largely funded by budgetary allocations. They are also made to align activities/regulations with the directives of local politicians in some cases. A case in point is the Electricity Regulatory Commissions (ERC) which has been given the authority to fix tariffs for the end users, but have not been allowed to do it at their discretion.

Presence of multiple regulators for one sector - Some of the sectors in India are regulated by multiple regulators. There are four regulators in the financial system and nine regulators in the education system with overlapping and contradictory regulations. As a result, there is a mix of over regulation, under regulation, confused regulation (overlapping jurisdiction), indicators of regulatory capture and perhaps in many cases, unenforceable regulation or lack of capacity to effectively regulate.

Overlapping jurisdiction between sector regulators and competition authority - While both sector regulators and competition authorities pursue a common objective of improving economic performance through competition, they however, have different legislative mandates and sometimes approach the same issue with different perspectives. This results in regulatory parallelism. There is a lack of clarity as to which regulator has the overriding jurisdiction in case of any conflict.

Lack of effective regulation - Effectiveness of regulatory bodies has been impacted for multiple reasons. Firstly, some regulatory authorities have not been granted statutory standing. For example, Directorate General of Hydrocarbons (DGH) falls under the administrative control of Ministry of Petroleum and Natural Gas (MoPNG). Secondly, there has been lack of clarity in jurisdictional powers given to the regulatory authorities, as discussed earlier. Third, there is lack of technical expertise and sectoral knowledge among the regulatory authorities, especially at the senior level as most of these positions are offered to bureaucrats. Also, there has been no proper accountability procedure set up to monitor the regulatory effectiveness.

Dual role played by the government in some sectors - In sectors such as insurance, coal, petroleum, banking and telecom, the government or the state plays the role of a market regulator as well as the owner of the state-owned enterprises (SOEs), which creates conflict of interest and there are chances of the basic function of good governance being compromised in the process. This also restricts the regulators from promoting enough competition in a sector.

Way Forward - Regulatory Reforms

Set up a dedicated authority to oversee and guide the process of regulatory reforms in a structured, planned and systematic manner which will enable creation of a consistent and coherent regulatory environment in the country.

In many countries there is an explicit government regulatory policy and an oversight body (at times more than one) that is responsible for disseminating information on best practices and maintaining

consistency in regulatory process. Important roles played by the entity include quality check of the new regulatory proposals, supporting stakeholder engagement practices and regulatory impact assessments.

Perform Regulatory Impact Analysis (RIA) to assess the effects of any proposed or existing regulation and to ensure that regulations which have unintended impact/effect or have out-lived their intended intention are removed. RIA could also try to see the impact of any non-regulatory alternatives that is available for dealing with a situation. This process has been widely adopted in OECD countries and has proved helpful in ensuring the effectiveness and efficiency of regulations.

Parliamentary law should include sections that clearly define the elements involved in the formation of regulators. These elements include clarity of purpose, their objectives, role and composition of the board and the regulators, the legislative, executive and judicial process, processes with respect to licensing and investigation, and reporting. This will help in improving the performance of regulators by creating a system of accountability which in turn will come from a clear understanding of the various features involved in the formation of the respective regulators. This will also help in removing ambiguity from the system.

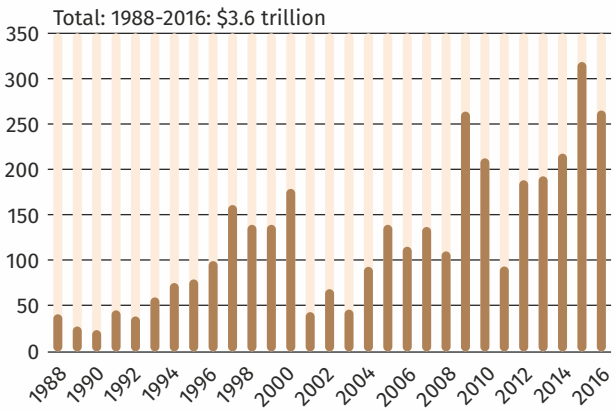
10 Minimising Government : Increasing Private Sector Participation and Privatisation

For a majority of countries, state-owned enterprises have constituted an important part of their industrial landscape at some point in time. However, experience indicates that while these enterprises were set up to fulfill a multitude of objectives including self-reliance, employment generation, balanced regional development, fulfillment of social obligations etc, inefficiencies in their functioning finally made way for market forces to play a dominant role. Almost every country in its course of economic transformation has gone through the phase of dismantling its public sector undertakings consequently making greater space for the more efficient private sector.

> "Big government economics breeds crony capitalism. It's corrupt, anything but neutral, and a barrier to broad participation in prosperity"
>
> **Paul Ryan**

Accelerating Privatization: Global Glimpse

World Privatization Revenues ($ billion)



Ranking EU Countries by Total Privatization Revenues: 2016

Country	Deals	Value ($ million)
France	9	9596
Netherlands	4	7099
Denmark	2	5360
Italy	3	4878
Greece	4	2724

Ranking Non-EU Countries by Total Privatization Revenues: 2016

Country	Deals	Value ($ million)
China	276	1,48, 047
Australia	5	25, 705
Russia	13	15, 774
India	35	7,393
Malaysia	11	5, 330

China was the leading privatizing country in 2015 and 2016, raising $173.2 billion in 2015 and $148.0 billion in 2016

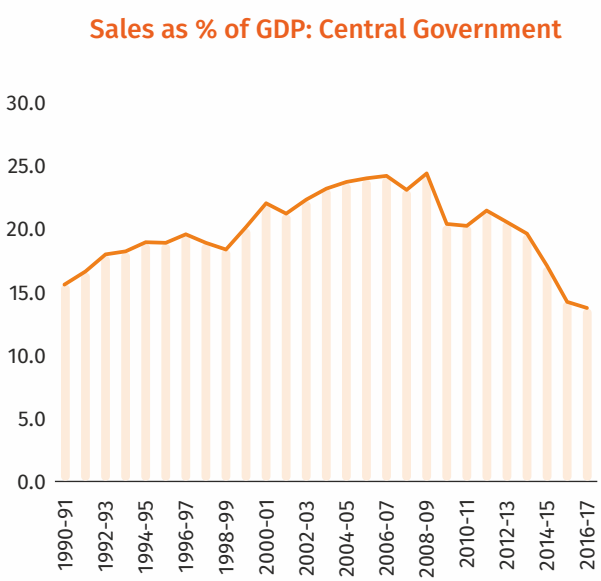
This represented over half of the worldwide total privatisation revenues in both years

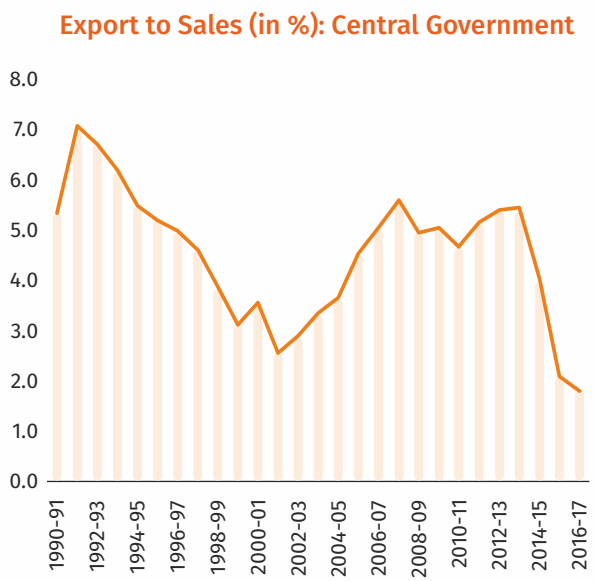
Source: *Privatisation Barometer, 2015-16*

Post-independence, establishing public sector enterprises seemed the most obvious choice for India to promote growth and there were some compelling reasons backing this model. However, public enterprises have dominated India's industrial landscape for longer than warranted. Despite a comprehensive approach towards reforms, we have not been able to fully trust our private sector.

Performance of India's Public Sector Enterprises

Public sector enterprises did make significant contribution to India's economy especially in the two decades following country's independence. From just five central public sector enterprises at the time of commencement of First Five Year Plan in 1951 with a total investment of Rs 29 crore, the number of these enterprises increased to about 170 by end of 1970s with an estimated investment of over Rs 15,000 crore. However, the performance of central public sector enterprises started to come under the scanner by 1980s and following the first bid of liberalisation in 1991, the share of these enterprises in sales, profits, exports, employment witnessed deterioration.

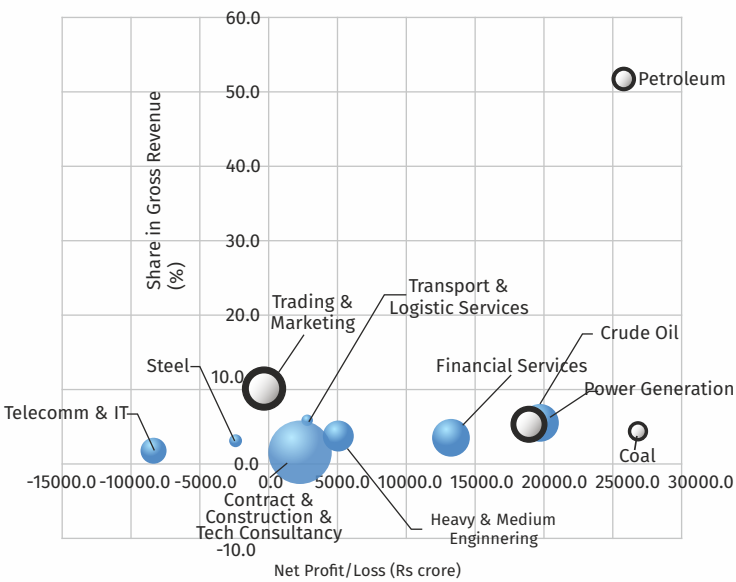




- At the end of 1990s, the sales to GDP ratio of central government enterprises stood at 20 per cent, which peaked to 24.1 per cent in 2008-09 concurring with the high growth phase. However, as per latest available data for 2016-17, the ratio has declined to about 14 per cent.
- Almost 50 per cent of central government PSEs were making losses in the 1990s, but with period of high growth from 2002-03 onwards, the number of loss making CPSEs declined to about a quarter of the total. But since then and especially after 2012 slowdown, the share of loss makers has increased again to almost 30 per cent of total number of central government PSEs.

	Profit Making PSEs as % of Total PSEs	Loss Making PSEs as % of Total PSEs
1995-96	55.2	42.7
2000-01	52.6	47.0
2005-06	71.4	28.1
2007-08	74.8	25.2
2010-11	71.8	28.2
2016-17	67.7	31.9

PSEs Net Profit/Loss & Share in Gross Revenue: Sector Wise



- Export to sales ratio of central government enterprises has tapered off over the years and shows a declining trend
- Labor productivity in PSEs measured by value added per employee increased by just around 2.0 per cent per annum between 1990 and 2015; which was substantially slower than average labor productivity growth of 5.2 per cent for the economy as a whole over the same period
- Manufacturing, mining and electricity units dominate the central government PSEs vis-à-vis the services sector units. Petroleum, coal and lignite and power sectors contribute the most to PSE profits and PSEs are a clear monopoly here
- In fact, presence of public enterprises in services has had an adverse impact on the performance of service enterprises belonging to the private sector. A good example of such distortion created through policy favouritism is the civil aviation sector.

Note- *Bubble size represents CAGR of Gross Revenue b/w FY15 to FY17. White bubbles represent negative growth*
Share in Gross Revenue: average FY15 to FY17
Net Profit/Loss: Average FY15 to Fy17
Source: *CMIE / PE Survey 2016-17, Department of Public Enterprises*

The performance of public enterprises has been under the lens for some time now and various governments have made attempts in the past to turnaround the situation. We have seen attempts towards use of different policy tools such as MoUs, and share sales and strategic disinvestments to improve the performance of central government PSEs, however so far the approach mostly has been piece-meal. Also, some interesting research has been undertaken to gauge the impact of these policy instruments on the performance of public sector enterprises.

The results of the study[12] reveal that MoUs have no positive impact on performance of public sector enterprises and at times MoUs have had a negative effect. Disinvestment, on the other hand, has a positive impact on productivity measures considered in the study. The study also stated that MoUs are not producing the results for which they were designed. It was pointed out that may be public sector enterprises are only agreeing to benchmarks which are easily achievable and these enterprises are in fact not adhering to the MoU system in true spirit.

The study results provide clear support for share sales (divestment) and privatisation (strategic disinvestment) to improve the performance of PSEs, as opposed to MoUs (performance contracts).

Way Forward

The current government has tried to bring back the focus on disinvestment once again. Several steps towards revival and restructuring of these behemoth enterprises have been undertaken in the past four years, including setting of higher disinvestment targets, announcements to undertake strategic disinvestment, and listing of CPSEs on stock exchanges.

Air India: Lessons to be learnt...

Government of India made a landmark decision last summer to privatise India's most iconic air carrier, Air India. The airline with a debt burden of over Rs 50,000 crore has been battling losses for almost a decade now. The announcement of government's disinvest plan did generate interest among some of the stakeholders, however the attention lasted only until the details of the deal were spelled out. Several reasons have been put across as to why the plan had no takers. These included the government's decision to retain 24 per cent share, size of workforce and declining market share.

The pertinent question that remains is will the government give another shot to undertaking disinvestment in Air India. In fact, in a recent statement Niti Aayog has suggested that the airline should be made profitable before it is privatised. This will be the correct approach going ahead. PSEs should be prepared for privatisation through restructuring. However, what is advisable is financial restructuring and not operational restructuring. Cleaning up the financial issues is a critical part to prepare them for sale.

[12] Ajay Chhibber and Swati Gupta, "Bolder Disinvestment on Better Performance Contracts? Which Way Forward for India's State-Owned Enterprises", Sep 2017

While, the government has been trying hard to walk the talk on the disinvestment front, it was unable to achieve the set targets between 2014-15 and 2016-17. Nonetheless, last year (2017-18) not only did the government surpass the set disinvestment target, but was also able to garner funds worth a whopping Rupees one lakh crore - the highest ever. The progress made with respect to disinvestments is encouraging, but it remains critical that we further consolidate our efforts in a bid to improve the performance of these public enterprises. The following section offers a few suggestions in this regard.

Formulating a Ten-year Action Plan

The government should consider preparing an elaborate Ten-Year Reform Action Plan for dispensing with both central and state level public sector enterprises. The plan could be split into two phases of five years each.

Phase I

The first five years of the plan could focus on enterprises that need to be closed and where outright sale will not disrupt provision of goods and services in the country.

Out of the group of 16 Navratnas, several companies could be considered for privatisation during Phase I. The performance of Navratnas has been lackadaisical and they have certainly fallen behind their private counterparts. In fact, some enterprises in this category are already being considered for disinvestment, or are undergoing the process of disinvestment. Nonetheless, a holistic plan for privatisation still seems amiss.

The Miniratna category which comprises 75 enterprises are among the most apt for strategic disinvestment and could be dispensed off in the first phase. Those in manufacturing and services sector can be put high on list for immediate sale as these have been the worst performers.

The other big group is the set of enterprises which do not have a Ratna status. This is a considerable chunk and the loss makers in this group do not really serve any social/security objective. These should also be prepared for sale in the first phase.

Phase II

The second set of five years could focus on PSEs that would require alternate service provisions with reforms in the sector.

This phase could include the closure of Food Corporation of India and fertiliser enterprises. The country doesn't really need food and fertilizer PSEs to meet its food policy objectives.

The private sector could be allowed to play a bigger role in purchase, storage and sales of food to bring in more efficiency and minimising wastages.

It is important to initiate a bolder approach towards privatisation. Unless the underlying incentives are changed for public enterprises to improve their own performance, not much is going to change.

Revamping Public Private Partnerships (PPP)

Overhaul of the PPP programme along the lines of Kelkar committee recommendations.

Establish 3P India as problems being faced by PPP projects remain largely unresolved.

Closure of State-Level Public Enterprises

At the state level more than half of the SLPEs should be shut down. In fact over 300 of the registered companies are 'non-working' and should be wound down immediately. In fact, even among the functioning PSEs' there are many loss making companies which are apt candidates for closure.

A centralised account should be created to know the full financial picture of all remaining SLPEs just as has been done for the CPSEs. A dividend policy should be enforced so that profit making SLPEs provide a return to the taxpayer.

Privatisation proceeds to contribute to National Infrastructure Investment Fund

The proceeds from privatisation and sales of assets of closed firms should not go back into the budget to fund subsidies or compensate for falling tax collections but instead should be put into National Infrastructure Investment Fund. The government over the next 10 years must convert the 'balance sheet of capital in PSEs' into a 'balance sheet of public infrastructure' which can deliver services and crowd in private investment for a sustained long-term growth.

India's Defense Sector: Leveraging the Low Hanging Fruit

With nine Defense Public Sector Undertakings, 41 Ordnance Factories, an exclusive research organisation and over 100 private companies, India undoubtedly has a huge defense industrial base. In fact, India is the second largest armed forces in the world and is among the top five military spenders. However, despite this India remains one of the largest importer of major weapons and we also import several low-tech items.

Defense was opened to the private sector in 2001, however nearly a decade-and-a-half old voyage of the private sector in defense has been beset with numerous teething difficulties. Nonetheless, as of today it would not be wrong to say that things are changing in a positive direction for the sector. Over the course of four years, the government has shown a dedicated focus on easing out the policy framework for the sector, which is very encouraging. Defense is also among the 25 focus sectors under the government's Make in India campaign. The defense sector is at an important cusp where growth will be propelled by indigenisation going ahead and this would not be possible without an increasing role of private players.

Defense Public Sector Units

Defense Public Sector Units along with the ordnance factories have been the mainstay of defense manufacturing in India. However, until now these units used to procure majority of their orders through the support of Defense Ministry. Also, their dependence on imported components has been quite significant. Moreover, reports indicate that the performance of these units in terms of value addition, productivity, research and development and profitability has not seen a substantive improvement over the years.

Thus, it has become increasingly imperative for these enterprises to realign themselves with the changing times.

While it will be difficult to privatise these enterprises over short to medium term, the government must come out with a solid plan to privatise them under the Phase II of the 10-year Action Plan suggested above.

In the immediate near term, the government should look at listing all the nine DPSUs on the stock exchange. BEL and BEML are already listed on the exchange and the government has partially withdrawn the public investments in these two enterprises. The government shareholding now in BEL and BEML is 66.72 per cent and 54.03 per cent respectively and this should be further brought down. An initial public offering has also been made for Garden Reach Shipbuilders & Engineers Limited (GRSE).

An in-depth evaluation of the Ordnance Factories may also be considered. The private sector is emerging as an efficient alternative and given the fact that some of these ordnance factories suffer from very high overhead costs, a list of factories that need to be closed or passed on to the private sector may be drawn. Also, 'corporatisation' may be considered for the remaining factories.

Supporting the Private Sector

The private players are gradually moving towards creating a space for themselves in the defense sector. Several companies have come to the forefront and have secured a variety of orders in the past few years.

As of June 2018, Department of Industrial Policy & Promotion (DIPP) has issued 379 licenses to 230 Indian Companies for manufacture of various licensable defence items. Till June 2018, 70 license companies covering 114 licenses have reported commencement of production.

Grant of 'Infrastructure' Status: While the shipyard industry has been given the 'infrastructure status', the same should be extended to other investments by the private companies in defense. This will allow the sector to benefit from financial and tax incentives.

Payment Terms: At present, the private sector in India is paid by the Defense Ministry, while foreign companies are paid through the Letter of Credit-based system. The Letter of Credit-based payment system should be extended to the Indian private sector as well.

While the government has raised FDI caps in the defense sector, most of the deals have been undertaken by portfolio investors focusing largely on changing the shareholding patterns. Contrary to this, emphasis must be laid on promoting joint ventures that can eventually enhance and contribute to our research and technical base.

Research and Development

Defense Research and Development Organization (DRDO) has been an apex institution involved in almost the entire gamut of defense-related technology. However, a comparison with international counterparts brings some glaring facts to the table. Foremost being that defense related R&D remains grossly underfunded in India. The share of DRDO in the country's defense budget has remained by and large stagnant. Besides, skill shortage, lack of innovation ecosystem, and limited accountability have further marred the situation.

Thus while there is clearly an urgent need for enhancing the R&D expenditure on defense and laying a solid foundation for developing a strong human capital base, the government should undertake further steps to de-monopolise defense R&D allowing the private sector to play a greater role.

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