

Investing in Social Infrastructure for Larger Dividends: Way Forward to Stimulate Indian Economy

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Introduction

With the launching of a recent major economic reform process, the Indian economy is going through several different challenges. The government has initiated an effort to integrate India as one market through the introduction of the Goods and Services Tax (GST). The introduction of the GST is also contributing to formalizing a large section of the informal economy, comprising millions of small and medium enterprises (SMEs). The government has also withdrawn larger denomination notes, adversely affecting money supply but bringing in greater accountability and checks on transactions where applicable taxes are not paid. The cumulative impact of demonetization and the GST is the shrinking of the economic growth rate, though expected only over the shorter term. Growth is expected to slow down from 8.6% in 2015 to 7% in 2017.

Currently the Indian economy is passing through a phase of slowdown. This calls for taking immediate steps on various fronts, like the newly introduced GST scheme. The finance minister has announced several measures to mitigate the hardships being faced by SMEs. However, there is also a need to come up with specific schemes such as opening special kiosks in various markets where free guidance and support can be provided to small players on compliance with various provisions of the GST. This would also create immediate job opportunities for young aspirants from the law and accountancy streams. Another important task could be on the front of asset creation that may widen the scope for more employment opportunities at different levels. For example, giving added attention to low-cost housing could serve the twin objective of strengthening social infrastructure and generating employment for low-skilled workers.

Thus, the need of the hour is to facilitate and empower participants from the informal sector in a manner that ensures they can effectively join the formal sector and derive resultant benefits. The missing link so far has been less emphasis on investments in social infrastructure than required. The current government of Prime Minister Narendra Modi has attached higher priority to social sector infrastructure development, reflecting the ideas of political ideologue Pandit Deendayal Upadhyaya (1916-1968), who articulated the need for greater expenditure on the social sector to enhance productivity at the bottom of the pyramid. Increased productivity at the bottom will have a multiplier effect on the overall growth and development of the economy and contribute to the peace and prosperity of the region

in a sustainable manner. Such a multiplier effect will be ensured through creation of an effective and enhanced level of social capital that will result from reduced morbidity, increased levels of human capability and consequent strengthening of people's institutions at the grass root level. Thus, increased investment in the social sector is a *sine qua non* for "integrated humanism" to be ushered in during the coming days as the Indian economy gets the necessary fillip to come out of the current slowdown phase. It will get on a pathway that ensures inclusive and sustainable growth and development, which undoubtedly will spur a positive dynamism in the economy as a whole.

Social Infrastructure

There are several economic studies which have discussed the importance of infrastructure in promoting economic growth. Tatyana Palei in her paper in *Procedia* (2014) has discussed that infrastructure consists of two elements, "capitalness" and "publicness", which means they may have assets that have major capital content but not necessarily social focus. As a result, roads, highways, railways, and ports may have high capital content and high publicity value but people may not be able to connect themselves directly with these assets. In contrast, low-level capital expenditure with low publicity may have larger social connections, such as hospitals, advanced operating theaters, schools, colleges, libraries and universities. In their report "Infrastructure Capital: What Is It? Where Is It? How Much of It Is There?" (*Canadian Productivity Review Research Paper No. 16*, March 12, 2008), John R. Baldwin and Jay Dixon say that infrastructure is a long-term spatially bound, capital-intensive asset with a long life cycle and the period of return on investment is often associated with a market failure, which is a situation where the market system crashes and economic efficiency is not achieved, for example monopolies of different kinds. The report tries to define public infrastructure and its classification, but it captures social infrastructure according to a functional classification.

In this paper, I will follow a functional classification in which I include major budgetary allocations. *Table 1* clearly shows broad trends in the social services sector. India has exhibited a consistent rise across various categories in expenditure on social services, which itself has expanded from 6.6% of GDP in 2011-12 to 7.4% in 2016-17. A similar rise is discernible across education, which declined from 3.2% to 2.8% and is now back to 3.2%, and health,

TABLE 1

Trends in social services expenditures (as percentage of GDP)

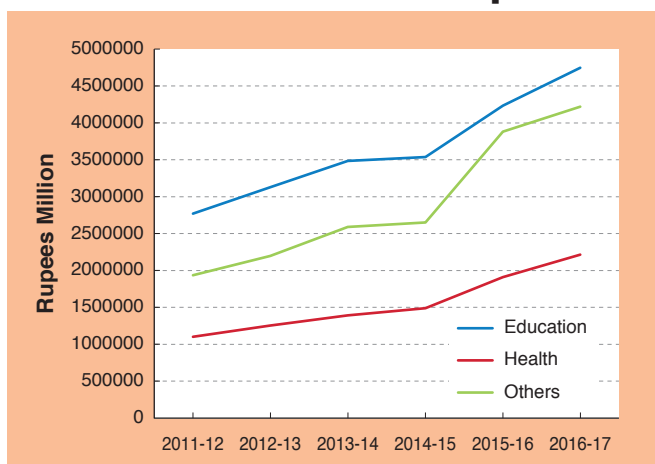
	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17
Total Expenditure	27.7	27.1	26.7	26.4	29.1	29.5
Expenditure on social services	6.6	6.6	6.6	6.2	7.0	7.4
Education	3.2	3.1	3.1	2.8	3.1	3.2
Health	1.3	1.3	1.2	1.2	1.4	1.5
Others	2.2	2.2	2.3	2.1	2.8	2.8

Source: *The Economic Survey, 2016-17: 256, Government of India*

which expanded from 1.3% to 1.5%. Social services include education, sports, arts and culture, medical and public health, family welfare, water supply and sanitation, housing, urban development, the welfare of weaker sections of society, labor and labor welfare, social security, and welfare and nutrition. In the table, I have included only education and health for illustration.

Chart 1 also shows a similar expansion in absolute numbers. It is interesting to note that since the change of government in India in 2014, social services expenditure has multiplied consistently. The further disaggregated data is analysed in the Economic Survey (2016-17) at the sub-national level of States for years 2014-15 and 2015-16. States like West Bengal, Kerala, Karnataka, Tamil Nadu and

CHART 1

Trends in social services expenditure

Source: *The Economic Survey, 2016-17: 256, Government of India*

Gujarat have shown an increase of 15-20%. The picture becomes all the more impressive when we scan the performance of poorer states. Bihar, for instance, shows an increase of 46%, Chhattisgarh of 49% and Jharkhand of 53%. This clearly shows the growing political traction in bridging the infrastructure gap, particularly, in the areas beginning from a very low level.

Education

The component of education which is receiving greater attention at this point is

that of skills and the capacity to connect with the markets and new economic opportunities. With the adoption of Sustainable Development Goals (SDGs), the focus is increasingly on quality of education rather than quantity. More and more measures are underway to help schools and educational institutions move in the direction of quality education. This, of course, requires expenditure on infrastructure (*Table 2*) but at the same time on the very experience for students at these places. The *All India Survey of Higher Education (2015-16)* shows that more than 80% of universities, colleges and stand-alone institutions maintain their own libraries, playgrounds, laboratories and conference facilities. Around 78% have their own health centers, computer centers and other similar facilities. This clearly shows the impact of enhanced expenditure in the higher education sphere. The government has approved a proposal to establish the Higher Education Financing Agency (HEFA) with government funding of 10 billion rupees in order to give a big push toward creating a robust higher educational institution. The creation of HEFA would enable major investments in high-quality infrastructure for premier educational institutions.

The estimated gross enrolment ratio (GER) in higher education in India is at 24.5 per cent for the age group of 18-23 years. The GER for male students is 25.4 per cent while for female students it stands at 23.5 per cent. This, however, is on the lower side for students from the weaker side of society. The survey probably would also have to do an independent exercise on how higher education in India is responding to the digital revolution.

It is heartening to note that the male/female ratio in the GER has improved in a major way at the primary and secondary level. As *Table 3* shows, in 2012-13, the male GER was at 69.6% and that for females at 67%, expanding to 78.1% and 78.9% in 2014-15. It dwindles when students are in class XII, with the GER for male

TABLE 2

Optimizing use of infrastructure in schools

- Reap gains from the synergy and efficiency of co-location of schools at all levels of schooling.
- Improve utilisation of physical infrastructure — classrooms, science labs and equipment, different course streams, computers/computer rooms, IT infrastructure, arts/crafts/culture rooms, toilet and drinking water facility, playground and equipment, counsellor and principal rooms, etc.
- Continuity for students when they move from primary to secondary and then to higher/senior secondary and so improve the transition rate from primary to secondary and then to higher/senior secondary.
- Single school for siblings amongst other things facilitates safe movement/transport to and within the school.
- Improved teacher retention by ensuring their progression including promotions at three levels of schooling.

Source: *Economic Survey (2016-17). Social Infrastructure, Employment and Human Development, Government of India.*

students in 2012-2013 being 41.9% and for females 39.5%, and improving marginally in 2012-15 to 54.6% and 53.8% respectively.

Health

With the commitment to SDGs, government attention on the health sector has multiplied several times. The focus is on “health for all”. It was with this idea that the National Health Policy 2017 was launched for preventive and promotive health care. As part of this policy, efforts are being made to evolve adequate scales for capturing

state level developments in a comparative framework. The composite index that is being used to monitor and incentivize improvements in health service delivery across states in the country is now being regularly published. Apart from many other parameters it also reflects the extent of immunization of children that would be required against vaccine-preventable diseases by 2020. Towards achieving universal health coverage, a health insurance cover of 100,000 rupees (\$1,563) is being extended to all poor families. Since health requires a comprehensive approach, the government has taken measures for improving conditions in kitchens. In order to meet the clean cooking fuel needs of the poor and thereby safeguard the health of women and children, the Pradhan Mantri Ujjwala Yojana (PMUY) welfare program was launched in 2016. Under the scheme, 50 million liquefied petroleum gas connections will be provided to poor families over the next three years. Over 22 million connections have already been provided under the scheme.

Health is one sector in which several limitations have posed severe challenges for India. As is clear from *Chart 2*, almost 69% of health-related expenditure comes from the pockets of households, followed by government health insurance schemes, which account for around 11%. The other actors have only marginal roles. The almost 22% shortage in primary health centers (PHCs) and 32% shortage in community health centers (CHCs) also provide scope for larger intervention through effective investment (http://wcd.nic.in/sites/default/files/RHS_1.pdf). It is also estimated that more than half of the beneficiaries have to travel more than 100 kilometers to access quality care.

Similarly, hospital infrastructure is equally constrained. The total number of beds per 1,000 people is 1.1, against the global average of 2.7 (*Funding Indian Healthcare: Catalysing the Next Wave of Growth*, Pricewaterhouse Coopers, PWC, 2017). There is need for 1.8 million additional beds to achieve the target of 2 beds per 1,000 people by 2025. Investment of nearly \$86 billion would be required

TABLE 3

Gross enrolment ratio (GER)

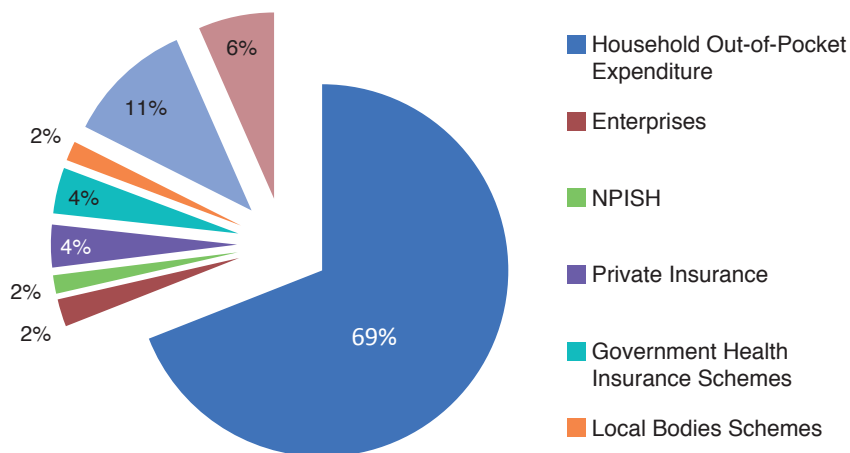
Level/Year	Secondary (IX-X) 14-15 years			Senior Secondary (XI-XII) 16-17 years			(IX-XII) 14-17 years			Higher Education 18-23 years		
	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total
2012-13*	69.6	67.0	68.1	41.9	39.5	40.8	57.0	56.5	56.8	22.7	20.1	21.5
2013-14*	76.8	76.5	76.4	52.8	51.6	52.2	62.5	62.6	62.5	23.9	22.0	23.0
2014-15*	78.1	78.9	78.5	54.6	53.8	54.2	64.9	65.8	65.3	25.3	23.2	24.3

* Figures related to school education are provisional.

Source: MHRD (2016). *Education Statistics at a Glance, Ministry of Human Resource Development, Government of India*

CHART 2

Components of current health expenditure in India (in percent)



Source: *The Economic Survey, 2016-17: 271, Government of India*

to achieve the above two targets ([Table 4](#)).

The primary, secondary and tertiary healthcare sectors probably require a far greater investment push (“Health Care in India: Current State and Key Imperatives”, *Review of National Health Policy 2015*, KPMG, 2016). The numbers at each of these levels are so limited that the scope may be much larger. In tertiary care, which includes medical colleges and ESIC (Employee State Insurance Corporation) hospitals, there are around 2,800 urban health posts and public sector hospitals. Similarly, the deficit in health infrastructure is also evident at the level of secondary care. There are about 4,833 community healthcare centers, around 987 sub-divisional hospitals

and nearly 722 district hospitals. In the recent past, efforts have been made to move for mobile medical units. They are now close to 2,134. The biggest window for investment to improve is in the realm of primary health care and at the level of sub-centers. The number of PHCs is only around 24,049 while the need is for more than double this. Some estimations clearly show the scope for infrastructure addition is very high. Only around 25% of the sub-centers have access to electricity and water supply. Sub-centers without all-weather accessible roads total nearly 6.6%. The scenarios are better at the PHC level, but around 8% of PHCs are without regular electricity supply and nearly 10.7% are without regular water supply. Nearly 3.8% do not have doctors.

Urban Infrastructure

This is one area in which maximum efforts have been made by the current government in India to regulate, incentivize and organize the sector to achieve its target of 22 million houses by 2022. The government has already provided incentives for promoting investment in affordable housing. Among the key legislation introduced are the Real Estate Regulation Act (RERA) and Real Estate Investment Trusts (REITs), which along with such programs as Housing for All, Smart Cities and AMRUT (Atal Mission for Rejuvenation and Urban Transformation) are contributing to a larger change.

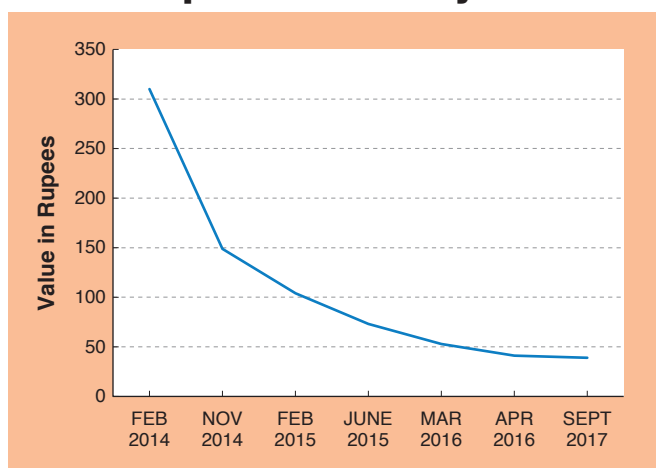
TABLE 4

Emerging disease burden in India

Diseases	Extent of Coverage
Hypertension	Every fourth individual in India aged above 18 years has hypertension
Obesity	Age standardized obesity prevalence increased by 22% in the past 4 years
Diabetes	India has the world's second-highest number of diabetic patients
CVD death rate	Cardiovascular diseases (coronary heart disease, stroke and hypertension) account for 45% of all NCD deaths
NCD toll	The probability of dying from NCDs between ages 30 and 70 years is 26%. Accounts for 60% of deaths in India
Communicable diseases	22% of global TB incidence
India still accounts for 16% of global maternal deaths and 16% of global newborn deaths.	

Source: *pwc (2017). PricewaterhouseCoopers Private Limited.*

CHART 3

UJALA-Impact of economy of scale

Source: PIB (2017). PM Modi addressing ICSI gathering on Oct. 4, 2017, Press Information Bureau

In the Annual Budget of 2017-18, the government has even provided the National Housing Bank with refinance for an individual housing loan scheme. In order to make “the profit-linked income tax exemption for promoters of an affordable housing scheme” announced earlier more attractive, certain changes were added to the scheme. Already in the Annual Budget of 2016-17, several provisions were made to promote investment. This was done to stimulate housing activity and investments in REITs.

The fact that the Indian government has already granted infrastructure status to affordable housing has encouraged several funds and agencies to come forward and invest in the sector. In the year 2016-17, foreign direct investment (FDI) is almost \$43.5 billion. Qatar Holding has committed to invest \$250 million in its affordable low- and middle-income fund, while the Land and Housing Corporation of South Korea has also shown interest in low-cost housing projects in India. It is estimated that a \$1.3 trillion housing boom would be the next growth driver in India, adding 60 million new houses during the six years beyond 2018 and creating two million jobs annually. There is a need for greater exploration to attract more FDI into this sector. The newly appointed minister for housing and urban affairs, Hardeep Singh Puri, has introduced eight public private partnership (PPP) options for the private sector to invest in the affordable housing sector, part of the new PPP initiative to promote private investment in affordable housing in line with the Housing for All target of 2022.

Another important initiative which has triggered a major revolution

in urban areas is the supply of low-cost LED bulbs (UJALA — Unnat Jeevan by Affordable LEDs and Appliances). In the period from February 2014 to September 2017, the price of a 9-watt LED bulb has declined from 310 rupees to 39. This has led to greater adoption and production by various enterprises. Energy Efficiency Services Limited, a public sector enterprise under the Ministry of Power, has distributed 264 million LED bulbs, and other organizations 414 million (Chart 3).

Conclusion

The necessary impetus toward economic reforms opens up the possibility for enhanced FDI in social infrastructure, particularly in health, education, low-cost housing and other areas like public hygiene, sanitation, and supply of nutritious products. This in turn would facilitate generation of derived demand, which would lead to further expansion of the frontiers of the economy — on both supply and demand fronts.

The pull factor for FDI would be higher rates of return due to a relatively young population, a relatively high rate of economic growth with various development projects, and dynamically increasing demand. In this way, three Ds — demographic dividend, demand and development — will merge, of course with democracy as an overarching strength.

FDI is also required as there is a resource gap. The government is making special efforts to put in place a policy regime that could motivate local entrepreneurs and industrialists not to invest outside India but find avenues to invest within the country. In 2013, outbound FDI was almost \$80 billion and inbound FDI was \$33 billion, but currently the picture has completely changed, with inbound FDI close to \$78 billion and outbound FDI around \$48 billion. As a result, the overall policy framework for widening and strengthening the social infrastructure to implement the agenda of SDGs will move forward when the macro-economic variables fall into shape and provide impetus for overall growth of the economy. **JS**

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