

## Boosting Infrastructure Development: A Panacea for Economic Growth

Lt Col Anil Raj



*Image source: Live Mint*

### Introduction

The National Infrastructure Pipeline (NIP) recently launched by the government envisages an expenditure of around ₹100 lakh crore for the period 2020–25, towards achieving the targeted GDP of US\$ 5 trillion by 2025. The fact that the fixed investment rate has been on the decline since 2011, however, makes the target seem like a tall order. And increasing the budgetary allocations exponentially to meet the gap in funding is definitely a challenge to the government, given the low tax to GDP ratio.

As per the Economic Survey 2019–20, as the fixed investment rate<sup>1</sup> increases, the GDP increases and so does the consumption. In the case of India, usually there is a lag of 3–4 years for the impact of this increase to be seen on the GDP growth. Similarly, there is a further lag of 1 to 2 years to see the impact on the growth of consumption as a result of the GDP growth. As per the National Statistical Office data, the fixed investment rate has been on the decline since 2011–12 and has stabilised and showing an upward trend from 2016–17 onwards. It means that the GDP growth corresponding to the increase in the investment rate will manifest somewhere in 2021–22.

The above statistics about the slowdown in investment is in line with the fact that credit growth of banks across all sectors dipped post 2013 to 2018. One of the largest declines was seen in the infrastructure sector which saw the growth of credit<sup>2</sup> (CAGR) plummet from 28.9 per cent during March 2008–March 2013 to 7.7 per cent during March 2013–March 2018. This explains the fall in private participation by over 27 per cent in the roads sector alone during this period.

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<sup>1</sup>It is the purchase of newly produced fixed capital per unit time or in other words is the accumulation of physical assets such as machinery, land, buildings, installations, vehicles or technology. It is not the investments made in labour, ongoing operating costs, materials or financial assets as they do not involve purchase of physical assets.

<sup>2</sup>Reserve Bank of India.

The growth in the infrastructure sector, however, is believed to be a panacea for the overall economic development of the country. Towards this end, the policy of the government has been on the right track with the recent launch of the National Infrastructure Pipeline (NIP) for the period FY 2020–25. Energy (24 per cent), Roads (19 per cent), Urban infrastructure (16 per cent) and Railways (13 per cent) amount to over 70 per cent of the projected capital expenditure during this period. The funding for the proposal under NIP is to be shared equally by the Central Government (39 per cent) and State Government (39 per cent) followed by the Private Sector (22 per cent). The government expects that together with these policy thrusts and FDI inflows, the fixed investment in the economy would increase in the case of both brown-field and green-field infrastructure projects. Till then, the budgetary allocations will need to be exponentially increased by both Central and State governments.

But with India's low tax to GDP ratio, it is an uphill task for the government to allocate funds for investment and infrastructure while remaining within the bounds of fiscal prudence. The expenditure pattern of the government in the last few years reveals that capital expenditure is less than 40 per cent of all expenditures. Apart from budgetary provisions, Extra Budgetary Resources (EBR) have also been mobilised to finance infrastructure investment since 2016–17. A major chunk of capital expenditure allocation in the infrastructure sector is in the construction of roads and railways. All this calls for substantial investments by the private sector under Public-Private Partnership (PPP) or other modes, now that major tax cuts have also been extended to woo the corporate sector.

The following paragraphs analyse the sector-wise issues, expenditure pattern over preceding years and compare them with projected figures for the next fiscal.

## Energy

Access to electricity is necessary for inclusive growth and for promoting ease of living. The installed capacity stands at 364.96 GW as on October 31, 2019. Thermal power still accounts for 63 per cent of the installed capacity and roughly half of the generation capacity is in the private sector. As part of the National Clean Air Programme (NCAP), utilities running thermal power plants were required to install Flue Gas Desulphurisation (FDG) units by December 2019 to minimise SO<sub>2</sub> emission levels, but 29 per cent missed the deadline. The private companies will need to think about switching over from thermal power to other less polluting ways of generating electricity due to environmental concerns in the times to come.

The Union Budget 2020 also gave a big push for renewables (RE) and rural economy through solar power by allotting ₹2149.65 crore in line with the Sustainable Development Goals (SDGs), an increase of 20 per cent over the last fiscal. The discoms welcomed the emphasis on smart metering.

The ongoing economic slowdown has, however, affected the demand which in turn has impacted the capacity addition and generation in the RE sector. Solar power generation recorded the lowest growth rate in the last four years. Wind energy generation which accounts for around 70 per cent of the country's total RE output registered a negative growth. A prolonged monsoon which affected the demand of power generation for pumps in agriculture sector, reduction in cooling requirement in domestic and commercial sectors and a decline in overall industrial activity have together resulted in the current power woes. Also power discoms across the country owe more than 81,000 crore to power generation companies in October 2019.<sup>3</sup>

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<sup>3</sup>Ministry of Power, Government of India.

## Transport Infrastructure

A sum of ₹1.70 lakh crore has been proposed for the transport infrastructure in 2020–21 by the Finance Minister.

### Road Sector

In the last five years, the budgetary allocations have increased by 65 per cent with more than 1.5 times increase in the funding from EBR (including NHAI borrowings and monetisation of existing NHs). However, private participation fell by 27 per cent during the same period. In fiscal year (FY) 2018–19, the budgetary allocation and private funding were 48 per cent and 13.8 per cent, respectively. In terms of absolute numbers, the government allocation comes to around ₹76,000 crore. The balance 38.2 per cent came from EBR. In the run-up to 2024–25, NHAI plans to generate about 84,000 crore from monetisation of 6165 km.

The total investment in constructing NHs by both government and private investors was about ₹1.59 lakh crore during the last financial year. But this financial year, the pace of construction so far seems to have moderated as per the Economic Survey 2019–20. There is an increase of 10.6 per cent in the government allocation for 2020–21 to 91,656.45 crore.

### Railways

The railway infrastructure would need an investment of ₹50 lakh crore for the period 2018–30. This would translate into capital expenditure outlay of railways alone to be around 1.5 to 1.6 lakh crore per annum. The budget proposes around 70,000 crore in the FY 2020–21. The government proposes to bridge the gap using PPP funds and EBR from railway assets. Though the budget allocation increased by 19.5 per cent in 2019 over the previous year, it rose by only 6 per cent in FY 2020 over the last year's allocation of ₹65,837 crore. As part of monetisation of railway assets, a proposal is being mooted to set up large solar power capacity alongside rail tracks, on land owned by the railways.

To garner private funds, the government is bidding to privatise the railways in a big way by opening up the sector to not only redevelop existing stations but also run around 150 trains between places of iconic tourist destinations. The government expects around ₹16,000 crore investment by private players, both domestic and international. The ICF coaches are being replaced by LHB coaches to run most of the long-distance express trains, Rajdhani express trains and Shatabdi trains. The general perception is that the speed of the trains can be increased by bringing in imported rakes or running swanky trains and locomotives. But the problem is not of top speeds but maintaining the top speeds uninterrupted over a longer period of time. The top speeds for most old style ICF coaches and LHB trains are in the range of 110–120 kmph and 130–140 kmph, respectively. There are locomotives which are capable of hitting speeds of even 160 kmph also. But the average speed for most trains across the entire length over which the train runs is just 50–60 kmph, resulting in delays over and above the 'slack time' built into the schedule which takes care of all the anticipated delays. The main problems are unavailability of enough tracks leading to frequent overtakes and stoppages, and weak tracks which require constant maintenance resulting in low top speeds and speed restrictions.

### Civil Aviation

Even though air traffic has been increasing steadily over the years, passengers and cargo handled by airports registered a decline<sup>5</sup> of 34 per cent and 32 per cent, respectively in FY 2018–19 and remained stagnant since then. One of the most talked about events of 2019 was the suspension of operations by Jet Airways, one of the biggest airlines in terms of passengers, and for many years the second largest airlines.

As part of the fillip provided by the Finance Minister in the Budget 2020 to revive the sector, the government has proposed development of up to 100 new airports with an anticipated fleet increase from the present 680 to 1200 aircraft in the next four years. But fleets operated by airlines across the world have had technical issues with Airbus A320neo powered by Pratt & Whitney geared turbofan engines which are also used by Indian carriers like Indigo, GoAir and SpiceJet airlines. SpiceJet fleet's Boeing 737 Max aircraft have also been grounded over accidents of International carriers in the recent past.

About 16 private greenfield airports are also being planned. Till January this year, out of 96 auction-driven<sup>6</sup> Regional Connectivity Scheme (RCS) airports identified, 44 RCS airports and 238 RCS routes have commenced. The allocation for RCS is ₹465.17 crore. SpiceJet and Indigo can be the biggest beneficiaries provided they are able to resolve the engine and safety issues.

### **Water Transport**

The government plans to corporatise at least one major port and its subsequent listing on the stock exchange. The total outlay for the Ministry of Shipping of ₹1269.80 crore is an increase of 8.3 per cent over the preceding year.

Towards shifting of inland cargo movement from road and rail to waterways, multimodal terminal at Varanasi has been operationalised and two more at Haldia and Sahibganj have achieved substantial progress. The Inland Waterways Authority of India (IWAI) aims to move 120 million tonnes of cargo using waterways from the present 72 MT by 2023. But all this requires a fine balance between sustainable development and concerns of water pollution due to oil-spillage and threat to aquatic life which has a direct bearing on the livelihood of people living off the rivers and water bodies.

### **Housing Infrastructure**

The current trend of migration from rural to urban areas in the country would result in about 60 crore people residing in urban habitats by 2030. With haphazard development in most urban areas, this number will put tremendous strain on already worsening urban infrastructure as far as water and sanitation as well as housing is concerned. The PMAY-U<sup>7</sup> proposes to provide pucca houses with basic amenities to all eligible poor by 2022. Out of 1.12 crore houses registered, so far only 32 lakh<sup>8</sup> houses have been completed and delivered.

Sixty per cent of India's current GDP is contributed by towns and cities of which the construction sector including housing accounts for 8.2 per cent while employing 12 per cent of the workforce.<sup>9</sup> With the creation of the National Urban Housing Funds (NUHF), the

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<sup>5</sup>Economic Survey 2019–20.

<sup>6</sup>Least bidder for requirement of VGF to be selected.

<sup>7</sup>Pradhan Mantri Awas Yojana (Urban) Mission launched in June 2015.

<sup>8</sup>Economic Survey 2019–20.

<sup>9</sup>Ibid.

government proposes to augment the budgetary allocations with up to 60,000 crore through EBR.

Apart from the unavailability of urban land and delay in approvals from multiple local authorities, rising construction costs and lack of skilled manpower along with financing constraints for Low Income Groups (LIGs) are plaguing the affordable housing sector. Urban housing shortage is prominent across the Economically Weaker Sections (EWS) and LIGs which together constitute about 95 per cent of the total housing shortage.<sup>10</sup> The capital outlay proposed is just ₹545.32 crore as against RE of ₹1467.43 crore in FY 2018–19, a huge fall of almost 63 per cent.

### **Growth Revival and Employment Generation: Food for Thought**

The GDP growth in FY 2019 is projected at 5 per cent as compared to 6.8 per cent in the last fiscal. The RBI has also reduced its projection downwards to 5 per cent for 2019–20 in its December policy from its 6.1 per cent projection in October. In the budget provisions every year, the receipts and expenditure by the government has increased year-on-year, but why does it not translate into achievement of higher growth rates every year? What should be the government policy to increase further allocations or to induce much larger private participation? How can there be an increase in the disposable income to induce consumption? These are very pertinent questions which every policymaker is trying to understand and find solutions to. But are there real solutions?

Some very interesting facts about GDP growth have been put forth by Abhijit Banerjee and Esther Duflo in their book *Good Economics for Hard Times*. They postulate that growth is hard to measure and even harder to know what drives it. Growth rates for the same country can change drastically from decade to decade for no apparent change in anything else. Even the World Bank sponsored Growth Commission has not been able to find a sure-shot recipe for the attainment of high growth.

Infrastructure sector involves long gestation periods as far as returns are concerned and therefore the present sentiment in private participation. Another problem with private funding in India is that of high lending rates when compared to the rest of the world, leading to very high cost of capital, even though depositors earn very little bank interest. With dwindling private money in infrastructure funding, the government has to increase its share. But without widening the tax base with the present tax rate, how it is going to meet this growing demand is anybody's guess.

Another reason for the slowdown in the construction industry is lack of skilled workforce. There have been reports that schemes like MGNREGA have been able to stop distress-migration from rural areas to cities. Also due to improvement in social infrastructure and greater emphasis on certain skills, rural youth and urban poor are drawn towards not-so-strenuous jobs like driving LMVs/HMVs, hair dressing, tailoring, waiting/cleaning in restaurants, etc. Even though skilled workers like mason, carpenter, electrician, plumber, etc. command higher wages in forward States like Kerala, they are still in short supply leading to time overruns of construction projects. To make matters worse, unskilled workers do not stick to their jobs in the long run and acquire the requisite competency and experience of a skilled trade because they are initially at the mercy of petty contractors who do not want to extend any legal or social

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<sup>10</sup>KPMG-NAREDCO. 2012. Bridging the Urban Housing Shortage in India.  
<http://www.naredco.in/notification/pdfs/Urban-housing-shortage-in-India.pdf>. Accessed February 17, 2020.



security benefits to the construction workers. The problem has become so acute that certain sectors in the manufacturing industry connected to the infrastructure sector are now deploying welding and cutting operators from China, Russia and East European countries.<sup>11</sup>

But not all is lost and there is a silver lining in the dark clouds. The Uralungal Labour Contract Cooperative Society (ULCCS) in Vadakara, Kozhikode, Kerala, is showing the way.<sup>12</sup> The 94-year-old cooperative society employs 12,000 people, the largest of its kind in Asia, and has ₹2700 crore worth of work in its kitty from flyovers to bridges to roads with a revenue share of ₹1100 crore in 2018–19. With a host of employee benefits like PF, ESI, holiday wages, pension, interest-free loans apart from bonus twice a year and medical insurance, it is no surprise that the cooperative has managed only a slim profit of about ₹3 crore. This is what is known as inclusive growth.

The best bet for India therefore, as Abhijit Banerjee and Esther Duflo put it, is to attempt to do things that can make the quality of life better for its citizens with the resources it already has. The need to be 'business-friendly' should not lead to anti-poor and pro-rich policies, which end up doing nothing for growth other than enrich the top earners of the economic pyramid. Time has proven more than once that giveaways to the rich will never trickle down.<sup>13</sup>

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<sup>11</sup><https://www.thehindubusinessline.com/economy/india-now-imports-skilled-labour-for-infra-projects/article29657364.ece#>. Accessed February 17, 2020.

<sup>12</sup><https://economictimes.indiatimes.com/news/economy/infrastructure/how-this-kerala-cooperative-in-the-infrastructure-sector-has-become-a-role-model/articleshow/72615180.cms?from=mdr>. Accessed February 17, 2020.

<sup>13</sup>Banerjee, V. Abhijit, and Esther Duflo. 2019. *Good Economics for Hard Times*. New Delhi: Juggernaut Books.