

# Analysis of Infrastructure Building Policies in India: Meeting SDG 9

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Following the footsteps of UN, India has taken certain initiatives as well. All forms of transportation -- roads, railways and waterways -- are being rapidly expanded. Road connectivity and electricity are being brought to rural areas. Many new schemes were introduced after the SDGs came into light. Schemes like Make in India. The 'Make in India' program is an initiative launched to encourage companies to increase manufacturing in India. The increased manufacturing will push the investment limit which would in turn trigger infrastructure building. Another thing that showed impact of SDGs was NHAI. The NHAI was created through the promulgation of the National Highways Authority of India Act, 1988. Section 16(1) of the Act states – function of NHAI is to develop, maintain and manage the national highways and any other highways vested in, or entrusted to, it by the Government of India. The government contracts out the concessions/rights to build, operate and maintain parts of highways, flyovers, underpasses, etc., to the private sector. The private partners are required to fund the project upfront. The ownership of the road assets generated through PPP is returned back to the government at last (end of the contract period). These PPPs on national highways are funded by the National Highways Authority of India (NHAI) on behalf of the Ministry of Shipping, Roads Transport and Highways (MSRTH).

12<sup>th</sup> Five Year Plan – The 12<sup>th</sup> plan mainly emphasised infrastructure building and increasing investments by the

## Introduction

This paper focuses on Indian economy in the light of sustainable development goal number 9. Indian economy is a developing mixed economy. It is world's sixth largest economy in terms of nominal GDP and third largest economy by GDP (PPP) 181 countries as per International Monetary Fund. The Indian economy is projected to grow at an annual rate of 7.4% in 2018 and 7.8% in 2019, according to a recently released IMF Economic Outlook. Forbes cites that, India's economy is lifted by strong private consumption, waning transitory effects of demonetisation and implementation of the national goods and services tax. Over time, growth is expected to gradually rise with continued implementation of structural reforms that increase productivity and incentivize private investment.

In 2015, the General Assembly embraced Sustainable Development as its agenda. 17 Sustainable Development Goals (SDGs) were framed to be achieved till 2030. It is built on the premise that no one is left behind. It ensures development for all. Amongst these 17 goals is-Goal 9: Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation. This goal targets to develop quality, reliable, sustainable and resilient infrastructure, including regional and transborder infrastructure. It also aims to support economic development and human well-being, with an edge on affordable and equitable access for all.

government and private. public-private partnerships was also recognised as an efficient arrangement. Total spending on infrastructure development was estimated to increase to 9.9 per cent of GDP in the 12<sup>th</sup> plan from 7.5 per cent in the 11<sup>th</sup> plan and 5.1 per cent in the 10<sup>th</sup> plan. The Government of India is expected to increase its spending on the development of the transport sector to USD173.1 billion in the 12th plan. Renowned experts believe in order to achieve economic growth, infrastructure needs to be developed.

**NATIONAL MANUFACTURING POLICY** – The Department of Industrial Policy and Promotion (DIPP) under the Ministry of Commerce and Industry has notified the National Manufacturing Policy (NMP) on November 4, 2011. The main objective of this policy is to enhance the share of manufacturing sector in GDP to 25% from 16% and creating 100 million jobs by 2022. Although this policy came before SDGs but it proves as a great initiative towards the target of the goals.

**Need of Study:-** The SDGs replaced the Millennium Development Goals (MDGs) which expired in the year 2015 (which also marks the beginning of SDGs). It is a collection of 17 goals and 169 targets aimed at resolving the social, economic and environmental problems troubling the world in a span of 15 years (2015-2030). Governments came up with the idea at the Rio+20 conference on sustainable development in Brazil in 2012. According to United Nations

MDGs accomplished various achievements including, decreasing the number of people living in extreme poverty by more than half i.e. to 836 million in 2015, gender parity in primary schools in the majority of countries, a reduction in the rate of children dying before their fifth birthday by more than half since 1990, a fall of 45 percent worldwide in maternal mortality, over 6.2 million malaria deaths averted and 37 million lives saved by tuberculosis prevention and treatment, access to improved drinking water sources for 2.6 billion people between 1990 and 2015. But still there are some forfeit, which paves the way for SDGs to barge in. The following point wise illustration will make the need of Sustainable Development Goals more clear –:

- Around 800 million people still live in extreme poverty and face hunger.
- Between 2008 and 2012, millions of people were forced to migrate from their homes due to natural calamities. This number is predicted to rise as the planet's increasing temperature invites more extreme weather conditions. Rising sea levels and rapidly melting glaciers are the signs.
- 40 percent of the global population is affected with the water scarcity and is projected to increase with the drying out of fresh water lakes.
- Approx 1 billion people still practice open defecation.
- Gender inequality persists in spite of more representation for women in parliaments and gender parity in schools.

#### Review of Literature:-

Dr. Babaraju. K. Bhatt (Principal), Seema A. Suryawanshi, Vishal J. Mali(2014) in “The National Health Outcomes in The 12<sup>th</sup> Five Year Plan and The Goals Thereof” analysed that, In 12<sup>th</sup> Five Year Plan of GOI dimensions which are very important in improving the health of the population are fixed. He used parameters like IMR, MMR and TFR to analyse.

Salisu Ahmed Kabiru (2016) in his research paper studied infrastructure situation in Nigeria. He took into consideration transport, education, energy, health factors and concluded infrastructure development in Nigeria is poor.

K J Joseph in his paper researched about infrastructure, industrialisation and innovation in India in accordance with SDGs. He used various schemes like Make in India, Manufacturing policies and FYP for his research. He also gave conclusion remarks on South –South Cooperation.

Jonardan Koner, Avinash Purandare, Akshay Dhume (2012) gave a paper about Impact of Infrastructural Development on Social and Economic Growth in Indian States. He used statistical tools like dummy regression model. The study reveals that the infrastructural development has played a significant role in the reduction of mortality rate per thousand populations in Indian States and also has played a great role to increase per-capita income in Indian States.

Dr.Puneet Aneja (2016) gave a research paper on Make in India. He analysed policies for new initiatives, intellectual property facts, FDIs, national manufacturing, etc. He concluded that the concept of Make in India is definitely going to boost up the Indian economy and will help in meeting the major challenges of poverty, unemployment, low per capita income and help in sharing the burden of government.

TCA Anant and Ram Singh made a study on distribution of highways on PPP basis and used logit probability function, correlation, dummy.

#### OBJECTIVES -

- To study the growth of national highways in India.
- To study the infrastructure building in 12<sup>th</sup> Five Year Plan.
- Impact of infrastructure building on growth of Indian economy.

**METHODOLOGY** - NHAI - National Highway Authority of India on the half of GOI develops, maintains national highways of India. The progress of highways accounts to infrastructure development.

Source: planning, Ministry of Road Transport and Highway for analysing the growth in particular sectors.

As per 31<sup>st</sup> October 2016 -

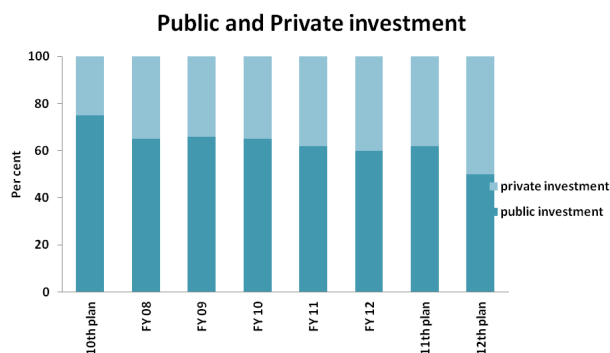
ROADS ACHIEVEMENTS OF NATIONAL HIGHWAY DEVELOPMENT PROJECTS AND OTHER PROJECTS					
NHDP Components	Total Length (km)	Completed 4/6 lanes (km)	Under implementation		Balance for award of civil work (km)
			Length(km)	No. of contracts	
1	2	3	4	5	6
GQ	5846	5846	0	0	0
NS - EW	7142	6499	391	31	252
NHDP Phase III	12109	7144	3213	82	1752
NHDP Phase IV	20000	5144	8616	175	6270
NHDP Phase V	6500	2483	974	25	3043
NHDP Phase VI	1000	0	165	8	835
NHDP Phase VII	700	22	79	3	599
TOTAL	53297	27108	13438	324	12751

Just after SDGs came into force, 53 thousand km of national highways were to be constructed. Out of which 27 thousand 4/6 lanes were completed and rest were completed later on.

GROWTH OF NATIONAL HIGHWAY IN INDIA CENTRAL GOVERNMENT EXPENDITURE INCURRED THERE ON			
year	Length of National Highways (km) (as on 31 <sup>st</sup> march)	Expenditure on National Highways (crore)	
		development	maintenance
2000-01	57737	1211.00	63.49
2001-02	58112	1611.40	67.75
2002-03	58112	5144.81	626.54
2003-04	65569	5190.17	731.62
2004-05	65569	4963.54	679.05
2005-06	66590	8746.62	838.31
2006-07	66590	13942.60	784.30
2007-08	66754	12337.06	981.35
2008-09	70548	14670.86	969.45
2009-10	70934	14660.20	1050.50
2010-11	70934	16868.60	1488.30
2011-12	76818	25287.03	1082.46
2012-13	82246	16318.67	1460.28
2013-14	91287	20264.17	1802.54
2014-15	97991	23688.85	2524.24
2015-16	101010	40017.40	2525.28

Over the last two decades there is growth in national highways in India. But soon after the implementation of SDGs the expenditure in development of national highways became almost double as compared to the previous year i.e. from 23 thousand crore in 2014-15 to 40 thousand crore on 2015-16.

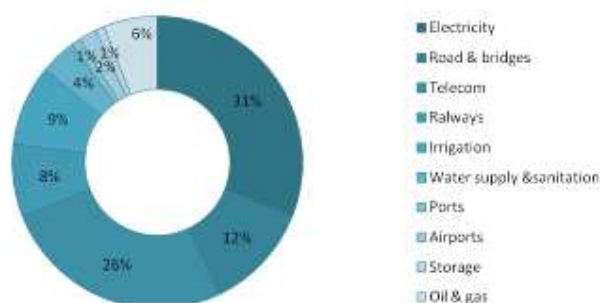
12<sup>TH</sup> FIVE YEAR PLAN – The 12<sup>th</sup> plan emphasises on the need for expanding infrastructure and increasing investments by the government, private and forms of public-private partnerships.



Source: Planning Commission, eleventh plan mid-term approval, Aranca Research.

12<sup>TH</sup> FYP here is a special case as one can see. It exhibits around 50% investment of private sector. This depicts the goal of 12<sup>th</sup> FYP i.e. form public-private partnership. Investment portfolio –

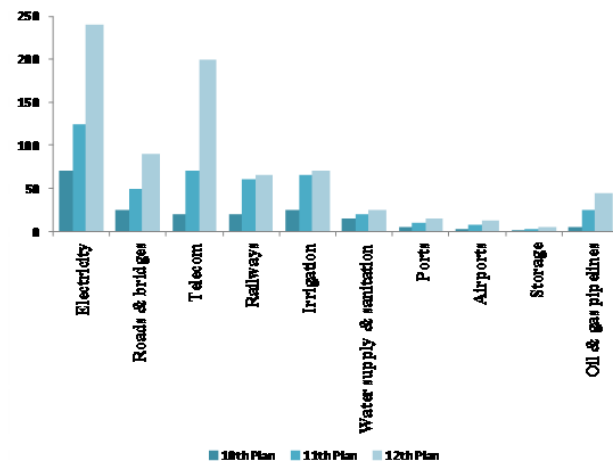
Infrastructure spending in different sectors (12th Plan)



Source: International finance corporation report, Aranca Research.

In allocation of spending there is a huge share of electricity and telecom. After these two, roads and bridges are given the maximum allocation.

Trend in infrastructure spending (USD billion)

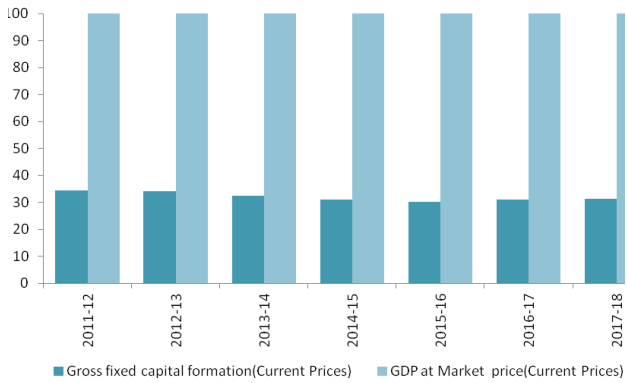


Source: International finance corporation report, Aranca Research.

There can be seen significant rise in infrastructure spending from 11<sup>th</sup> FYP to 12<sup>th</sup> FYP. In electricity the spending became almost double. While in telecom sector it became three times in 12<sup>th</sup> FYP as compared to 11<sup>th</sup> FYP.

Impact of infrastructure building on national economy growth – Does infrastructure building have an impact on the national economy? To study the impact, GDP is used as an indicator. The following data shows contribution made by gross fixed capital formation in GDP every year.

**Share of infrastructure building on GDP (out of hundred)**



Source: [dbie.rbi.org.in](http://dbie.rbi.org.in)

The graph clearly shows that infrastructure building shows significant contribution in growth of economy.

**CONCLUSION –**

From the above analysis it can be concluded that after the introduction of SDGs there is a significant rise in the kilometres of national highways construction. 12<sup>th</sup> Plan shows private and public equal participation in investment and the investment become 2-3 folds in sectors like electricity and telecom. It can also be concluded from the above study that infrastructure building plays an important role in nation building. Infrastructure building makes a visible contribution in national GDP, which in turn is indicating national growth rate.

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