

RURAL INFRASTRUCTURE : AN OVERVIEW

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Infrastructure development in providing modern facilities of roads, housing, communication, banking etc has poised the country at the threshold of an elite and developed nation. The Central Government's priority in irrigation infrastructure development supported by MSP and crop insurance, health infrastructure in terms of AIIMS and Health Insurance, Stand Up and Start Up initiatives, Cashless Transaction, Direct Benefit Transfer, e-governance and m-governance, and the like, are forward looking futuristic sustainable economic and social development initiatives

Infrastructure is critical for a country's development and a country's development and progress is judged by the quality of infrastructure it has. Infrastructure could be private and public, physical and services, social and economic. Economic infrastructure could be transportation, communication, power, irrigation, and the like while that of social infrastructure comprise of education, health, drinking water and sanitation, housing, etc. In addition to the development of these sectors, the infrastructure development brought in the efficiency of investment, manufacturing competitiveness, exports, employment, urban and rural development, quality of life and a host of benefits for the country.

The Rangarajan Commission (2001) defined infrastructure as having natural monopoly, non-tradability of output, bestowing externalities on society, high sunk costs or asset specificity, non-rivalness in consumption and possibility of price exclusion. The Rakesh Mohan Committee Report (1996) and the Central Statistical Organisation (CSO) presents infrastructure as Electricity, gas, water supply, telecom, roads, industrial parks, railways,

ports, airports, urban infrastructure and storage as infrastructure. The RBI (2007) looked infrastructure as power, telecommunication, railways, road and bridges, sea port and airport, industrial parks and urban infrastructure (water supply, sanitation and sewage projects). The Insurance Regulatory and Development Authority (IRDA) (2008) defined infrastructure to include Road, including toll road, bridges or a rail system, Port, airport, inland waterways or inland port, Water supply project, irrigation project, water treatment system, sanitation and sewerage system or solid waste management system, telecommunication services whether basic or cellular, domestic satellite services, network of trunking, broadband network and internet services, an industrial park or special economic zone, transmission or distribution of power, construction for preservation and storage of processed agro-products, perishable goods such as fruits, vegetables and flowers including testing facilities for quality, educational institutions and hospitals, and any other public facility of similar nature as may be notified by the authority in this behalf in the Official Gazette. The Income Tax Department treats electricity, water

supply, sewerage, telecom, roads & bridges, ports, airports, railways, irrigation, storage (at ports) and industrial parks/SEZ, as infrastructure. The World Bank treats power, water supply, sewerage, communication, roads & bridges, ports, airports, railways, housing, urban services, oil/gas production and mining sectors as infrastructure.

The Government of India has taken the infrastructure sector, mainly highways,



renewable energy, housing, digital infrastructure and urban transport, as a priority sector, for which an allocation of Rs 5.97 lakh crore has been earmarked under the infrastructure sector in the Union Budget 2018-19.

Road Infrastructure:

Road network has been the fulcrum of country's economy, for transportation of goods, services, agriculture produce, travel and connectivity, and act as a growth centre. The promotion of all weather qualitative durable road network ensures faster economic and social gains, trade flows, integration of markets.

The Pradhan Mantri Gram Sadak Yojana (PMGSY) primarily aims at providing all weather road connectivity to unconnected villages with about 82% connected by December 2017 and the remaining 47,000 habitations are targeted to be completed by March 2019.

The total expenditure on the Ministry of Road Transport and Highways for 2017-18 is around Rs 64,900 crores, which is 24% higher than the revised estimates for 2016-17. In 2017-18, of the total expenditure, the highest allocation is towards roads and bridges at 63%, which is followed by allocation towards the National Highways Authority of India at 37%, with revenue expenditure of Rs 10,723 crore, and capital expenditure at Rs 54,177 crore.

Invigorating India's villages with the Shyama Prasad Mukherji Rurban Mission

- To create 300 such Rurban growth clusters over the next 3 years, which will be ODF, green and also create agro based and thematic clusters based on skilled manpower and access to economic opportunities
- 267 clusters already identified. 153 Integrated Cluster Action Plans (ICAPs), which are the blue prints of investment for each cluster, approved for 29 States and one UT of Dadra & Nagar Haveli

Connecting villages through Pradhan Mantri Gram Sadak Yojana

- Enhanced road connectivity in every village by 2019. Already, rural road connectivity up from 56 per cent in 2014 to 82 per cent, including in villages mostly in far flung and inaccessible areas
- 73,727 km of roads to be constructed in the immediate future

India has one of the largest road networks in the world with about 47 lakh km of roads, which includes National Highways (NHs), Expressways, State Highways (SHs), district roads, PWD roads, rural roads, etc. Road infrastructure caters to transport over 60% of total goods and 85% of total passenger traffic. An ambitious road and highways development program under the Bharatmala Project aimed at integrating many other schemes, projects and programs, targeted to cover 25000 km of roads and bridges, with development of about 7000 km State roads along coastal area, border area, with special focus on connectivity of non-major ports, roads for backward areas, religious and tourist places connectivity programme, Setubharatam Pariyojana aimed at elimination of the Railways crossing in India by constructing 1500 major bridges and 200 Railway over Bridges (RoBs) or Railway under Bridges (RuBs) by 2019, ensuring high speed road vehicular movement and train movement, to be completed by 2019, three years before the completion of entire Bharatmala Project in 2022, district headquarters connectivity scheme for development of 9000 kms of road, to be declared as National Highway and to provide better connectivity between district headquarters.

Communication Infrastructure:

The Telecommunication sector has phenomenal growth with growth in e-governance, cashless transaction in banking and financial services, trade, education, health, agriculture, travel, tourism, logistics, transportation and citizen services sector. The growth in telecom sector has also generated innovations, entrepreneurship through the Start-up India and Stand-up India, and has made mobile communication among more than 80 crores population and contributing significantly with about 1.75% of the Indian GDP for the year 2015, according to Broadband India Forum(BIF).

About 1.5 lakh Gram Panchayats are being connected with optical fibre for providing internet and wi-fi hotspots and access to digital services at low tariffs, through Digital India and the Bharat Net Project. Further the Digi-Gaon is being planned for providing the platform for the financial services, tele-medicine, education, e-governance, e-marketing and skill development. The Digital India Program was launched by the Government of India in July 2015 at an estimated cost of Rs 1,13,000 crores,

with a vision to transform India into a digitally empowered society and knowledge economy, with three primary focus areas of creation of digital infrastructure, electronic delivery of services and digital literacy, and empowerment of citizens with e-participation in governance.

Renewable Energy Infrastructure:

India is emerging as one of the largest producer of energy from renewable sources, catering to about 20% of the total installed power capacity (69.02 GW) as of 31 March 2018 and with hydro power it contributes about 33 per cent. The wind power capacity is about 34,046 MW as of 31 March 2018, making India the fourth-largest wind power producer in the world, and it is aimed to generate 100 GW of solar power by 2022. Biomass power from biomass combustion, biomass gasification and bagasse co-generation reached 8.3 GW installed capacity and family type biogas plants reached 3.98 million as of 31 March 2018. International Solar Alliance Project is promoting the growth and development of solar power internationally to over 120 countries and India set a target of achieving 40% of its total electricity generation from non-fossil fuel sources by 2030.

Housing Infrastructure:

Housing as a basic need and right both in rural and urban area is reflected in the Pradhan Mantri Awas Yojana - Housing for All. PMAY (Gramin) targets to build about 1 crore houses by March, 2019, with a unit cost for minimum support of nearly Rs 1.5 lac to Rs 1.6 lac per household, with a provision of Bank Loan up to Rs 70,000 and provides skilling for 5 lakh rural masons by 2019 and allows 200 different housing designs across the country based on local conditions, with an outlay of Rs 819.7 billion, giving special thrust to hilly areas and LWE region, during first phase, with about 16.5 lakh houses completed and 34.6 lakh houses are under construction.

National Rural Drinking Water Programme:

The National Rural Drinking Water Programme (NRDWP) is targeted at providing every person in rural India with adequate safe water for drinking, cooking and other domestic basic needs on a sustainable basis, within the guidelines, accessible at all times and creation of the infrastructure for the

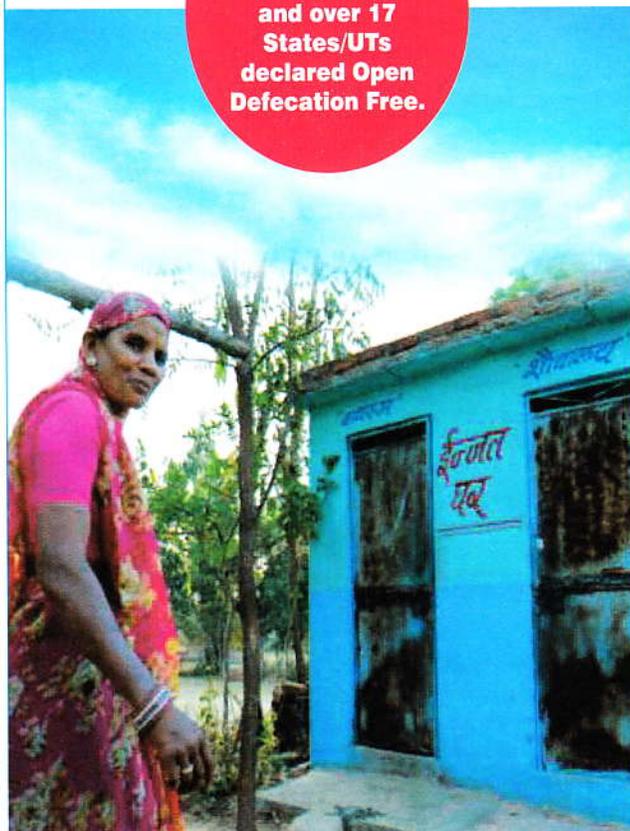
same, development of infrastructure and capacities for the successful operation of drinking water supply schemes in rural areas. About 1.7 million rural habitations provided drinking water under the National Rural Drinking Water Programme, 1.3 million (77%) habitations are fully covered under the guidelines of provision of 40 litres per capita per day (LPCD), while about 330,086 (19.3%) habitations are partially covered with safe water



Swachh Bharat Mission brings about a sanitation revolution

- Rapid construction of toilets across the country ensuring dignity of women and also helping to put an end to the practice of open defecation, which is unsafe and unhygienic
- Over 7.25 crore toilets built, over 3.6 lakh villages and over 17 states/UTs declared Open Defecation Free
- Sanitation coverage goes up from 38% in 2014 to 83%

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availability below 40 LPCD) and 64,094 (3.73%) are water-quality affected habitations, by March 15, 2017.

Swachh Bharat Abhiyan :

Swachh Bharat Abhiyan has been a revolutionary initiative for embedding the sense of sanitation, hygiene and health, introduced in 2014 and exhibited remarkable progress with a 85 % coverage in 2018-19, from 38.70% in 2014, with about more than 391 districts becoming open defecation free (ODF) covering 3.8 lakh villages. With Swachh Bharat Gramin, over 7.4 crore individual household toilets (IHHLs) have been built by May 2018, with an aim to cover 100% toilet coverage by December 2018 and people are coming forward to own toilets and participate in healthy waste disposal, with mindset change and social acceptability.

Irrigation Infrastructure under PMKSY:

A very innovative Govt of India Programme to promote productive agriculture is the Pradhan Mantri Krishi Sinchayee Yojana (PMKSY). Under this scheme convergence of investments to expand cultivable area, ensuring water use efficiency, improvement in recharge of aquifers, treatment of waste water from all sources for agriculture etc one taken up. Under this scheme under which water conservation, construction of farm pond, water harvesting structures, small check dams and contour bunding, construction of diversion canals, field channels, water diversion/lift irrigation, including development of water distribution systems, drips, sprinklers, pivots, rain-guns irrigation structures etc, for assured irrigation source, are promoted, and a Budget Outlay of Rs 5,300 crores were allocated during 2015-16, for this purpose.

Rural Infrastructure under the Mahatma Gandhi National Rural Employee Guarantee Act (MGNREGA):

Works undertaken under the Mahatma Gandhi National Rural Employee Guarantee Act(MGNREGA) are primarily rural infrastructure development works namely through watershed development like contour trench, contour bund, farm bunding, gabion structures, earthen dam, dugout farm ponds etc, agriculture development

works like manure and composting infrastructure etc, live stock related works like poultry and goat shelters etc, fisheries related works like drying yards, storm water drains etc, drinking water and sanitation related works like soak pits, recharge pits, individual latrines, school toilets, Anganwadi toilets, etc, flood management works like repair and deepening flood channels, and under irrigation infrastructure development like minor, sub minor and field channels etc. The Mahatma Gandhi National Rural Employment Guarantee Act (MGNREGA) has a budget allocation of Rs 48,000 crore, during 2017-18 and an allocated of Rs 55,000 crores for the financial year 2018-19, which has generated rural employment and provided rural livelihood support.

Conclusion:

Giving priority to infrastructure is a progressive measure, which can be treated as the social capital that accelerates the productive activities, livelihood and quality of lives. Infrastructure development in providing modern facilities of roads, housing, communication, banking etc has poised the country at the threshold of an elite and developed nation. The Central Government's priority in irrigation infrastructure development supported by MSP and crop insurance, health infrastructure in terms of AIIMS and Health Insurance, Stand Up and Start Up initiatives, Cashless Transaction, Direct Benefit Transfer, e-governance and m-governance, and the like, are forward looking futuristic sustainable economic and social development initiatives.

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