

Study of Rural Development through Infrastructure Development and the Initiatives by the Government of India

Dr. Reetuja Deshpande¹, Dr. Mangesh M. Bhople²

^{1,2}*Assistant Professor MAEER's MIT Arts Commerce and Science College, Alandi, Pune*

Abstract: The highway of rural development passes through the development of infrastructure.

India is an agrarian economy with two-third of the population residing in rural areas. According to the Census 2011 there are 6,49,481 villages in India and 44146 villages are in the state of Maharashtra. 70 percent of its rural households still depend primarily on agriculture for their livelihood, with 82 percent of farmers being small and marginal.

As per economic survey, rural economy contributes 46% towards the national income and 25-30% of India's GDP. Considering the figures, it is extremely essential to focus on the growth and development of India's rural economy in our journey to become \$5 Trillion economy by the year 2025.

Today, the primary source of rural economy has been shifted from agriculture to the non-farm sector including food processing, advanced animal farming, modern village industry. The educated youth in rural area is revitalizing of the rural economy. Implementing modern technology and mechanization in agriculture can improve productivity, efficiency, and profitability with reduced cost. The sustainable rural development can be achieved through human sustainability, social sustainability, economic sustainability, environmental sustainability.

Key Words: agrarian economy, rural households, human sustainability, social sustainability, economic sustainability, environmental sustainability.

INTRODUCTION

Infrastructure is the backbone of any country. It plays a very important role in supporting nation's economic growth and the same is the case with India. Rural infrastructure in the country is crucial for agriculture, agro-industries, and poverty alleviation in the rural areas. Infrastructure includes public utilities such as power, telecommunications, piped water supply, sanitation and sewerage, solid waste collection and

disposal, and piped gas, public works such as roads and major dam and canal works for irrigation and drainage, and other transport systems including urban and interurban railways, urban transport, ports and waterways, and airports.

The demand for rural infrastructure has undergone sea change over the last few decades due to the adoption of modern farming methods; management of resource constraints; influence of global value chains; expanded agro-processing demands; pressure on natural resources; demand for digitalization; evolving tax regimes; and climate change imperatives. NABARD has been playing a catalytic role in building India's rural infrastructure by leveraging various funds at its command. The latest addition to its range is the Rural Infrastructure Assistance to State Governments initiated in 2020 to support livelihoods in eastern India under the 5-J approach—Jan (people), Jal (water), Jameen (land), Janwar (livestock), and Jangal (forest). The scheme has now been extended to aspirational districts also. National Infrastructure Pipeline (NIP) estimates capital expenditure of Rs. 7,73,915 crores between FY2020 and FY2025 on rural infrastructure development by the center and states.

OBJECTIVES

- To know the regional spread of infrastructure
- To find out the Government initiatives in rural infrastructure
- To know about the Investment opportunities for building rural India
- To find out the sources for financing India's rural infrastructure

RESEARCH METHODOLOGY

The present study is an attempt to understand the role of development of rural infrastructure and the steps

taken by state and central governments for developing the same. This paper is based on the data and the information available at books, journals, magazines, websites, government reports, news etc. It provides an overview of regional spread of rural infrastructure across the India and the initiatives by Government of India for the development of same.

RESULTS AND DISCUSSIONS

Government initiatives in rural infrastructure:

The emphasis is on the development of rural infrastructure comprising irrigation, rural connectivity, post-harvest infrastructure, and digital network. About 49% of the net sown area in the country is irrigated at present though growth of net irrigated area is stagnating (with a compounded annual growth rate of only 1.3% between FY1996 and FY2015). The total length of rural roads in the country has increased more than 20 times from 0.2 million km in FY1951 to 4.2 million km in FY2017.18 The Warehousing Development and Regulatory Authority (WDRA) estimated that a storage capacity of 162.7

million tons was available in the public, private, and cooperative sectors in the form of warehouses. Besides Electronic National Agriculture Markets (e-NAMs) in Agricultural Produce Marketing Committee (APMC) mandis, the Bharat Net project aims to set up the world’s largest rural broadband infrastructure connecting all 2.5 lakh Gram Panchayats in the country.

Major government initiatives like the Mahatma Gandhi National Rural Employment Guarantee Scheme, Aatma Nirbhar Bharat, Pradhan Mantri Awaas Yojana– Gramin (PMAY–G), Pradhan Mantri Gram Sadak Yojana (PMGSY), SP Mukherjee Rurban Mission, Swachh Bharat Mission–Gramin (SBM–G), Jal Jeevan Mission, Pradhan Mantri Kisan Sampada Yojana, Deen Dayal Upadhyay Gram Jyoti Yojana, and Pradhan Mantri Sahaj Bijli Har Ghar Yojana– Saubhagya package, all focused on infrastructure in all major economic sectors. Major announcements in the Union Budget FY2022 for the creation of rural infrastructure are presented. The Budget raised the estimates for capital expenditure by 34.5% over the previous year to `5.54 lakh crore.

ISSUES AND CHALLENGES IN DEVELOPMENT OF INDIA’S RURAL INFRASTRUCTURE

Critical challenges faced by major rural infrastructure development programme and measures to address these challenges are as follows:

| Sector | Challenges | Suggested measures |
|-------------------------------|---|--|
| Rural housing for All by 2022 | <ol style="list-style-type: none"> 1. Land scarcity 2. Inadequate financing 3. Legal constraints | <ol style="list-style-type: none"> 1. Efficient land usage 2. Easy access to finance and innovative financing mechanism 3. Setting up an affordable housing fund in the National Housing Bank |
| Roads | Poor condition of rural road network | To follow Rural Roads Maintenance Policy prepared by the National Rural Infrastructure Development Agency and International Labour Organization |
| Water supply and sanitation | Poor delivery | Decentralized service delivery model with key role to Gram Panchayats and local communities |

(Source: Base Literature Survey)

PROVISIONS IN FIVE YEARS PLANS FOR RURAL INFRASTRUCTURE

The emphasis laid by successive five-year plans on the development of rural infrastructure comprising irrigation, rural connectivity, post-harvest infrastructure, and digital network has shown results. The Warehousing Development and Regulatory Authority (WDRA) estimated that a storage capacity of 162.7 million tons was available in the public, private, and cooperative sectors in the form of

warehouses. Besides Electronic National Agriculture Markets (e-NAMs) in Agricultural Produce Marketing Committee (APMC) mandis, the Bharat Net project aims to set up the world’s largest rural broadband infrastructure connecting all 2.5 lakh Gram Panchayats in the country.

Major government initiatives like the Mahatma Gandhi National Rural Employment Guarantee Scheme, AatmaNirbhar Bharat, Pradhan Mantri Awaas Yojana– Gramin (PMAY–G), Pradhan Mantri Gram Sadak Yojana (PMGSY), SP Mukherjee Rurban

Mission, Swachh Bharat Mission–Gramin (SBM–G), Jal Jeevan Mission, Pradhan Mantri Kisan Sampada Yojana, Deen Dayal Upadhyay Gram Jyoti Yojana,

and Pradhan Mantri Sahaj Bijli Har Ghar Yojana–Saubhagya package, all focused on infrastructure in all major economic sectors.

AATMA NIRBHAR BHARAT PACKAGE FOR RURAL INFRASTRUCTURE

| | |
|---|--|
| Agriculture Infrastructure Fund | Rs. 1,00,000 Crores Post-harvest infrastructure projects at farm gate or aggregation points, PACS, FPOs, agri-entrepreneurs, start-ups, etc. |
| Pradhan Mantri Matsya Sampada Yojana | Rs. 20,050 crores Fishing harbours, cold chains |
| Scheme for Formalization of Micro-Food Processing Enterprises | Rs. 10,000 crores Technical upgrading of MFPEs to attain FSSAI standards, Cluster-based approach |
| Animal Husbandry Infrastructure Development Fund | Rs. 15,000 crores Supporting private investment in dairy processing, value addition, cattle feed infrastructure, Establishing plants for export of niche products |

(Source: <https://static.pib.gov.in/WriteReadData/userfiles/MOF.pdf>)

RECENT ANNOUNCEMENTS IN UNION BUDGET FY2022 FOR RURAL INFRASTRUCTURE

1. Increase in RIDF (Rural Infrastructure Development Fund) XXVII allocation by 33.3% to Rs. 40,000 crores.
2. Provision of AIF (Agriculture Infrastructure Fund) to APMCs (Agricultural Produce Marketing Committee) for augmenting infrastructure in mandis
3. Integration of 1,000 more APMCs with e-NAMs (Electronic National Agriculture Market) (additional to the current 1,000)
4. Enhancement of corpus under Micro-Irrigation Fund with NABARD from Rs. 5,000 crores to Rs. 10,000 crores.
5. Scope expansion of Operation Greens from tomato, onion, and potato to 22 perishable agriproducts
6. Development of modern fishing harbours, fish landing centers, and multi-purpose seaweed park
7. Levying of Agriculture Infrastructure Development Cess to raise funds to improve agriculture infrastructure
8. Setting up of the National monetization Pipeline for monetizing public infrastructure assets
9. Completion of 7,400 projects under the National Infrastructure Pipeline

INVESTMENT AND START UP OPPORTUNITIES FOR BUILDING RURAL INDIA

There is a wide array of investment opportunities in rural infrastructure. Some of these are presented here.

1. Digital infrastructure: The Government of India under the project, network infrastructure is being established for broadband highways, accessible on a non-discriminatory basis to provide affordable broadband services to citizens and institutions in rural areas in partnership with states and the private sector.
2. Market and value chain infrastructure: Lack of cold-chain systems forces farmers in India to monetize their produce at first instance by selling into food processing units and inefficient wholesale markets. It provides ample opportunities to invest and use the value chain.
3. Agriculture export infrastructure: The Agriculture Export Policy (AEP), 2018 has argued that the development of export-oriented clusters across states will be central to ensuring surplus produce with standard physical and quality parameters which meet export demand. The AEP has further recommended the establishment of Agri Export Zones (AEZs) with common facility creation to facilitate value addition to Agri-commodities. Farmer producers’ organizations need to be linked to the AEZs.
4. Disaster-resilient infrastructure: The Coalition for Disaster-Resilient Infrastructure, launched in September 2019 at the United Nations Climate Action Summit, has initiated the process of national level risk and resilience assessment of infrastructure to support better decision making and policy development, and thus protect

infrastructure investments from disasters and climate change.

5. Rural health infrastructure: While National Family Health Survey data has shown improvement in rural health indicators, the pandemic (with attendant loss of food, health, and livelihoods security) poses a gargantuan challenge to rural health infrastructure which must be modernized and strengthened.
6. Infrastructure development in Aspirational Districts: The Transformation of Aspirational Districts programme (2018) of the NITI Aayog (transforming 115 districts across 28 states) focuses on (i) health and nutrition; (ii) education; (iii) agriculture and water resources; (iv) financial inclusion and skill development; and (v) basic infrastructure including roads (PMGSY), houses (PMAY-G), potable water, rural electrification, household toilets (SBM-G), internet connection, and common service centers.
7. Micro-infrastructure: It includes highly decentralized, smart, clean, climate-resilient system to provide agriculture, water, and energy services using an appropriate modern mix of extending the existing centralized systems, building stand-alone mini-networks and home-based services such as solar home systems and household water tanks etc.

CONCLUSION

The rural infrastructure is being developed very rapidly through following sources such as Union budgetary resources, Budgets of states, Extra-budgetary resources, Bank loans, Public-private partnerships, Viability gap funding, Asset monetization, Takeout Finance Scheme, Pension and insurance funds, National Bank for Financing Infrastructure and Development (NaBFID) etc.

With the participative approach by the rural population the rural infrastructure must be utilized by the users with the vigilant and transparent objectives for sustainable rural development.

REFERENCE

[1] NABARD sanctions Rs 608 crore for infrastructure projects in rural areas in Assam. (2021, oct). Retrieved September 21, 2022, from

<https://www.nabard.org/news-article.aspx?id=25&cid=552&NID=415>

- [2] Barrios, E. B. (n.d.). Infrastructure and Rural Development: Household Perceptions on Rural Development. *Progress in Planning*.
- [3] Bourguignon, F. P. (2007-10-29). Rethinking infrastructure for development. *Annual World Bank Conference on Development Economics 2007, Global: Rethinking Infrastructure for Development* (pp. 47- 67). World Bank Publications.
- [4] Ghosh, M. (2017)). Infrastructure and Development in Rural India. *Margin—The Journal of Applied Economic Research*, 256–289.
- [5] Ho, P. I. -,.-. (2004). *Rural development in transitional China the new agriculture*. London: London; Portland, OR: Frank Cass, 2004.
- [6] <https://www.nabard.org/pdf/building-rural-india-through-infrastructure-development-eng.pdf>. (n.d.).
- [7] Malassis, L. (2011). *The Rural World*. Taylor & Francis Group.
- [8] Moseley, M. (n.d.). *Rural Development: Principles and Practice*. SAGE Publications, Limited.
- [9] NABARD provided Rs 1,236 crore from its Rural Infrastructure Development Fund for Assam in FY21. (n.d.). Retrieved September Wednesday, 2022, from <https://economictimes.indiatimes.com/news/india/nabard-provided-rs-1236-crore-from-its-rural-infrastructure-development-fund-for-assam-in>
- [10] Runia, M. (2010, August). Rural Infrastructure and the Role of Social Capital. Wageningen University.
- [11] (2022, 09 18). Retrieved from <https://www.linkedin.com/pulse/contribution-rural-economy-indias-development-rajbir-sandhu#:~:text=The%20growth%20of%20Indian%20GDP,%2D30%25%20of%20India's%20GDP.>
- [12] India, F. i. (2022, 09 22). <https://www.fao.org/india/fao-in-india/india-at-a-glance/en/#:~:text=Agriculture%2C%20with%20its%20allied%20sectors,farmers%20being%20small%20and%20marginal>