

Rural Infrastructure

Sridhar Kundu

Infrastructure plays a crucial role for not just the country's economic growth but also its progress in human development. Rural areas account for a larger part of the geographical area in India. Census 2011 reports that there are 6.4 lakh villages in India, which shelter more than two-third of the country's population. Provisioning of basic infrastructure facilities for this large section of the population spread across 3.28 million square kilometer of the country's geographical area has been a major challenge. The present status of rural infrastructure in the country under various categories is discussed in the following.

Road

India has developed a reasonably wide road network in the last few decades. World Road Statistics 2009 says that India's road density is 1.25 km/sqkm (2008), which is higher than that of China's 0.36 km/sqkm (2007) and Brazil's 0.20 km/sqkm (2004), and that it can be compared to France and UK's road density of 1.72 km/sqkm (2007). As far as rural India is concerned, the road network has been increased from 3,54,530 km in 1971 to 24,50,559 km in 2008 (including 10,61,809 lakh km roads constructed under *Jawahar Rozgar Yojana* and *Pradhan Mantri Gram Sadak Yojana*) registering an annual compound growth rate of 5.4 percent over this period. However, the rural surfaced road coverage is just 33 percent of the total rural road network in India. The *kutch*a roads cover a large portion in total rural road network, which are highly vulnerable and inaccessible particularly during the rainy season. Given the wide diversity in physical structure of the country, the need for greater surfaced road connectivity is particularly important in the hilly terrains and low lying areas.

Power

Electricity has become a necessity for every household. The governments at the Centre and States have been trying to push various reforms in power sector in order to provide Electricity to people at affordable prices. However, the aim to provide "Power to all by 2012" has not been fulfilled. According to the Central Electricity Authority, Government of India, a total of 5,56,633 villages have been electrified, which stands at 87 percent of total villages in the country at present. However, even within the electrified villages, many households are not connected with electricity. The Census 2011 indicates that 45 percent of the rural households are not connected with electricity and depend on kerosene and other means for lighting. In terms of the per capita power consumption level, India continues to be among the low performing countries in the world. India's annual per capita electricity consumption stands at 670 kwh compared to China's 3310 kwh and USA's 13,230 kwh in 2011. The Central

Government has launched a few policies like provisioning of 1 kwh of free power per day to the BPL families. The hybrid electricity provisioning through off-grid connectivity and power supply from cogeneration, solar and micro-hydro projects have been some of the programmes implemented by the Central Government to bring the remote villages under the coverage of power supply.

Housing

The housing conditions in rural India have not improved much. According to Census 2011, as much as 20.7 percent of the total 206 million (or 20.6 crore) occupied rural houses are with thatched roofs. These houses are not safe for living, highly vulnerable to rainfall, wind blow, fire and many other accidents. Some of the government interventions, such as, *Indira Awas Yojana (IAY)*, operation of corpus funds like *Rural Infrastructure Development Fund (RIDF)* by the National Bank for Agriculture and Rural Development (NABARD) and *Rural Housing Fund* by the National Housing Bank, aim at promoting rural housing in the country. However, a lot more needs to be done to provide better housing facilities to the rural population.

Education

The 8th All India School Education Survey (AISE) report shows that there are 6.75 lakh primary schools functioning in rural areas in the country. It presents a picture that on an average every village in India has a primary school. The survey reports that there are 3.04 lakh upper primary, 82.8 thousand secondary and 36.9 thousand higher secondary schools along with 1.18 thousands degree colleges in the rural belt of India. However, average teacher availability in the schools is quite low. For example, in the primary schools this is just 2.2 teachers per school. Even in terms of the number of classrooms, availability of safe drinking water facilities, toilet facilities etc. the school infrastructure in rural India needs a lot more improvement. Therefore, governments at various levels need to be pro-active to develop and maintain the infrastructure for education in rural areas.

Health

Health infrastructure in rural India is still quite inadequate. As on March 2011, the total of 6.4 lakh villages in the country were covered with only 23,887 Primary Health Centres (PHCs) and 1,48,124 Sub-Centres. This shows that, on an average, 4.3 villages have one sub-centre and only one PHC exists for as many as 27 villages. Added to this, many health centres are also run without doctors (or absentee doctors) and in some cases treatment is done by unskilled healthcare workers. Absence of connectivity to the villages and inadequate number of health centres and skilled health workers still endangers the life of rural population in the country.

Drinking Water and Sanitation

Provisioning of safe drinking water to every household should be one of the basic policy priorities. However, the Census 2011 reports a mere 30 percent of rural area being covered with tapped water supply. Households in the remaining rural areas in the country depend on other means like hand pumps, bore well and fetching water from nearby rivers and canals etc. The poor sanitation facilities in the rural belt have been an equally challenging issue for the government. The Census 2011 report reveals that 69.3 percent of rural households in the country still resort to open defecation. The Union Ministry of Drinking Water and Sanitation also reports that many Primary Schools and Anganwadi Centres in the rural areas do not yet have toilets. Hence, provisioning of safe drinking water and sanitation facilities in rural areas need to be a top priority for the government now.

We need to remember that rural economy still plays a significant role in India's overall economy. The rural sector has a very high potential in terms labour and natural resources, which are the basic inputs in production process. However, among other factors, lack of adequate infrastructure has been driving the rural labour into poverty and deprivation. Provisioning of basic infrastructure facilities would help in tapping the vast resources in the rural areas in India. Therefore, the gaps in rural infrastructure need to be addressed properly so as to achieve redistributive growth and alleviate poverty in the country.

[The author works with Centre for Budget and Governance Accountability (CBGA), New Delhi (www.cbgaindia.org); he can be contacted at sridhar@cbgaindia.org]