

Focus 67 - Rural India: The Country's Untapped Growth Engine

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Abstract

Urbanisation is posing ever-growing challenges to most countries around the world. This paper explores the ways in which India can tap into the latent potential of two-thirds of its population still living an agrarian life. It provides a vantage point for the bystander to understand various rural development programmes under way across ten socio-economic elements categorised as 'essential', 'foundational' and 'sustenance'. It paints a vision of how strategic efforts over the next decade can enable close to a billion people currently living in villages to propel India's growth

and produce nothing short of an economic miracle – driven by the completion of multiple government initiatives, affordable connectivity and digital technologies.

Keywords

Urbanisation, Rural Development, Smart villages, Technology, Digitalisation, Self-reliance, Transformation, Ease of living

Introduction

The strategic rivalry between India and China has plumbed new depths amidst the Covid-19 pandemic and China's expansionist spree. Following recent border clashes between the two Asian giants, a leading Indian national daily (Thakur, 2020) commented on some of the key 'battles' in which India needs to 'win' vis-à-vis China.

Whilst GDP, infrastructure, industrial and infant-mortality-rate parameters were legitimately mentioned as areas where India needs to catch up with China, the comment regarding the ways in which India has 'slipped behind' China in urbanisation warrants greater analysis.

As the above-cited Times of India report mentions, urbanisation in China has grown five times over the past seven decades - from 12% to 60%, while India has only doubled its urban population from 17% to 35% during the same period. However, instead of simply lamenting these figures, India must aim to convert this inadvertent lag to its advantage – rather than attempt to 'copy' the Chinese (or, for that matter, the global) urbanisation model.

Urban planners and administrators in [7935 urban agglomerations of India](#) (Ministry of Housing and Urban Affairs, 2020) face a constant struggle to provision spaces, utilities and services to an unabatedly growing population. Urbanisation is driven by the usual culprits - population growth and lack of employment opportunities in villages. In order to cope with these challenges, the Indian government is funding towns and cities using the [Seven Mission Program](#) (Alliance Experts, 2020).

Amongst these is PM Modi's 'Smart Cities Mission', which received significant limelight, funding, and support from the ["managing urbanisation"](#) vertical of the National Institute for Transforming India (NITI Aayog; Government of India, 2020).

However, despite these laudable efforts, it is generally expected that bringing positive change into the day-to-day life of an average urban dweller will take years.

India's rural population is currently [estimated](#) at roughly 950 million (Department of Drinking and Water Sanitation, 2020), spread over 662,000 villages.

Contrary to the popular assumption that the youth in rural ‘Bharat’ - a term commonly used to characterise agrarian India - will continue to dream of migrating to urban ‘India’, this paper proposes a scenario where the reverse becomes a reality by 2025, potentially further propelling the imminent rise of India as a global economic powerhouse.

It envisions that the “rural development” vertical of NITI Aayog should aim towards a “Smart Village” framework - not as a centralised mission, but in the form of a democratised, ‘self-adoptable’ model. This can build on the endeavours and learnings from the Smart Cities Mission which can be suitably adapted for the Indian hinterland.

This can be visualised under a 3-tier model that will deliver ease-of-living and prosperity by providing the ten key elements required for a fulfilling life.

1. **Essentials** (Housing, Water, Electricity, Sanitation, Roads)
2. **Foundational** (Telecom connectivity, Education, Healthcare)
3. **Sustenance** (Agriculture, Services)

Let us examine how the government and private sector initiatives are working on delivering these elements - taken for granted by large swathes of the world - to almost a billion Indians. In each of these elements, the use of digital technologies is already making a crucial difference.

Tier 1 - Essentials: Onus - Government

Meeting these needs is primarily the responsibility of the government both at state and central levels. Until recently, a significant portion of India’s rural population was deprived even of essentials; however, all that appears to be rapidly changing. A roadmap within this framework was articulated and set for completion within the next five years.

- **Housing** initiatives are progressing well under the Pradhan Mantri Awaas Yojna – Gramin (PMAY-G) rural household scheme, which aims to enable housing for all rural inhabitants by 2022.

Through provision of government assistance for the building of 29.5 million ‘pucca’ (brick) houses with a minimum size of around 250 square feet, over 12.5 million houses have already [been constructed](#) (Ministry of Rural Development, 2020). In fact, over 4.7 million houses were constructed in 2018-19 – at an average of 114 days per unit. These efforts are supplemented by the [‘AwaasApp’ mobile app](#) that allows for evidence-based monitoring of pre-determined stages of housing construction using geo-tagged images (Ministry of Rural Development, 2017).

- **Electricity** is now available in [99.92%](#) (Ministry of Power, 2020) of Indian villages, and availability for each house is within reach. Solar powered lanterns costing 1,000 Rupees [provide](#) a source of lighting and mobile charging (Urpelainen, 2020). The government’s highly successful UJALA scheme (Press Information Bureau, 2020) - literally meaning ‘light’ - to distribute free LED bulbs to households has also helped deliver affordable lighting.
- **Water** constitutes a greater challenge. The government’s Jal Jeevan Mission (JJM) aims to provide accessibility to safe drinking water to all rural households by 2024. To monitor outcomes, every functional tap connection or asset created under this ‘water for life’ mission will be [geo-tagged](#) (Jal Jeevan Mission, 2019). This is a major leap forward, and could potentially advance the target by six years ahead of the original 2030 goal coinciding with United Nation’s Sustainable Development Goals.
- **Sanitation** in villages as a basic hygiene issue is being addressed at a fast pace under the Swachh Bharat Abhiyaan (SBA) or Clean India Mission. Launched in 2014, [102 million toilets](#) (Kookana, 2020) were constructed over 5 years through this mission. Only 50.90% rural households had access to toilet facility in 2015-16. This has now [increased](#) to nearly 100% in 2019-20 (Ministry of Statistics and Program Implementation, 2020).
- **Roads** providing all-weather connectivity to all eligible rural habitations are 98.45% complete. [6,26,910 kms of roads](#) (Ministry of Rural Development, 2020) have been constructed with a peak productivity of 130-135 kms built

per day. Road-wise maintenance and payments are being tracked using e-MARG - an e-Governance platform rolled out in the state of Madhya Pradesh with plans for wider adoption.

Tier 2 - Foundational: Onus - Government and Private Sector

- **Telecom connectivity** - India has 1.15 billion [mobile phone subscribers](#), with 519 million in rural areas as of March 2020 (Telecom Regulatory Authority of India, 2020). According to [reports](#), 4G mobile phones in India are greater in number than the entire US population (Nokia, 2019). This phenomenon of affordable wireless broadband internet and devices has democratised the availability of video-calling, entertainment, and many other digital services – even for most rural households. Since 2014, over 120 mobile phone manufacturing units have been set up, resulting in India’s emergence as the second-largest mobile phone manufacturer in the world. The industry’s [ambitious target](#) - to produce 1,250 million handsets per annum by 2025 (India Cellular & Electronics Association [ICEA]) - lies partly on account of huge demand from rural Indians, waiting to make the switch from 2G feature phones to smartphones.
- **Education** for all rural children is being undertaken through the [Samagra Shiksha](#) (Ministry of Education, 2020) or ‘holistic education’ development program. The main emphasis of this central government scheme lies on improving the quality of school education by focusing on teachers and technology. This aims to meet the obligations in [The Children's Right to Free and Compulsory Education Act](#), commonly known as RTE, which has been in effect since April 2010 (Right to Education [RTI]). The compulsions imposed by the Covid-19 pandemic have created a universal need for online education, thereby accelerating these initiatives.

The Indian government’s [‘eVidya’ or e-education scheme](#), launched in May, offers a common national digital content platform on internet, television, radio, and podcasts (Majundar, 2018).

Ed-tech start-ups and private sector enterprises are also witnessing a latent demand for affordable devices, internet, and digital education content delivery in multiple languages for children in villages.

- **Healthcare** - An important component of India's National Rural Health Mission is to ensure the presence of a trained [Accredited Social Health Activist](#) (Ministry of Health and Family Welfare), or ASHA, in every village - the person must be a woman resident in the village chosen through a rigorous process. Over 940,000 such social workers have been appointed and issued a drug-kit so as to deliver first-contact healthcare after being suitably trained. These women act as the trusted interface between the rural community and nearest healthcare centres, spreading awareness and facilitating access to medical services.

The ongoing pandemic has highlighted the need for a major healthcare upgrade in villages but also the important role being played by ASHA workers, [publicly lauded](#) by PM Modi (DD News, 2020).

In February 2018, the Indian government announced the creation of 150,000 Health and Wellness Centres (HWCs) intended to deliver comprehensive primary healthcare and universal health coverage under the [Ayushman Bharat](#) (National Health Authority) scheme. Later, the government also launched a health assurance plan providing cover of half a million rupees annually per family for secondary and tertiary care hospitalisation. This plan, catering to roughly 500 million poor and vulnerable Indians, is the largest such insurance cover in the world. Rural populations will be the greatest beneficiaries of both these schemes.

However, the gap in availability of healthcare specialists in villages remains a key impediment. Several enterprises and start-ups are targeting this bottom-of-the-pyramid rural market so as to deliver tele-health solutions initially designed for cities. These include remote diagnostics as well as tele-consultation services, [enabled](#) in March 2020 (Medical Council of India, 2020).

Tier 3 - Sustainable Elements: Onus - Government, Private Sector & Rural Youth

- **Agriculture** – As agriculture is the mainstay of rural India, the Indian government announced an initiative to double the income of the average farmer in five years. A [report](#) by The Europe India Foundation’s ‘EU-India Agriculture Forum’ (EU India Agriculture Forum) highlights how Indian farmers often lack the knowledge and application of modern and scientific methods for farming as well as the ability to access global supply chains and export markets. It further states that in order to achieve this objective, focus must shift from increasing per acre productivity to gainfully employing farm households in other farm-related activities, including targeting export markets. The forum emphasises four key challenges that need to be met: lowering input cost, appropriately pricing produce, reducing wastage, and providing alternate means of income to farmers.

In addition to attention from global governments, several Indian enterprises such as Tatas, Reliance Industries, ITC and Mahindra & Mahindra are also attempting to solve the core issues mentioned above. They too are supporting these strategic initiatives through the delivery of smart-farming techniques and precision-agriculture ‘as-a-service’. This can be achieved by leveraging better productivity tools using Internet-of-Things (IoT) with billions of sensors connected over 4G, 5G or NB-IoT networks.

Modern farming techniques, including the use of drones, may also encourage farmers’ children to continue working in agriculture and farming instead of considering moving to cities in search of alternative professions. Showcasing the successes of the Israeli kibbutz as well as prosperity of European farmers could serve as role models in highlighting the value of self-reliance villages supported by technology-enabled sustainable farming.

- **Services** – The availability and accessibility of all the above elements will enable India's rural youth to effectively compete not only with Indian urban millennials but also with their global counterparts.

Through affordable technology tools and cloud infrastructure, new mobile apps and digital services can be launched by millions of young rural entrepreneurs. Working remotely for IT-enabled services firms constitutes another possibility now that the effectiveness of the ‘work-from-home’ model has proven that such services do not need employees to be physically present in offices.

However, in order to achieve all this technical upskilling must be undertaken in a model adopted and delivered on a mammoth scale. Apart from the crucial task of creating job opportunities, this will also align with the Indian government’s Antyodaya initiative that targets local self-help groups.

Mission Antyodaya - a project under the Ministry of Rural Development - aims at developing a convergence framework for measuring effective outcomes on parameters that transform lives and livelihoods. This ‘Digital Bharat’ initiative can be viewed as a subset within the [‘Gram Samvad’](#) or [“Disha” performance tracking systems](#) (Ministry of Rural Development, 2018) intended to achieve a buy-in of every rural household.

Another notable illustration of rapid technology-driven transformation is the plan for the aerial mapping of 662,000 Indian villages under the SVAMITVA scheme. On June 26 this year, the FICCI committee on drones organised a [panel discussion](#) with the Surveyor General of India and the Joint Secretary, Ministry of Civil Aviation on the scheme (Industry’s Voice for Policy Change, 2020). Fast-track approvals provided by multiple government departments were highlighted. Launched by PM Modi in April, this mega rural initiative under execution builds upon successful pilots conducted in both Maharashtra and Haryana. The nationwide scheme, under a 4-year execution span, will enable rural upliftment through world-class GIS databases and maps that facilitate ‘gram panchayat’ (village council) level development programmes, including accurate data on individual property and government records.

This will not only create thousands of jobs in rural India but will also allow state governments to leverage the data generated so as to enable digital service delivery and sustainable value for the rural population.

After the nationwide lockdown in India in March, millions of migrant workers returned back to their villages, many traveling on foot for hundreds of kilometres. The pandemic and the perilous circumstances that surrounded their journeys is forcing many migrants to [rethink](#) their return to cities. India should see this as an opportunity to use its villages as the next big growth engine so that the sustainable income from agriculture, services or self-employment can trigger another resurgence led by rural India – potentially larger than the information technology and business process out-sourcing driven growth of the past three decades. Indian corporates should focus their post-COVID strategies towards supporting this ‘Digital Bharat’, which is no longer technology-starved. This is the true ‘Atmanirbhar Bharat’ or the self-reliant India which existed 1,000 years ago and is about to be re-discovered.

References

Alliance Experts. (2020). Urbanisation in India: trends, opportunities and smart cities.

<https://www.allianceexperts.com/en/knowledge/countries/asia/opportunities-in-urbanisation-in-india/>

Board of Governors, Medical Council of India. (2020). Telemedicine Practice Guidelines.

<https://www.mohfw.gov.in/pdf/Telemedicine.pdf>

Department of Drinking Water and Sanitation, Ministry of Jal Shakti. (2020). Jal Jeevan Mission, State-Wise number of rural populations.

https://ejalshakti.gov.in/IMISReports/Reports/BasicInformation/rpt_RW_S_RuralPopulation_S.aspx

EU India Agriculture Forum. (2019). An Initiative to Empower the Farmers and Improving the Agriculture Ecosystem in India.

<https://eife.org/wp-content/uploads/2019/05/EU-India-Agriculture-Forum-EIAF.pdf>

Government of India. (2020). NITI Aayog - Objectives and Features.

<https://niti.gov.in/objectives-and-features>

India Cellular & Electronics Association (ICEA). (n.d.). Making India the Global Manufacturing Powerhouse for Mobile Handsets and Components.

<https://icea.org.in/icea-make-in-india/>

Industry's Voice For Policy Change. (2020, June 26). SVAMITVA scheme will be a game changer for Drone Industry. [Press release].

<http://www.ficci.in/pressrelease-page.asp?nid=3762>

Jal Jeevan Mission [JJM]. (2019). Jal Jeevan Mission.

https://jalshakti-ddws.gov.in/sites/default/files/JJM_note.pdf

Kookana, R. S. et al. (2020, August 25). Urbanisation and emerging economies: Issues and potential solutions for water and food security. Science Direct.

<https://www.sciencedirect.com/science/article/pii/S004896972032574>

[2](#)

Majundar, R. (2018, May 18). PM e-VIDYA initiative to bring more opportunities for ed-tech start-ups. LiveMint.

<https://www.livemint.com/companies/start-ups/pm-e-vidya-initiative-to-bring-more-opportunities-for-ed-tech-startups-11589774602446.html>

Ministry of Education, Government of India. (2020). Budget of the Department of School Education & Literacy.

https://www.mhrd.gov.in/Dashboard/SE_Dashboard/index.html

Ministry of Health and Family Welfare, Government of India. (n.d.). About Accredited Social Health Activist (Asha).

<https://nhm.gov.in/index1.php?lang=1&level=1&sublinkid=150&lid=226>

Ministry of Housing and Urban Affairs. (2020). Number of Cities Towns by City Size Class.

<http://mohua.gov.in/cms/number-of-cities--towns-by-city-size-class.php>

Ministry of Power. (2020). Pradhan Mantri Sahaj Bijli Har Ghar Yojna.

<https://saubhagya.gov.in/>

Ministry of Rural Development, Government of India. (2018). Rural Development rolls out a robust Accountability Framework.

<https://rural.nic.in/press-release/rural-development-rolls-out-robust-accountability-framework>

Ministry of Rural Development. (2019). Vision Document 2019-2024:

Transforming lives and livelihood through pro-active socio-economic inclusion, integration and empowerment of rural India.

https://rural.nic.in/sites/default/files/Vision_Document_2019_2024.pdf

Ministry of Rural Development, Government of India. (2020) One Year of Modi 2.0: Towards a Self-Reliant India - Key Achievements and Action for Covid-19 Mitigation.

https://rural.nic.in/sites/default/files/1YearAchievementBook_21Jul2020_MoRD_English.pdf

Ministry of Rural Development. (2020). Union Minister for RD&PR Shri Narendra Singh Tomar asks States to proactively implement Rural Development Schemes relating to employment generation, rural housing, infrastructure development and strengthening of rural livelihoods.

<https://rural.nic.in/press-release/union-minister-rdpr-shri-narendra-singh-tomar-asks-states-proactively-implement-rural>

Ministry of Statistics and Program Implementation, Government of India. (2020). Sustainable Development Goals - National Indicator Framework: Progress Report.

http://mospi.nic.in/sites/default/files/publication_reports/Sustainable_Development_Goals_National_Indicator_Framework_Progress_Report_2020_Version2.1.pdf

National Health Authority. (n.d.). About Pradhan Mantri Jan Arogya Yojana (PM-JAY), Ayushman Bharat.

<https://pmjay.gov.in/about/pmjay>

Nokia. (2019). India Mobile Broadband Index 2019.

http://bestmediainfo.in/mailer/nl/nl/Nokia_MBiT_2019_FINAL.pdf

PM stresses on development of rural health infrastructure. (2020, July 28). DD News.

<http://ddnews.gov.in/health/pm-stresses-development-rural-health-infrastructure>

Press Information Bureau. (2020, January 05). Government of India's UJALA & Street Lighting National Programme Complete Five Successful years of Illuminating India. [Press release].

<https://pib.gov.in/Pressreleaseshare.aspx?PRID=1598481>

Right to Education (RTI). (n.d.). Chronology.

<http://righttoeducation.in/know-your-rte/chronology>

Telecom Regulatory Authority of India, New Delhi. (2020, July 14). Highlights of Telecom Subscription Data as on 31st March, 2020.

https://traai.gov.in/sites/default/files/PR_No.49of2020_0.pdf

Thakur, A. (2020, June 28). Not just Galwan, we need to win these 5 battles too. Times of India.

<https://timesofindia.indiatimes.com/india/not-just-galwan-we-need-to-win-these-5-battles/articleshow/76669128.cms>

Urpelainen, J. (2020, June 06). Energy access for rural India: Don't underestimate the solar lantern. India Times.

<https://energy.economicstimes.indiatimes.com/energy-speak/energy-access-for-rural-india-don-t-underestimate-the-solar-lantern/4313>