

Leveraging JAM Infrastructure to Implement UBI

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Abstract

Poverty remains a pressing global issue, and India, despite economic progress, grapples with ensuring an acceptable standard of living for all its citizens. Welfare schemes exist, but challenges like eligibility, awareness, and bureaucratic hurdles hinder their effectiveness. Universal Basic Income (UBI), an unconditional minimum income provided to all citizens, offers a promising alternative. This paper explores the feasibility of leveraging India's Jan Dhan-Aadhaar-Mobile (JAM) infrastructure for UBI implementation. JAM encompasses Jan Dhan bank accounts, Aadhaar unique digital IDs, and mobile phone penetration, creating a robust platform for direct cash transfers. The paper examines the merits of UBI, its potential impact on poverty reduction, and the suitability of JAM infrastructure for its implementation. It acknowledges limitations like digital literacy gaps and network connectivity issues and explores the need to address concerns regarding inflation and existing social safety nets. The paper concludes that UBI, if strategically implemented, will be a significant step towards achieving social justice and poverty reduction in India.

Introduction

Poverty remains one of the most critical challenges facing humanity. The World Bank defines extreme poverty as living on less than \$2.15 per day, and almost 700 million people live in extreme poverty around the world.ⁱ While significant progress has been made in poverty reduction globally, millions of people still struggle to meet basic needs such as food, shelter, education, etc. India, despite experiencing unprecedented economic growthⁱⁱ in recent decades, continues to grapple with poverty. Nearly 13% of Indians lived below the national poverty line in 2018.ⁱⁱⁱ

The consequences of poverty are far-reaching. Studies have shown that poverty can lead to a loss of IQ points, hinder cognitive development, and impact future earning potential.^{iv} It is also a significant cause of ill health and premature death.^v Furthermore, poverty can perpetuate a cycle of disadvantage, limiting opportunities for education, employment, and upward mobility.

The Limitations of Traditional Welfare Schemes

India's welfare system comprises over 10,000 schemes (central and state), with the National Rural Employment Guarantee Scheme (NREGS) and Public Distribution System (food subsidy) being the two with the largest share.^{vi} These schemes often involve targeted interventions and provide subsidized goods and services to identified beneficiaries. However,

these programs face several limitations. First, eligibility criteria can be complex and exclusionary, leaving deserving individuals out. This exclusion error can range from 65-73% for NREGS.^{vii} Second, a lack of awareness among the population about available schemes can further hinder their reach, coupled with processes that intimidate people who are not literate. Finally, bureaucratic hurdles associated with application processes and distribution channels can create inefficiencies and opportunities for corruption. These limitations highlight the need for alternative approaches to address poverty more effectively.

UBI could simplify this landscape by providing direct cash transfers to beneficiaries, reducing the dependency on intermediaries, and mitigating the risks of corruption and mismanagement. Studies have shown that cash transfers are more effective in improving individuals' lives than in-kind benefits (like food, fertilizers, etc.) that come with numerous conditions.^{viii}

Universal Basic Income: A Promising Alternative

UBI has emerged as a potential solution to address the limitations of traditional welfare schemes. It provides all citizens with a guaranteed minimum income, regardless of their employment status or income level. Proponents of UBI argue that it offers several advantages over traditional welfare programs through three core principles: universality, unconditionality, and agency. First, its universality ensures inclusivity, reaching all those in need, regardless of their ability to navigate complex application processes. It ensures that everyone receives a basic income. Second, unconditionality eliminates the administrative burden associated with means-testing and monitoring, reducing bureaucratic costs.^{ix} Moreover, it means the income is provided with no strings attached, allowing recipients to decide how to spend it. Third, the agency empowers individuals to make choices about their lives and livelihoods. By giving recipients autonomy over their resources, UBI empowers individuals to invest in their education and health or start small businesses, potentially leading to increased economic participation and long-term poverty reduction.^x

The JAM Infrastructure: A Platform for UBI Implementation in India

India's Jan Dhan-Aadhaar-Mobile infrastructure offers a compelling platform for implementing UBI due to its ability to overcome the limitations associated with traditional welfare programs. Let's delve deeper into each component of JAM and explore how it facilitates UBI rollout.

1. Jan Dhan Accounts

Launched in 2014, the Jan Dhan scheme aimed to achieve financial inclusion for the previously unbanked population. As of March 2024,^{xi} it had helped open over 520 million new bank accounts. Often zero-balance accounts, these provide individuals with access to basic banking services like deposits, withdrawals, and money transfers.

For UBI implementation, Jan Dhan accounts offer a crucial advantage. They create a direct link between the government and beneficiaries, enabling direct cash transfers. This eliminates the need for intermediaries, reducing the risk of corruption and leakages often associated with traditional welfare schemes. Additionally, Jan Dhan accounts foster financial literacy by

familiarizing individuals with the banking system and encouraging them to manage their finances more effectively.

2. Aadhaar

Aadhaar is a unique digital identification program launched in 2010. It assigns a 12-digit identification number to every resident of India based on their demographic and biometric information.

In the context of UBI, Aadhaar plays a vital role in ensuring targeted and efficient transfers. By linking Aadhaar with Jan Dhan accounts, the government can verify beneficiaries' identities and eliminate the possibility of duplicate accounts or fraudulent claims. This ensures that UBI reaches the intended recipients, minimizes leakages, and maximizes program effectiveness. However, concerns regarding data privacy and potential misuse of Aadhaar data remain a point of discussion, requiring robust safeguards and data protection measures.^{xii}

3. Mobile Penetration

India has witnessed a rapid rise in mobile phone penetration in recent years. As of 2022, the country's mobile phone penetration was about 76.6%.^{xiii} This widespread mobile connectivity provides a valuable channel for disseminating information about UBI and facilitating real-time cash transfers.

Mobile wallets linked to Jan Dhan accounts allow for convenient and secure receipt of UBI payments. Additionally, SMS notifications can be used to inform beneficiaries about transactions and educate them on managing their finances. However, while JAM presents a strong foundation for UBI implementation, it also has some limitations. Here are some key considerations.

- 1. Digital Literacy:** Despite significant progress, a digital literacy gap exists in India, particularly in rural areas and among older demographics. Individuals unfamiliar with using mobile wallets or banking services may continue to face difficulties accessing UBI payments unless this digital literacy gap is filled through targeted training programs and user-friendly interfaces for mobile apps. The mobile penetration rate does not account for people having multiple SIM cards, and hence, we still have a long way to go when it comes to giving people access to mobile phones.
- 2. Network Connectivity:** While mobile penetration is high, network connectivity issues persist in remote areas. India's internet connectivity has been growing rapidly, with the penetration rate increasing from 14% in 2014 to over 52% in 2024, which also means that almost half the population still lacks internet access.^{xiv} Ensuring reliable internet access across the country is essential for uninterrupted UBI transfers. Expanding network infrastructure and promoting affordable data plans will be necessary to bridge this gap.

- 3. Biometric Identification Issues:** Aadhaar relies on biometric identification, which can be susceptible to errors due to technical limitations or physical variations. Developing robust error correction mechanisms and alternative identification methods for individuals facing challenges with biometric authentication will be necessary. Stories of data leaks^{xv} and people being denied services (like food) keep coming up^{xvi} in the news due to irregularities and it's important that these issues are given priority by the government and resolved.

Conclusion

India's JAM infrastructure presents a significant opportunity for implementing UBI. By leveraging Jan Dhan accounts for direct cash transfers, Aadhaar for beneficiary identification, and mobile technology for communication and transactions, JAM offers a platform to overcome the limitations of traditional welfare schemes and ensure efficient, inclusive delivery of UBI. However, addressing the limitations of digital literacy, network connectivity, and biometric identification will be crucial for successful implementation. Together, these elements form a comprehensive platform for administering UBI. Directly transferring payments to individuals' bank accounts minimizes delays and reduces the scope for misappropriation of funds. By leveraging the JAM infrastructure, India can efficiently administer direct cash transfers, minimizing bureaucratic hurdles and ensuring that benefits reach those in need. However, successfully implementing UBI requires careful planning and addressing challenges related to digital infrastructure, fiscal sustainability, and the transition from traditional welfare schemes. As India grapples with persistent poverty and inequality, UBI offers a beacon of hope—a step towards a more equitable and just society. Embracing UBI not only reflects a commitment to financial inclusion but also reaffirms the fundamental principle that every individual deserves a dignified life free from the constraints of poverty.

ⁱ <https://www.worldbank.org/en/topic/poverty/overview>

ⁱⁱ <https://www.washingtonpost.com/opinions/2023/04/28/india-revolutions-economy-growth-future/>

ⁱⁱⁱ <https://pip.worldbank.org/country-profiles/IND>

^{iv} <https://www.princeton.edu/news/2013/08/29/poor-concentration-poverty-reduces-brainpower-needed-navigating-other-areas-life>

^v <https://health.gov/healthypeople/priority-areas/social-determinants-health/literature-summaries/poverty>

^{vi} https://www.indiabudget.gov.in/doc/Budget_at_Glance/bag7.pdf

^{vii} https://www.graduateinstitute.ch/sites/internet/files/2022-08/Project_56_Connect.pdf

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https://pure.rug.nl/ws/portalfiles/portal/98317564/Cash_or_In_kind_Transfers_Evidence_from_a_Randomised_Controlled_Trial.pdf

^{ix} <https://ace-usa.org/blog/research/economic-policy/universal-basic-income/>

^x <https://www.givedirectly.org/research-on-cash-transfers/>

^{xi}

<https://static.pib.gov.in/WriteReadData/specificdocs/documents/2024/mar/doc2024314324201.pdf>

^{xii} <https://cacm.acm.org/research/privacy-concerns-with-aadhaar/>

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<https://www.statista.com/statistics/1373584/india-mobile-phone-penetration-rate/>

^{xiv} <https://www.statista.com/statistics/792074/india-internet-penetration-rate/>

^{xv} <https://www.livemint.com/news/india/aadhaar-data-leak-massive-data-breach-exposes-815-million-indians-personal-information-on-dark-web-details-here-11698712793223.html>

^{xvi} <https://indianexpress.com/article/explained/explained-when-aadhaar-related-problems-lead-to-denial-of-rations-and-benefits-what-the-data-show-7277092/>