India 2047:
High Income with Equity

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AMRIT KAAL: The Road to A Developed INDIA

Sameer Kochhar

In his speech on 17 December 2018, Finance Minister Arun Jaitley ignited the hope of achieving an eight per cent growth rate. Catching on quickly to the theme, Finance Secretary, Subhash Chandra Garg, talked about a US$10 trillion economy within reach by 2030 shortly after. Both statements gladdened my heart as they set the perfect stage for releasing my edited book India 2030 – A US$10 Trillion Economy five days later, on 22 December 2018. My fellow authors and I have been working on a plan to make this happen since 2017; just in time, the book suggested a sector-wise action plan to make this happen.

'India 2030 is a kind of omnibus on the visualisation of experts of how the Indian economy would look like in 2030, and the action points required to be taken for getting us there,' wrote Madan Sabnavis in his book review in the Financial Express.

By February 2019, the country had warmed to a US$10 trillion economy by 2030. From the budget to speeches of crucial ministers, parts of the roadmap laid out in the book started reflecting.

'We have already become the world's sixth-largest economy and will soon be among the top five. We aspire to make India the third-largest economy in the world by 2030. This implies that we commit to make India a US$ 5 trillion economy by 2025 and US$ 10 trillion economy by 2032,' said the BJP manifesto going into the 2019 elections.

The book's objective was to provide the detailing and an action plan on how US$10 trillion can happen. But more importantly, it was about the quality of this growth, and it was noted that India needs spatially dispersed, job-generative, and equitable growth.

The book emphasised the strengths of the Indian economy, such as no sovereign default on external debt, significant external reserves, independent monetary policy, and democratic governance. The book explored the role of democracy in economic growth, including encouraging investment, improving education, providing public goods, and reducing social unrest.

In terms of growth and investment, the book highlighted the required growth rate of 7.6 per cent per year to reach the target GDP. It analysed the trajectory of gross fixed capital formation (investment) as a percentage of GDP and discussed the importance of physical investment in enabling economic growth. The book examined the incremental capital-output ratio (ICOR) as a measure of investment efficiency and suggested that a sustained ICOR of 4 would be necessary to achieve the growth target. The paper India 2030 – A Macroeconomic View by Indira Rajaraman laid out the macroeconomic essentials.

Then Covid happened; unlike most other economies, India stayed afloat reasonably well, albeit at a much slower growth rate.

During his seventy-sixth Independence Day address, Prime Minister Narendra Modi set an ambitious target for India to become a developed nation by 2047. He also emphasised the need to reduce import dependence and promote domestic manufacturing. The Hon'ble Prime Minister introduced 'Paanch Pran,' or five resolves for the nation, which includes making India a developed country as the first resolve. He urged the country to focus on these resolves over the next 25 years to achieve the goal.

It has always been my attempt to grasp the full magnitude of the direction given by Prime Minister Narendra Modi and translate it into an action agenda by garnering the best available expertise in the country to make the 'how' of the idea more widely understood. This then becomes a great reference point for policy-making and effective implementation. My earlier books, ModiNomics – Inclusive Governance, Inclusive Economics; Defeating Poverty – Jan Dhan and Beyond, and India's Odyssey - Digital India, Developed India, have served this purpose well.

India 2047 attempts to review progress and bridge the residual gaps from the last book in line with the new target date and objectives. Some areas have already seen improvement, others are work in progress, and others need a rethink.

MACRO-ECONOMIC ESSENTIALS FOR INDIA TO BE A HIGH-INCOME COUNTRY

Starting with the Macro Economic essentials of making India a high-income country with equity, we draw upon the expertise of Bibek Debroy, Chairman of the Economic Advisory Council to Prime Minister Modi, and C Rangarajan, who was Chairman Economic Advisory Council to the then Prime Minister Manmohan Singh.

Debroy, in his paper, INDIA IN 2047 - Looking Back and Looking Forward, reflects on India's past and looks forward to its future in 2047. It highlights the celebrations of 75 years of independence and references Swami Vivekananda's emphasis on learning from the past to build a brighter future. He discusses India's economic and social conditions in the past, including low per capita income and limited statistical data. He mentions the aspirations of India to become a US$5 trillion economy by 2024–25 and the challenges posed by the COVID-19 pandemic. The paper concludes by projecting India's potential growth and development by 2047, including higher per capita income, a larger economy, and increased global influence. However, achieving these goals depends on assumptions and factors such as real growth and exchange rates.

The paper 'India at 75 and Beyond: A Macro View' by C. Rangarajan provides a macro view of India's economic progress, challenges, and future strategy, emphasising the need for sustained high growth and appropriate policy measures to achieve the desired financial goals. In the final section, the paper presents projections for future growth. It discusses the aspirations of policymakers to reach a US$5 trillion economy in the next five years and the status of a developed country by 2047. The required growth rates to achieve these goals are calculated, considering different assumptions.

While both papers arrive at the same conclusion, it is also important to note that they have taken different starting figures to forecast from and used different currencies (INR and USD) to project their calculations.

Averages can be very misleading, as the poor will tell you. If the wealth and income are concentrated mainly in the top percentile, can India be called a developed country on average?

A developed country, also known as an advanced or industrialised country, refers to a nation that has achieved a high level of economic prosperity, technological advancement, and social well-being. Developed countries generally exhibit characteristics such as a high per capita income, a well-established infrastructure, a diverse and sophisticated industrial base, and a high standard of living for their citizens.

The United Nations Human Development Index (HDI) is often used to assess and compare the level of development among different countries. The HDI considers various factors, including life expectancy, education, income, and overall quality of life. Countries with a high HDI score are generally considered developed.

While there is no universally agreed-upon definition, some commonly recognised developed countries include the United States, Canada, Japan, Germany, France, the United Kingdom, Australia, and many countries in Western Europe. These nations tend to have advanced healthcare systems, high literacy rates, strong educational institutions, robust infrastructure, and stable political systems.

It's important to note that the classification of a country as 'developed' is not static and can change over time. Some countries considered developing in the past have made significant progress and transitioned to the category of developed countries. Additionally, development is a multidimensional concept, and certain aspects of development, such as income inequality or environmental sustainability, may vary among developed countries.

Need for Structural Transformation

S Mahendra Dev, in his paper Structural Transformation of the Indian Economy: Past Performance and Way Forward to 2047, offers pointers.

The paper highlights that while many countries followed the classical pattern of transitioning from agriculture to manufacturing and then to services, India experienced a different trajectory, bypassing the manufacturing stage and transitioning directly from agriculture to services.

He presents data on the changes in the composition of output and employment in India over the past five decades. The share of agriculture in output has significantly declined, while the share of services has risen significantly. However, the percentage of manufacturing in output has only marginally increased over this period. In terms of employment, the share of agriculture has also declined, but the increase in the percentage of services has been more significant than that of manufacturing.

The paper compares the structural transformation in India with that of China, highlighting that China experienced a larger scale of labour reallocation from agriculture to non-agriculture sectors. China's levels of labour productivity are higher than those of India in all sectors except services, with China exhibiting higher growth rates of labour productivity due to greater within-sector productivity growth.

Overall, he suggests that while India has made progress in structural transformation, there is a need for further emphasis on industrialisation and increasing productivity to achieve sustained economic growth.

But is all transformation good?

The paper titled 'The Cobra Effect and Super-Cycles: Will India Become Prosperous @100?' by Ajay Chhibber discusses the concept of the Cobra Effect, where the solution to a problem ends up causing more harm than good. The author provides examples of policies in India that have had a Cobra Effect, hindering the country's path to becoming an advanced economy.

The paper highlights the negative consequences of demonetisation, the use of Life Insurance Corporation (LIC) to bail out underperforming banks and private companies, protectionist trade policies, low floor-to-area ratio policies, and the One-Rank-One-Pension (OROP) policy. These policies have unintended consequences and have not produced the desired outcomes.

Ajay also discusses the need for a second Green Revolution in agriculture, emphasising the importance of shifting crop production to more profitable and in-demand items. The current focus on minimum support prices (MSPs) and the role of the Food Corporation of India (FCI) in storing crops that are not needed are identified as problematic.

Furthermore, the paper questions the effectiveness of the inflation-targeting framework in India, arguing that factors such as international commodity prices and supply-side issues have a more significant impact on inflation than monetary policy. The author suggests re-evaluating the inflation-targeting regime and possibly focusing on core inflation. Having said something similar in my paper in the book India 2030, I recall getting into trouble with the critics who swear by RBI and MPC method even though growth and jobs be dammed. I am glad to find support from Chhibber's thinking.

Chhibber argues that demonetisation was a bad idea. Re-monetisation was a bad idea once demonetised, and the jury is still out on that.

Lastly, the paper examines the absence of a comprehensive plan or strategy for economic growth in India since the abolition of the Planning Commission in 2014. While acknowledging the need to move away from a control-oriented planning approach, the author suggests that a lack of planning may hinder the country's progress.

Overall, the paper emphasises the importance of implementing the right reforms and avoiding policies that have unintended negative consequences for India to become an advanced economy and seize the opportunity of its demographic advantage.

Increasing Formality

The paper titled 'Tackling Informality' by Radhicka Kapoor highlights the persistent challenge of informality in India's workforce, with over 90 per cent remaining informally employed. The paper discusses that while formalising the informal economy is desirable, simplifying bureaucratic procedures and offering benefits and incentives alone cannot formalise the economy. Informal enterprises that are low in productivity cannot afford to survive in the formal sector; hence formalisation processes are not just about legal considerations but also increasing productivity.

The author suggests that for such informal enterprises, targeted measures such as financial services, enterprise support, and training, and general measures of State support, such as infrastructure services, could help enhance productivity. The paper also emphasises that the informal sector is not just self-employed individuals who choose to be in the informal economy due to policy-induced distortions but also large swathes of low-productivity own-account enterprises working as subsistence enterprises. Survival is the biggest challenge for them, and precarity defines their existence.

The author concludes that creating more gainful employment opportunities through a process of labour-intensive growth by raising agricultural productivity and incomes and making labour-intensive manufacturing the central focus of growth strategy can potentially create a virtuous circle of consumption of manufacturing goods and industrial development and thereby accelerate the growth of output and employment in the manufacturing and services sectors.

Competitiveness

The paper 'India and Competitiveness' by Amit Kapoor and Shivani Kowadkar discusses the importance of understanding the external context, which constantly changes and can significantly impact a nation's trajectory. Given its contribution to the world population and economy, India needs to strategise to gain from opportunities and overcome challenges. The competitiveness approach is a promising framework to address India's challenges and make a transformative leap.

As defined by Michael Porter, the competitiveness approach rests on a dual emphasis on an economy's macroeconomic and microeconomic components, with productivity being the key to long-term prosperity for any economy. The article highlights the need for a new conceptualisation of India's ambitions grounded on a renewed development approach and to address the ground yet to be covered in terms of progressing in providing access to good quality health and education, expanding opportunities for gainful employment, and bridging the divide between classes, communities, and geographies.

The paper discusses India's challenges in achieving its transformation goals in the next 25 years. It emphasises the need for a bottom-up approach to policy-making and implementation that considers the heterogeneity of the Indian landscape, including regional economic disparities. The concept of clusters, closely located groups of related industries, is proposed to promote productive competition by utilising existing capacities in different regions. The '4 S' framework, which focuses on prosperity matched by social progress, shared across regions, environmentally sustainable, and resilient to external shocks, is presented as a way to redefine success and achieve long-term prosperity.

FINANCIAL INCLUSION AND EQUITABLE GROWTH

This brings us back to the issue of ensuring that India is a high-income country with equity. Most of my domain work has been around this theme.

My book 'Defeating Poverty: Jan Dhan and Beyond' extensively dealt with the subject and outlined a roadmap for leveraging Financial Inclusion for Poverty Alleviation and more equitable growth.

My paper 'State of Financial Inclusion and India 2047' finds that significant there have been made in credit outreach gaps since 2014.

The PMJDY scheme aimed to open bank accounts for every household and expanded to include every adult. The scheme has been highly successful, with over 46 crore bank accounts opened, and it has increased banking habits among the population.

The paper highlights the growth of bank accounts opened under the PMJDY, with deposits and average balances increasing significantly over time. It also mentions that as of 2021, 78 per cent of Indian adults had a bank account compared to 53 per cent in 2014, indicating improved financial inclusion. However, financial inclusion is not just about bank accounts but also includes access to a wide range of financial services, such as credit, insurance and equity products.

The paper notes that financial inclusion enables sustainable development goals and emphasises its role in reducing poverty and boosting shared prosperity. Access to banking services improves day-to-day living and helps individuals and businesses plan for long-term goals and unexpected emergencies.

While there has been progress in financial inclusion, particularly in access to financial services, the usage of these services remains a challenge. The availability and cost of credit, along with the need for improved financial literacy, are vital areas that require attention to enhance financial inclusion in India further.

The paper discusses the relationship between credit and economic growth in India. Financial Inclusion Task Force set up by SKOCH Group analysed the relationship between bank credit growth and GDP growth rate from 1974 to 2014 and found that credit growth and GDP growth exhibited a positive correlation across sectors.

The decline in credit growth post-2013 was mainly due to a surge in bad loans and a slowdown in GDP. The article also discusses the gaps in financial inclusion, particularly access to credit for MSMEs, agriculture, and small businesses. The Financial Inclusion Task Force will give recommendations on digital lending and markets to bridge credit and literacy gaps.

The article also discusses the credit outreach gaps in India, which refers to the proportion of people who need access to formal credit. According to a research study by the Financial Inclusion Task Force, the credit outreach gaps in India declined by 12.01 per cent points between 2015 and 2022. The study uses the same methodology as the Rangarajan Committee report released in 2008, which analysed credit outreach gaps for 2005. The information includes a nationwide and district-wise analysis of credit outreach gaps. Significant progress has been made in bridging the credit outreach gaps since 2015, with states such as Tamil Nadu, Chandigarh, Maharashtra, Puducherry, and Kerala showing a sharp drop in credit outreach gaps. However, there is still wide geographical variation in credit outreach gaps in India.

The performance of different states and union territories in narrowing the credit outreach gap refers to the gap between the percentage of households availing of credit and the percentage of households eligible for it. Five states/UTs, namely Andhra Pradesh, Delhi, Goa, Karnataka, and Tripura have been categorised as performers for consistently improving their credit outreach gaps. Among them, Andhra Pradesh has shown the most improvement, with a decline of 12.51 percentage points between 2015 and 2022. On the other hand, Haryana, Punjab, Jammu & Kashmir, Odisha, and West Bengal have been categorised as catching-up states, as they have registered significant improvements in narrowing the credit outreach gap during 2015–2022. Punjab witnessed the most significant improvement, with a decline of 11.7 per cent points during the same period.

The Financial Inclusion Task Force analysed the relationship between credit outreach gaps and various factors in India. A negative correlation was found between state economic growth (measured by Net State Domestic Product) and credit outreach gaps, meaning that as a state's economic growth increased, the credit outreach gap tended to decrease. District-level analysis showed significant progress in narrowing credit outreach gaps at the district level. However, nearly one-third of the districts in the country still faced severe credit outreach gaps. Microfinance loans were not prevalent in districts with acute credit outreach gaps, but with the removal of interest rate ceilings, Microfinance institutions are incentivised to expand in those areas. The Task Force found that the percentage of households with access to clean fuel for cooking and the percentage of women with ten or more years of schooling had a negative correlation with credit outreach gaps. A positive correlation was found between credit outreach gaps and multi-dimensional poverty, and MSMEs are negatively correlated with credit outreach gaps.

Availability of credit, cost, and a significant increase in penetration would be required to meet the objectives of India becoming a high-income country with equity by 2047.

In her paper titled 'Financial Inclusion and its Discontents: Unaddressed Issues and the Way Forward, ' Deepali Pant Joshi discusses the challenges and shortcomings of financial inclusion in India. The author emphasises the need to go beyond mere access to financial services and focus on effective credit delivery as a means of poverty eradication and economic growth.

The paper highlights the historical efforts made in rural credit systems, such as the Priority Sector, Bank Nationalization, and various government-sponsored schemes. However, it points out that directed credit and quantitative targeting still need to achieve their objectives, leading to inefficiencies and credit culture issues.

The author argues that financial inclusion should prioritise credit penetration while ensuring adequate post-disbursement supervision. The focus should be on providing timely and sufficient credit for needy borrowers and promoting sustainable income-generating projects. This approach would lead to regular credit flow and encourage credit discipline.

The paper also discusses the importance of financial literacy and education in achieving effective financial inclusion. It mentions initiatives the Reserve Bank of India (RBI) took to promote financial education, such as incorporating it into the school curriculum and implementing the Centre for Financial Literacy (CFL) project. The CFL project aims to expand financial literacy centres nationwide to improve financial awareness and empower individuals.

The paper highlights the RBI's goals for the coming years, including leveraging fintech innovations, capacity building for financial education, and scaling up the CFL project to cover the entire country. The RBI aims to sustain the momentum of financial inclusion and measure progress through the Financial Inclusion Index.

Overall, the paper emphasises the need to address the challenges and gaps in financial inclusion and suggests strategies to improve credit delivery, promote financial literacy, and achieve meaningful economic growth with equity.

SOCIAL INCLUSION AND EQUITABLE GROWTH

N C Saxena, in his paper, 'How to Reduce Poverty and Inequality in India – Some Practical Tips,' critically analyses India's progress in achieving the Millennium Development Goals (MDGs) and highlights areas where the country has fallen short, such as hunger, health, nutrition, gender, and sanitation. Despite India's impressive economic growth, poverty remains a significant problem, with 25 per cent of people still classified as poor according to the Multidimensional Poverty Index (MPI). The paper argues that flawed designs in flagship programs such as MGNREGA, ICDS, and urban housing need to be amended to ensure that benefits reach the poor. The author suggests practical tips to reduce poverty and inequality, including revamping agriculture, empowering women, and simplifying procedures to promote non-farm enterprises.

The paper emphasises the need to focus on improving public investments in human capital and strengthening delivery mechanisms of government interventions to ensure transparency and accountability. The author suggests using technology to monitor the attendance and performance of field staff and collecting quantitative data on the absenteeism of service providers and service receivers. The paper argues that dealing with inequality while encouraging productivity growth and wealth creation is crucial for inclusive development in India. Good governance and accountable administration are essential to translating these macro-policies into action.

Amarjeet Sinha, in his paper, ‘ Rural Livelihood – Women’s Collectives as a Pathway to Well Being,’ discusses poverty reduction efforts and progress made in India, particularly in rural areas. It cites various reports and surveys showing that India has significantly reduced poverty. The paper also discusses the role of education, healthcare, and women’s empowerment in poverty reduction, citing examples of Southern Indian states like Kerala and Tamil Nadu.

The paper highlights the importance of decentralised governance, convergence, and community connections to address poverty. The passage also describes various interventions and initiatives that have contributed to poverty reduction in India, such as forming women’s Self Help Groups (SHGs) and promoting social capital, providing credit and microfinance, and implementing various public welfare schemes.

Sinha discusses the challenges posed by the COVID-19 pandemic and the Ukraine crisis to poverty reduction efforts in India. Finally, the paper discusses the success of the Deendayal Antyodaya Yojana-National Rural Livelihoods Mission (DAY-NRLM) in reducing poverty in India and the challenges in developing credit linkage for higher-order economic activities.

The paper ‘Health: The Centennial Challenge for India,’ by Rama V. Baru, examines India’s health sector and its challenges and opportunities leading up to the centenary of Indian Independence in 2047. The article acknowledges the impact of liberalisation on the health sector and the growing gap in access to health services between rural and urban areas, with the private sector dominating the conversation on health care. The major subsystems of the health service system in India are financing, provisioning, medical and paramedical education, drugs, technology, research, and public-private partnerships in each of these subsystems. The author identifies socioeconomic inequalities, wealth gaps, and contradictions between the public and private sectors as significant impediments to improving India’s human development indicators, particularly in the health sector. The paper suggests that the government needs to increase healthcare spending to at least 3 per cent of GDP, focus on building healthcare infrastructure, and regulate the private sector effectively to improve access to healthcare.

FEDERALISM AND INCLUSIVE GROWTH

Salman Anees Soz finds answers in decentralisation. His paper, 'Decentralisation: An Internal Growth Engine,' discusses India's economic challenges due to the COVID-19 pandemic and other factors. The report suggests that decentralisation could be a path to mitigate the impact of post-COVID challenges and achieve sustainable economic and social development. The author argues that centralisation threatens India's federal structure, and the spirit of cooperative federalism is in jeopardy. The paper proves that a decentralised system can deliver public services more effectively and transform how poor and marginalised communities get a 'seat at the table'. The article concludes that India must rededicate itself to the promise of federalism and push the envelope to secure the dreams of all Indians.

The paper 'Local Governments in India: Vision for 2047' by V N Alok discusses the importance of local governments in India and suggests reforms to make them more effective. The paper assesses the conventional wisdom of various commissions and committees and offers out-of-the-box solutions for effective local governance. The article suggests that bold and politically neutral steps are needed in Amrit Kaal to integrate rural and urban local governments. The report also highlights the need to correct the legal framework and expand the Union Finance Commission to cover local governments. The mandatory provisions of the amendments include structural uniformity of three levels of panchayats and municipalities, five-yearly elections, reservation of seats and chairpersons for weaker sections and women, State Finance Commissions, and District and Metropolitan Planning Committees. The paper also discusses staffing, political executive, and accountability to residents.

While researching this book and over the numerous conversations I had, I realised that Federalism is now divided into two parts; one is based on the Constitution, subsequent amendments and the overall discourse around functions, finances and functionaries, and two are based on the political discourse of the day about centre state frictions, overstepping of authority and so on. I am working on a comprehensive paper on this, but for now, I find near unanimity on the significant progress made on the technical aspects of decentralisation over the last decade.

INFRASTRUCTURE AND FINANCING

'India at 100: Some Thoughts on Infrastructure Issues,' a paper by M Ramachandran discusses India's vision to become a developed economy with a minimum per capita income equivalent to US$13,000 by 2047.

To achieve this, India needs to increase the growth rate, raise the gross fixed capital formation rate, and absorb new technologies. The paper predicts that India will become a solid economic power, a permanent member of the UN Security Council, and will have a stable Centre-State relationship. India will have third-level solid governance, digitisation, and respect globally for its cultural strength, heritage, and value-based systems.

The paper highlights the key areas where India's efforts will remain focused, such as transport and logistics, expanding the high-value manufacturing base, and integrating logistics with a robust infrastructure system. The National Logistics Policy and the PM GatiShakti initiative will play a crucial role in reducing the cost of logistics. The National Master Plan and its projects through the National Infrastructure Pipeline align with the PM GatiShakti framework, which can be a game-changer in the infrastructure scenario of the country.

The paper also discusses India's progress in two critical areas: exports and climate change. It is noted that despite India's position as the fifth-largest GDP in the world, it ranks only eighteenth in global exports. The paper argues that promoting coastal shipping, improving ports, inland water transport, and logistics development would help enable all other states to participate in export efforts actively.

Furthermore, the paper notes that a policy emphasis on districts as export hubs could help increase exports. In terms of climate change, India is committed to achieving four out of the five Panchamrits announced at CoP 26 in Glasgow by 2030, namely reaching 500 GW of non-fossil energy capacity, meeting 50 per cent of its energy requirements from renewable energy, reducing total projected carbon emission by one billion tonnes, and reducing the carbon intensity of its economy by 45 per cent. The paper argues that India should be able to make good progress in the long-term low-emission development strategy by using green hydrogen expansion, nuclear capacity, renewable energy, biofuels, and other contributing sectors such as transport, industry, and urbanisation.

'National Monetisation Pipeline: Silos and Future of the Public Distribution System (PDS),' A paper by Siraj Hussain and Shweta Saini, says the National Monetisation Pipeline (NMP) document, released by NITI Ayog, outlines plans to raise money through the monetisation of public sector assets in India while retaining ownership. The list of assets includes airports, mines, railways, ports, and power projects, among others. Warehouses of food grains run by the Food Corporation of India (FCI) are also proposed to be monetised. The paper argues that there are better policies than warehousing in big cities and that the public distribution system (PDS) should be reimagined, moving towards cash transfers to reduce the requirement for storage capacity. The paper also notes that some assets, such as those owned by petroleum and gas companies, may not be suitable for monetisation, while others, such as highways and surplus land, may be more suitable.

The paper discusses the need to relocate FCI warehouses in large cities' municipal limits to free up expensive land and reduce traffic congestion. The author suggests that monetising FCI-owned warehouses in rural areas could be a viable option for private management and that silos should be built outside municipal limits with railway sidings. The paper also highlights the issue of insufficient capacity utilisation and the need for a clear vision for the future of PDS to avoid excessive warehousing and silo capacity. Finally, the paper emphasises the need for more comprehensive consultations on the roadmap to direct benefit transfer (DBT) of food subsidies and to estimate the requirements for the physical distribution of food grains in each district.

Digital Financial Inclusion

The paper 'Harnessing Technologies of the Future for a Sustainable Growth Economy,' by Saurabh Garg, discusses the importance of technology in human evolution, which has been used not only to survive but also to grow and evolve faster. Equitable distribution of technology is essential to achieve sustainable growth, and technologies must also align with the environment to ensure sustainable development without deteriorating people's lives. The paper lists various technologies, including Artificial Intelligence, Quantum Computing, Smart Manufacturing, Advanced Communication Technologies, Blockchain, and Biotechnology, which have the potential to impact developing countries positively.

The paper emphasises collaboration among sectors and industries to ensure a holistic technology framework. Finally, the article discusses the importance of digitisation, digitalisation, and digital transformation in successful technology deployment and acceptance.

This paper also discusses the potential for Aadhaar, India's digital identity platform, to become a global standard for digital identity architecture. The report explains that Aadhaar has become a trusted and tested digital identity platform that is now ready to expand its domestic usage and global reach. The article describes how Aadhaar was developed to deliver on promises of uniqueness, online verification and know your customer (KYC) for digital transactions, and affordability without expensive credentials. The paper further explains how the Unique Identification Authority of India (UIDAI) has adopted cutting-edge technologies to improve the Aadhaar platform, such as AI/ML, offline e-KYC, and face authentication. UIDAI has ensured that Aadhaar has a multi-layered secure architecture to protect the system's integrity and privacy. The paper concludes with a discussion of UIDAI's vision for a technology-centric future grounded in reality and relevant to people.

In his paper 'Democratising Commerce through Open Network Digital Commerce,' T. Koshy discusses India's technological solutions to its structural economic challenges through leveraging digital public goods supported by regulation rather than relying solely on regulation. India's rapidly growing digital inclusion has allowed for unique public-private partnerships that benefit its 1.4 billion population without limiting innovation or private sector efficiencies.

Koshy highlights India's unique identification, payment systems, supply chain and logistics advancements through its tech-enabled solutions such as Aadhaar, unified payments interface (UPI), and Open Network Digital Commerce (ONDC). The paper also raises questions about data privacy and protection and how regulation can ensure people maintain their privacy while accessing services.

The paper titled 'Regulatory Challenges Facing the Indian Digital Payments Landscape,' by Ram Rastogi discusses the rapid growth of India's digital payments landscape, driven by the rapid expansion in digital infrastructure, unified payment interfaces, and innovative FinTech players. Merchant payments are expected to outpace person-to-person transfers, and digital payments will gradually become embedded in all forms of commerce. The paper also highlights the impact of real-time payments on economic growth and rural banking, facilitated by UPI and the National Payments Corporation of India (NPCI). However, challenges, such as thin margins, customer trust, and regulatory caps imposed by the NPCI, must be addressed for the digital payment market to reach its full potential.

In 'Banking in 2047,' Tamal Bandopadhyay argues that the sellers' market has become a buyers' market. From addressing the cycle of life, the customers' lifestyle is on the banks' radar now. Beyond meeting financial needs, they are becoming a marketplace for everything one wants.

The fintech and big techs are finding ways to throw the banks out of business while the banks are fast changing themselves into technology companies in the new financial world where brick-and-mortar structures are running the risk of turning into anachronism. Technology is no longer an enabler; it's the driver of the banking business.

Those banks which are changing in sync with time will survive and flourish. Others that cannot change may turn into dinosaurs and find themselves in the Reserve Bank of India Monetary Museum at Fort, Mumbai, which covers the evolution of money in India -- from the earliest barter system and the use of cowries to paper money, coins, stock markets and modern-day electronic transactions.

The customers will step in to get a feel for history and heritage but not shed tears for them.

SPATIALLY DISPERSED AND JOB-GENERATIVE GROWTH

The paper Financial Ecosystem for Micro, Small, and Medium Enterprises (MSMEs) by Ajay Thakur discusses the challenges of micro, small, and medium enterprises (MSMEs) in India, particularly the lack of access to formal financing channels. The Trade Receivables Discounting System (TreDS) platform is introduced as a solution to facilitate the financing of trade receivables of MSMEs.

Thakur also highlights the role of venture capital in funding high-risk technology and innovative start-ups and the importance of SMEs and start-ups accessing alternative sources of capital like equity funds. The compliances for the SME platform have been relaxed to make things easier and reduce the cost burden, allowing SMEs to mature and bring in corporate governance and best practices. Finally, the paper emphasises the need for financial institutions to adopt a relationship-lending approach to establish a strong financing relationship with MSME customers and for the equity funding ecosystem to be strengthened for the SME segment.

The Paper 'Role of Microfinance in Building a US$5 trillion Economy by Alok Misra and Vinay Singh discusses the role of microfinance in building a US$5 trillion economy. It highlights the positive impact of credit availability on poverty reduction, women empowerment, household health, children's education and other human development indicators. It highlights that despite progress in financial inclusion, only 53 per cent of adults worldwide reported borrowing money over the past 12 months.

The paper examines the history of credit delivery in India. It concludes that a supply-driven, subsidised and average banking-oriented approach could have been reaching the people living in poverty. It would also be sustainable over the long term. The paper examines the evolution of microfinance in India and discusses the success of microfinance in reaching the people living in poverty and providing financial services that are more effective than previous approaches.

The authors first discuss the regulatory reforms introduced in the microfinance sector by the Reserve Bank of India after the Andhra Pradesh crisis, which established a new category of regulated entities called NBFC-MFI. The regulations introduced customer protection measures and stricter rules for corporate governance, and they encouraged the use of credit information companies and self-regulatory organisations. The paper then explores the growth of the microfinance sector over the last decade, including the significant increase in loan volumes and outreach, the expansion of the JLG microfinance market to include diverse financial institutions, and the steps taken to ensure responsible finance, such as establishing a separate microfinance credit bureau, a self-regulatory organisation, and an industry Code of Conduct.

The paper discusses the shift in microfinance regulations in India from entity-based to activity-based regulations, which led to regulatory issues. Different regulated entities (REs) had similar products, client profiles, and operational methodologies but were governed by different laws. In 2019, the Code of Responsible Lending (CRL) was introduced by MFIN to address this issue. The Reserve Bank of India (RBI) published a Consultative Document on regulation for the microfinance sector in June 2022, followed by the final set of regulations published in March 2022. The new regulations shift from entity-based to asset class-based regulation and principles-based over micro-business rules. The new regulations benefit and protect customers from unethical practices and over-indebtedness. Further, the HH income limit has been revised, the distinction between rural and urban has been removed, and the deregulation of the lending rates for microfinance loans has been introduced. The paper concludes by discussing the positive impact of microfinance on household health, education, income generation, women's empowerment, conflict resolution, and social and political reconciliation.

The paper 'Role of Microfinance in Building a US$5 trillion Economy' by Jiji Mammen discusses the current outreach of microfinance in India and the potential market for microfinance. The authors estimate the outreach to be around 8.5 crore borrowers and the likely microfinance households in India to be 20.32 crore. The total microfinance market size is estimated to be ₹10 lakh crores, expected to grow to ₹24.63 crores by 2025–26. The authors believe that technological innovations and their adoption will drive the continued growth of the microfinance sector and that microfinance will be the key channel in meeting the unmet demand.

The paper by Jiji Mammen explores the evolution of microfinance in India and its contribution to the financial inclusion of the poor. The report highlights the success of the Self-Help Group (SHG) Bank Linkage Programme, which started in 1991 and is now a mainstream banking activity. Additionally, the paper discusses the emergence of Microfinance Institutions (MFIs) in 2000, which have played a crucial role in extending microcredit to the poor who do not have any collateral to provide. The paper also mentions the regulations for the NBFC-MFI sector following a crisis in Andhra Pradesh in 2011. The study provides statistical data on the spread of microfinance in terms of district coverage and the lender-wise spread of microfinance in terms of active loans and outstanding loans. Finally, the paper concludes that the microfinance sector has contributed significantly to India's mass financial inclusion movement.

Just like Aatma Nirbhar Bharat is a work in progress, so are the ideas and plans in this book, much the same as with the earlier volume India 2030. I hope to revisit it at reasonable intervals to take stock of the progress and update and upgrade wherever required.

Macroeconomic Essentials

India in 2047: Looking Back and Looking Forward

Bibek Debroy

THE REAR-VIEW MIRROR

Azadi Ka Amrit Mahotsav, the event that celebrated seventy-five years of India's independence, commenced on 12 March 2021 and continued till 15 August 2023. In his address to the country from the Red Fort on 15 August 2021, the Prime Minister quoted Swami Vivekananda:

When Swami Vivekananda used to talk about the future of India, when he used to see the magnificence of Mother Bharati in front of his eyes, he used to say: 'Try to look into the past as far as possible, drink the water of the ever-new spring flowing back there, and, after that, look ahead. Go ahead and make India brighter, greater, and better than ever'.[1]

This quote is from Volume 3 of his Collected Works, a lecture titled 'The Future of India', part of the collection *Lectures from Colombo to Almora*. Swami Vivekananda also said:

Children of India, I am here to speak to you today about some practical things, and my object in reminding you about the glories of the past is simply this. Many times have I been told that looking into the past only degenerates and leads to nothing and that we should look to the future. That is true. But out of the past is built the future. Look back, therefore, as far as you can, drink deep of the eternal fountains that are behind, and after that, look forward, march forward, and make India brighter, greater, much higher than she ever was.

…Out of this decay is coming the India of the future; it is sprouting, its first leaves are already out; and a mighty, gigantic tree, the Urdhvamula, is here, already beginning to appear; and it is about that that I am going to speak to you.[2]

1. https://www.pmindia.gov.in/en/news_updates/pms-address-from-the-red-fort-on-75th-independence-day/
2. https://www.ramakrishnavivekananda.info/vivekananda/volume_3/lectures_from_colombo_to_almora/the_future_of_india.htm

As one looks back at the midnight hour of 15 August 1947, while there is no reason for complacency, there is no reason for anger either. There is much that independent India has accomplished and there is much that we, as citizens of independent India, should be proud of. That said, in the next twenty-five years leading up to 2047, there is much that remains to be accomplished.

15 August 1947 seems like a long time ago. Seventy-five years is a long time, even though it is but a fleeting moment in the history of nations. The world was different then. India was different then. The Indian economy was different then. Minoo Masani (1905–1998)—an influential thinker, politician, and Parliamentarian in his day—is all but forgotten now. In 1940, he published a slim book directed at children.[3] It was socialist in tone and had views Minoo Masani would change in his later years. In the Preface to this book, he said, 'Statistics of Indian life are so scanty and scrappy that reliance on them is bound to endanger one's conclusions'. Indeed, data and statistics were scanty and scrappy in 1940. Proper statistical systems did not start to evolve until the 1950s. These days, if one wants official data, one often resorts to the Economic Survey. In those days, not only was there nothing quite akin to the Economic Survey, but data was also non-existent. Even after India's independence in 1947 and the enactment of the Constitution in 1950, for more than a decade, there was no Economic Survey in the sense that we understand it now. Publishing the Economic Survey is not a constitutional requirement, it is published because of an executive decision and because it has now become an established precedence. As the seed of what would eventually become the Economic Survey, a 'White Paper' started to be included in the Budget papers from financial year (FY) 1950–1951. If one reads the first White Paper, which was included in the Budget papers for 1950–1951, there is no mention of what we know as human development indicators today.

We do not know what it was like to be an average Indian in 1947. Minoo Masani offers some indication. He said:

Learned professors in our universities have estimated that the ordinary peasant in our country with a wife and three children has to live along with his family on much less than ₹27 a month, which is the average income for all kinds of Indians rolled into one…If, for instance, a baby brother or sister were to be born in your home—don't mention this to your mother or father, it'll only hurt their feelings, because grown-ups are like that—the little baby, sad to say, is due to die at the age of 27.

A per capita income of ₹27 per month and a life expectancy of 27 years.[4] There are also literacy numbers from the Census of 1941, though the geographical definition of India in 1941 was different from the geographical definition of India today. The literacy rate was 16.1 per cent. By 1951, we had a slightly

3. *Our India*, Minoo Masani, Oxford University Press, 1940.
4. By 1951, the life expectancy would increase to 32 years.

better idea of what it was like to be an average Indian. In the Census of 1951, with India geographically defined as it is now, the literacy rate was 16.7 per cent.[5] The infant mortality rate was 146 for every 1000 live births. In April 1951, the first report of the National Income Committee highlighted problems with the statistical system.[6] The Central Statistical Organisation (CSO) and the National Sample Survey Organisation (NSSO) were in their formative years. The Collection of Statistics Act would be passed in 1953.

That seems like a long time ago. It is unnecessary to document the successes achieved since 1947 and they are considerable. They could have been more—but that is neither here, nor there. 'Amrit Kaal' is about looking forward.

THE FORWARD VIEW

To quote the Prime Minister from his speech on 15 August 2021:

There comes a time in the development journey of every country when the country redefines itself afresh and pushes forward with new resolutions. Today that time has arrived in the development journey of India. We should not limit the occasion of 75 years of Indian Independence to just one ceremony. We must lay the groundwork for new resolutions and move forward with new resolutions. Starting from here, the entire journey of the next 25 years, when we celebrate the centenary of Indian Independence, marks the Amrit period of creation of a new India. The fulfilment of our resolutions in this Amrit period will take us to the hundredth anniversary of Indian Independence with pride. The goal of 'Amrit Kaal' is to ascend to new heights of prosperity for India and the citizens of India.

…Our country also has to change and we as citizens have to change ourselves too. We also must adapt ourselves to the changing era. We have started with the spirit of 'Sabka Saath, Sabka Vikas, Sabka Vishwas'. Today I am requesting from the ramparts of the Red Fort that 'Sabka Saath, Sabka Vikas, Sabka Vishwas' and now 'Sabka Prayas' are very important for the achievement of our goals.

What will India be like in 2047? It is impossible to tell precisely. Twenty-five years ago, we were in 1997—had we tried to predict then what India would be like in 2022, many of us might have got the general trends right but would have been wrong about the specifics.

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5. Methodologically, these literacy rates are not comparable with literacy rates in Censuses after 1991. Definitions have changed. Before 1991, in computing literacy rates, the denominator was total population. The figures were crude literacy rates. Post-1991, the ratio is worked out for the population that is 7 years or more in age. That is, post-1991, the figures are net literacy rates. If the net literacy rate is computed for 1951, with the population that is 5 years or more in age used in the denominator, the figure becomes 18.3%.
6. *First Report of the National Income Committee*, Department of Economic Affairs, Ministry of Finance, April 1951.

Often, one uses per capita income or the total value of the gross domestic product (GDP) as an indicator. As a measure, the GDP is often criticised—not because of what it measures, but because of what it does not measure. None of these criticisms are new and they have been known since the days when Simon Kuznets pioneered the measurement of national income.[7] Despite the criticisms of the GDP as a measure, no satisfactory alternative has quite emerged. Any country's GDP is in its own national currency. For purposes of cross-country comparison, a common numeraire is needed and that happens to be the US dollar. The rupee–dollar conversion can be done with official exchange rates, or with purchasing power parity (PPP) exchange rates. Using official exchange rates, India's per capita income is roughly US$ 2,500 now (2022), while the PPP per capita income is around US$ 8,300. Using official exchange rates, the aggregate size of the GDP is US$ 3.5 trillion, while the PPP size will be around US$ 11.7 trillion. Since PPP prices are difficult to obtain, most extrapolations are done on the basis of official exchange rates.

There was such an extrapolation in the Economic Survey, 2018–2019.[8] It said:

As articulated by the Prime Minister, Shri Narendra Modi, India aims to grow into a USD 5 trillion economy by 2024–25, which will make India the third-largest economy in the world. Given 4% inflation, as the Monetary Policy Framework specified by the Government for the Reserve Bank of India, this requires real annual growth rate in GDP of 8 per cent.

…International experience, especially from high-growth East Asian economies, suggests that such growth can only be sustained by a 'virtuous cycle' of savings, investment, and exports catalysed and supported by a favourable demographic phase. Investment, especially private investment, is the 'key driver' that drives demand, creates capacity, increases labour productivity, introduces new technology, allows creative destruction and generates jobs.

There was a footnote in that document, one that often gets missed. It said:

Among the different modelling possibilities, assume a 0.7% increase in total factor productivity in India when compared to the U.S. and a constant real effective exchange rate. This then translates into an exchange rate of INR 75 per USD in March 2025, which implies that the Indian economy must have a nominal GDP of 375 lakh crores in March 2025. An 8% real growth rate for GDP combined with 4% inflation would deliver this nominal GDP. While the export growth required to deliver the 8% real GDP growth rate may require a depreciation of the real effective

7 See, for example, *National Income, 1919-1938*, Simon Kuznets, *Occasional Paper*, April 1941, National Bureau of Economic Research, https://core.ac.uk/download/pdf/6907641.pdf

8 *Economic Survey 2018-19*, Department of Economic Affairs, July 2019, Vol.1, https://www.indiabudget.gov.in/budget2019-20/economicsurvey/doc/echapter.pdf

exchange rate, we emphasize export growth stemming from increases in productivity rather than currency depreciation.

In other words, an aspirational target of something like US$ 5 trillion dollars is set in nominal terms. The timeline for achieving that is a function of assumptions made about inflation and the behaviour of exchange rates. With those assumptions fixed, one can derive the required real rate of growth. With alternative assumptions, anyone can work out the desired real rate of growth—and that will, indeed, be in the region of 8 per cent or 8.5 per cent, whatever the iteration.

The above-mentioned extrapolation in the Economic Survey was pre-COVID-19. Regardless of the metric used (such as morality or vaccinations), compared to many other advanced economies, India has handled the pandemic rather well. In large measure, this is because of the inclusive measures undertaken by the Government since 2014. While the immediate exogenous shock of the pandemic is over, there is still uncertainty about future mutations, global politics, and the resilience of the world economy. A lot of the negativity about the state of the economy focuses on the transient—since the recovery from the downturn, resulting both from the pandemic and the lockdown, is not yet over. However, if the timeline is that of 2047, one should look beyond the immediate and the transient. Stated simply, because of the COVID-19 pandemic, India has lost two years of its development trajectory—whether the objective is defined in terms of a US$ 5 trillion GDP target or sustainable development goal (SDG) indicators. Consider some recent projections by the International Monetary Fund (IMF), with real growth of 8.2 per cent in 2022, 6.9 per cent in 2023, and 6.2 per cent in 2027.[9] In the immediate, as growth recovers from a low base, it tends to be higher. The more pertinent question is that of India's rate of growth once the recovery is out of the way. On that, an obvious point is often missed. As growth happens and a country moves up the development ladder, the rate of growth tends to slow. The 8 per cent rate of growth assumed for the 2020s cannot be assumed to continue in the 2030s. In these IMF forecasts, India should achieve the US$ 5 trillion target in FY 2026–2027–underlying the point about losing two years of the development trajectory. The point about growth is its exponential impact and this essay is not about 2027, but 2047. Depending on the assumptions one makes, in 2047, India's per capita income will be at least US$ 10,000 and the size of the economy will approach US$ 20 trillion. To repeat, inflation is the easier one to figure out. The critical assumptions are about real growth and the exchange rate. Just so that one appreciates the implications, in current World Bank classifications, India is classified as a lower-middle-income country. In that transition to 2047, it will pass through the upper-middle-income category and

9. *World Economic Outlook, War Sets Back the Global Recovery*, IMF, April 2022.

approach the high-income status—presently defined as more than US$ 12,695. This will have implications that are impossible to completely grasp today. Poverty levels will decline sharply. There will be socioeconomic churn. Since the GDP is an imperfect measure, the United Nations Development Programme (UNDP) has evolved the notion of the human development index (HDI), based on per capita income, life expectancy, and education indicators. By 2047, India will move from the present medium human development category to the high human development category. The global clout will increase greatly.

How conditional is this on the assumptions made? Often, one does not appreciate the power of the exponential function. In 2003, a Goldman Sachs report, known as the BRICS report, attracted a lot of attention.[10] In those projections, about one-third of the increase in the rate of growth occurred because of exchange rate appreciation. The remaining two-thirds consisted of real growth, but the growth rate assumed for India was 5 per cent. Given present expectations, if India grows at 5 per cent, that will be regarded as under-performance. What kind of real growth rate is plausible and how conditional is that on the assumptions made?

There are different ways to slice this question. In the quote from the Economic Survey, there is a reference to savings/investments, labour productivity, and exports. With income growth and because of the young population, as a secular trend, an increase in the savings/investments rate is almost a truism. The demographic dividend will, of course, not last indefinitely, and beyond 2035, India will begin to age—with strong inter-State variations in this proposition. At one level, the per capita income is nothing but the average productivity of India's citizens—more accurately, the productivity of India's citizens who are in the working-age groups. Hence, there is also an issue of increasing labour force participation, especially for women. One can also slice the problem in terms of a national income identity, with the four drivers of growth being consumption, investments, government expenditure, and (net) exports.

As has been mentioned earlier, the global economic environment is no longer that kind for export-led growth—though 2047 is a long time away. As of now, the main drivers will have to be consumption, investments, and government expenditure—the endogenous sources, so to speak. Government expenditure brings in the question of the efficiency of government expenditure, which is also determined by what one wishes the Government to do and at what level (Union, State, and local). Resources are also needed for public expenditure, thereby bringing in the question of tax reform (direct and indirect) and non-tax sources of revenue. One can also slice the problem in terms of making labour, land, and

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10 *Dreaming with BRICs: The Path to 2050*, Dominic Wilson and Roopa Purushothaman, Global Economics Paper No: 99, Goldman Sachs, October 2003.

capital markets more efficient, with the rest being a function of productivity. A sectoral perspective is also possible, with possible growth rates for the primary, secondary, and tertiary sectors. Finally, all-India growth is the aggregate of growth rates in all of India's States. There is plenty of slack within the system for States to grow, tapping on different sources of growth since States are at different levels of development. In sum, even if 8.5 per cent seems unduly optimistic, there is no reason why India cannot do 7.5 per cent—subject to the point made earlier, about growth slowing as one moves further up the development ladder.

The Cat only grinned when it saw Alice. It looked good-natured, she thought still it had very long claws and a great many teeth, so she felt that it ought to be treated with respect. 'Cheshire Puss', she began, rather timidly, as she did not at all know whether it would like the name: however, it only grinned a little wider. 'Come, it's pleased so far', thought Alice, and she went on. 'Would you tell me, please, which way I ought to go from here'? 'That depends a good deal on where you want to get to', said the Cat. 'I don't much care where,' said Alice. 'Then it doesn't matter which way you go', said the Cat.

In this case, we know where we want to go and the way is also clear.

…'so long as I get somewhere', Alice added as an explanation. 'Oh, you're sure to do that', said the Cat, 'if you only walk long enough'.

There is that too!

India at 75 and Beyond: A Macro View[1]

C. Rangarajan

Where will India be twenty-five years from now when we would have completed 100 years after Independence? Will by that time India achieve the status of a developed economy which means achieving a minimum per capita income equivalent to US$ 13, 000?

In section I, we outline the progress of the Indian economy since Independence and up to 2022. The strategy of development during this period is also discussed. In section II, some arithmetic on what growth rate is required in the next twenty-five years to reach the developed country status. In section III, the essential elements of the future growth strategy are indicated.

I. PROGRESS SINCE 1947

India's economic journey started with Independence. It is not realised often that India's economic progress in the first half of the twentieth century under British rule was dismal. According to one estimate, during the five decades, India's annual growth rate was just 0.89 per cent. With the population growing at 0.83 per cent, per capita income grew at 0.06 per cent.[2] It is not surprising that immediately after Independence, growth became the most urgent concern for policymakers.

The dominant view in the literature on development economics in the 1950s and 1960s was that the government had an important role to play and that it should undertake activities that would compensate for 'market failure'. Market failure was perceived particularly in its inability to allocate resources over time, that is, for investment because of the 'myopic' nature of market participants.

1. A partial adaptation of the Dr. V.K.R.V. Rao Memorial Lecture delivered in September 2022 at Bangalore.
2. Sivasubramanian, S. (1997), 'Revised Estimates of the National Income of India, 1900–1902 to 1946–17', *The Indian Economic Social History Review,* No. 34, Issue 2, pp. 113–68.

The literature also emphasised the benefit of a coordinated and consistent set of investment decisions. It is this line of reasoning that led most developing countries, including India, to formulate economy-wide plans. Though India adopted a mixed economy, the mix was tilted heavily towards the state, at least incrementally.

In the early period, India's strategy of development comprised four elements -raising the savings and investment rate, the dominance of state intervention, import substitution and domestic manufacture of capital goods. Arthur Lews wrote in 1954, 'The central issue for development economics was to understand how a country which saves 5 per cent of its income is transformed into one which saves 20 per cent of its income'. The simple Harrod-Domar model also emphasised the need to raise investment to spur growth. The intellectual support for an emphasis on 'heavy industry'-led growth came from the Mahalanobis model, which was strictly valid only in a closed economy. The 'export pessimism' that prevailed at that time went in support of the approach of import substitution. One consequence of this approach was that India became a high-cost economy. The net result was that India's share in world exports, which stood at 2 per cent of world trade, fell to less than half of 1 per cent by 1973. To some extent, policymakers in India in the 1950s and 1960s were handicapped. At that time, there was no clear model available for accelerating growth in developing countries. State intervention on an extensive scale seemed to be appropriate, even though there were some critics even at that time. However, by the end of the 1970s, it was becoming clear that the model we had chosen was not delivering and that it needed modification. By that time, there were many more critics of the Indian strategy. But our policymakers refused to recognise this. It was around that time China made a big change.[3]

It was the crisis of 1990–91 that compelled the policymakers to turn to an 'idea whose time had come'. The break with the past came in three important directions. The first was to dismantle the complex regime of licences, permits and controls that dictated almost every facet of production and distribution. Barriers to entry and growth were dismantled. The second change in direction was to reverse the strong bias towards state ownership of means of production and the proliferation of public sector enterprises in almost every sphere of economic activity. Areas once reserved exclusively for the state were thrown open to the private sector. The third change in direction was to give up the inward-looking trade policy. By embracing international trade, India signalled that it

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3 The famous Deng's speech was delivered on 13 December 1978. He called to 'explore new ways and generate new ideas'. It is interesting to note that in 1980, in current dollars, India's per capita income was 266 while that of China was 194. In 2020, India's was 1900 while that of China was 10,500. Of course, one cannot attribute the big difference to only a change in policy.

was boldly abandoning its export pessimism and was accepting the challenge and opportunity of integrating into the world economy. This approach is very different from what we used to do when faced with BOP problems earlier.

The New Economic Policy of India has not necessarily diminished the role of the state; it has only redefined it, expanding it in some areas and reducing it in others. As has been said, somewhat paradoxically, more market does not mean 'less government' but only 'different government'.

What has been the impact of the reforms on the economy? Did India's growth rate pick up? What happened to inequality in income and poverty?

Trends in Growth

India's average growth till the end of the 1970s remained modest with the average growth rate being 3.6 per cent. With a population growing at 2.2 per cent, the per capita income growth rate was extremely modest at 1.4 per cent. However, on certain health and social parameters such as the literacy rate and life expectancy, there were noticeable improvements, (Table 1). While India had to rely on heavy imports of food grains on a concessional basis initially, there was a breakthrough in agriculture after Green Revolution. The industrial base also got widened. India became capable of producing a wide variety of goods including steel and heavy machinery. While India's post-Independence economic performance was reassuring compared to the pre-Independence period, it is not that impressive when compared with several developing countries even in Asia (Table 2). It was also less than our expectations. Plan after plan, actual growth was less than what was projected. The Indian economy did grow at 5.6 per cent in the 1980s. But it was accompanied by a sharp deterioration in the fiscal and current account deficits and the economy faced the worst crisis in 1991–92 when the growth rate fell to 1 per cent. It is extremely doubtful if, without a change in the strategy of development, growth would have picked up. However, it must be admitted that the 1980s did see the beginnings of reforms. But the conviction to break with the past was not there.

Between 1992–93 and 2000–01, GDP at factor cost grew annually by 6.20 per cent. Between 2001–02 and 2012–13, it grew by 7.4 per cent and the growth rate between 2013–14 and 2019–20 was 6.7 per cent. The best performance was between 2005–06 and 2010–11 when GDP grew by 8.8 per cent, showing clearly what the potential growth rate of India was. This is the highest growth experienced by India over a sustained period of five to six years. This is despite the fact that this period included the global crisis year of 2008–09. During this period, the investment rate reached a peak of 39.1 per cent in 2007–08. There was a corresponding increase in the savings rate, touching the high of 36.8 per cent in 2007–08. The current account deficit in the BOP remained low at an average of 1.9 per cent. However, the growth story suffered a setback after 2011–

12. The growth rate fell to 4.5 per cent in 2012–13 according to the 2004–05 series. According to the 2011–12 base series, the corresponding figure is 5.5 per cent.

The decline in growth rate which started well before the advent of COVID-19 should make the policymakers reflect and introspect. The growth performance since 2012–13 is a bit difficult to interpret. The introduction of a new series on national income with the base 2011–12 has raised many controversies. The methodological changes that were introduced—particularly the use of MCA 21 data for calculating manufacturing growth—have not found general acceptance. In any case, we have no other data to go by. As per the new data, 2015–16 and 2016–17 were good years with a growth rate of around 8 per cent. The high growth rate of 2016–17 came as a surprise to all those who were witnessing the harsh situation following demonetisation. Thereafter, it started declining and touched the level of 3.7 per cent in 2019–20. This period is marked by a sharp decline in the gross fixed capital formation rate from 33.4 per cent of Gross Domestic Product (GDP) in 2012–13 to 28.8 per cent in 2019–20. The private sector investment during this period fell from 26.4 per cent of GDP in 2012–13 to 21.8 per cent in 2019–2020. The shocking management failure for demonetisation announced in 2016 and the continuing teething problems of Goods and Sales Tax (GST) had their adverse impact on the economy. Certainly, it appears from the data that the investment climate deteriorated.

The growth story cannot be complete without reference to the two recent events —one, COVID-19 and the other, Russia–Ukraine War. The economic impact of COVID-19 is large because of the actions taken to contain the spread of COVID-19 such as the lockdown. The net result of COVID-19 has been a decline in growth rate by 6.6 per cent in 2020-2021 and a rise in growth rate by 8.7 per cent in 2021–22. The economy is virtually where it was in April 2020. We have lost two years. The decline in output is even greater when looked at from the trend rate of growth.

2022–23 could have been the first normal year after COVID-19. Even that assumption has been shattered by the Russian invasion of Ukraine. The economic impact of this war can be severe if it continues for a long. The sudden surge in crude oil prices can severely affect our Balance of Payment (BOP) and the current account deficit can rise to 3 per cent of GDP or even higher. The impact of the rise in crude prices as well as other imported commodities on the general price level can be severe and overall inflation may well exceed 6 per cent, given the trends in liquidity. The expectation that the growth rate in 2022–23 could be around 8 per cent was optimistic even before Russia–Ukraine War. Perhaps, we should settle for a growth rate of 7 per cent.

Poverty Ratio

Besides growth, the other major objective of economic policy is to reduce the number of people living below the poverty line.[4] There are many problems associated with the definition of poverty and the kind of data required to measure it. Going by the procedure adopted by the erstwhile Planning Commission using the Tendulkar expert group methodology, the overall poverty ratio came down from 45.3 per cent in 1993–94 to 37.2 per cent in 2004–05 and further down to 21.9 per cent in 2011–12. The per year reduction in percentage points in the poverty ratio between 1993–94 and 2004–05 was 0.7 and between 2004–05 and 2011–12, it was 2.18. The annual per capita income growth in the first period was 4.3 per cent and in the second period, it was 6.7 per cent. The post-reform period up to 2011–12 saw a significant reduction in the poverty ratio because of faster growth supplemented by appropriate poverty reduction programmes such as the Rural Employment Guarantee Scheme and Extended Food Security Scheme. This decline in poverty is also corroborated by the multiple indicator index computed by the Oxford Study.[5] With the decline in growth rate since 2011–12 and with the loss of output since COVID-19, this trend must have been reversed that is the poverty ratio may have increased. The key lesson to be learnt is that for poverty reduction, high growth is needed. We also need appropriate safety net measures. The two together can speed up the reduction in the poverty ratio. The National Sample Survey (NSS) data on consumption expenditure is the basis for measuring changes in the poverty ratio. But there are some concerns about the survey data.

II. The Arithmetic of Future Growth

In this section, some projections regarding the future are made. The aspirations relating to growth have been expressed by policymakers from time to time. One aspirational goal is to achieve the status of a US$5 trillion economy in the next five years. The other goal is to reach the level of a developed country by 2047 that is in the next twenty-five years. In calculating the required rate of growth to achieve these goals some assumptions have to be made. One relates to what the

4 In the context of the developing countries, it is best to see the behaviour of the poverty ratio than look at inequality coefficients. Of course, inequality by itself has its own relevance. But it is bound to remain high in the early stages of development. Eliminating poverty must be the initial goal.

5 The report on global multidimensional poverty index (MPI) 2018 released by UNDP and Oxford University says, 'India has made momentous progress in reducing multidimensional poverty. The incidence of multidimensional poverty was almost halved between 2005/6 and 2015/16, climbing down to 27.5%. The global Multidimensional Poverty Index (MPI) was cut by half due to deeper progress among the poorest. Thus, within ten years, the number of poor people in India fell by more than 271 million—a truly massive gain.' This is indeed high praise.

exchange rate will be. Second, while calculating the required aggregate income level for a developed economy, what should be the per capita income in dollars?

The calculation of the required growth rate for achieving in five years the level of US$5 trillion is uncomplicated. The latest year for which Gross National Income (GNI) for India is available is 2021–22. We can use that base and make the calculations. Assuming no change in the exchange rate, reaching a US$5 trillion economy in five years will require a nominal annual growth rate of 9.82 per cent. Assuming annual inflation of 4 per cent, the required real growth rate will be 5.82 per cent. This of course is easy to achieve. However, the assumption of no change in the exchange rate is unrealistic. If we assume a depreciation of ₹2 per year in the dollar-rupee exchange rate, the required nominal growth rate will be 12.62 per cent and once again with an inflation of 4 per cent per year, the required real growth will be 8.62 per cent. This will of course require substantial effort. On the issue of achieving the status of a developed economy, several assumptions will have to be made. First, the current (2022) criterion for determining the status of a developed country is reaching a per capita income level of US$13,205. It was US$12,696 in 2021 and US$12,276 in 2011 (Table 3). Changes over time have been limited. In one scenario, we assume that the criterion would be the same even in 2047. We also give an alternate scenario in which the cut-off is raised to US$15,000. The calculations show that with no change in the cut-off, the required annual nominal growth rate for the next twenty- five years is 10.18 per cent and with the assumption of a rise in the cut-off, the required nominal growth is 10.74 per cent. With an inflation assumption of 4 per cent, the real rate of growth will have to be 6.1 per cent in the first case and 6.74 per cent in the second case. If the depreciation of the rupee is higher than what we have assumed which is quite likely (in the light of the latest developments), the required growth rate will be higher in all cases. Trying to achieve the status of a developed country by 2047 will mean strong growth of around 7 per cent per annum over this entire period.

III. FUTURE STRATEGY

Lessons from the Reform Experience

The reform process has resulted in higher growth (Table 4). The reform agenda must continue as it has been under various regimes. Policymakers should identify the sectors that need reforms in terms of creating a competitive environment and improving performance efficiency. The Centre and states must be joint partners in this effort. The power sector, the financial system, governance and even agricultural marketing need reforms. But we need more discussion and consensus-building. Timing and sequencing are also critically important. For example, labour reforms are best introduced when the economy is on the upswing.

To be credible and acceptable, reforms must not only result in higher growth but also benefit all sections of society. In that sense, reforms are not ends in themselves. At the same time, equity will remain a dream, if it is not supported by growth spurred by reforms. Reforms, growth and equity must form the triad of economic policy. All three are mutually reinforcing.

Challenges and Opportunities

Post COVID-19 and post the Russia–Ukraine war, there is a need to lay down a clear roadmap for India's future development. The first and foremost task is to raise the growth rate. Our calculations on the required growth rate clearly show that if we achieve a 7 per cent rate of growth continuously over the next decades and more, it will make a substantial change to the level of the economy. This in turn requires that we need to raise the Gross Fixed Capital Formation rate from the current level of 28 per cent of GDP to 33 per cent of GDP. If at the same time, we maintain the Incremental Capital-Output Ratio (ICOR) at 4 which is a reflection of the efficiency with which we use capital, we can comfortably achieve a 7 per cent rate of growth. For this, what do we need to do?

Raising the investment rate depends on several factors. A proper investment climate must be created and sustained. 'Animal Spirits' needs the support of non-economic factors such as social cohesion. Growth must become the sole concern of policymakers. While public investment should also rise, the major component of investment is private investment, both corporate and non-corporate. It is this which depends upon a stable financial and fiscal system.

India needs to absorb the new technologies that have emerged. More will come into operation as we move along. These technologies while improving productivity may also have adverse implications for employment. This impact on employment will be felt by all countries – developed and developing. While we need to equip our youth with new skills, the production system as a whole will need a relook.

Our development strategy must be multi-dimensional. We need a strong export sector. It is a test of efficiency. At the same time, we need a strong manufacturing sector. The organised segment of this sector must expand.

As output and income increase, we must strengthen the system of social safety nets. The concept of the provision of Basic Income for all can become a reality.

India today is the fifth largest economy. This is an impressive achievement. In 1992, according to International Monetary Fund (IMF), we were fifteenth. By 2014, we became tenth (Table 5). We have improved since then to the present level but the situation is different when it comes to per capita income. In 2020, India's rank according to IMF is 142 out of 197 countries. This only shows we need to run fast. The task before us is difficult. As of now, the global environment for growth is not encouraging. OECD reports a secular decline in growth in developed countries. India is a vast country. Despite global uncertainties, there is scope for growth. The aspirations of youth which is entering the labour market are also high. We have no choice but to grow fast.

Table 1: *Literacy Rate and Life Expectancy*

Parameter	**1951**	**1981**	**1991**	**2001**	**2011**	**Current Value**
Literacy Rate	30.7	43.1	51.6	64.8	73.0	
Crude Birth Rate (per 1000 population	39.9	37.2	32.5	24.8	21.8	20.0
Crude Death Rate (per 1000 population)	27.4	15.0	11.4	8.9	7.1	6.2
Infant Mortality Rate	146	110	80	66	44	32
Total Fertility Rate	6.0	4.5	3.6	3.1	2.4	2.2
Expectation of life at birth (in years)						
Male	37.1	54.1	60.6	61.8	66.9	68.2
Female	36.1	54.7	61.7	63.5	70	70.7

Source: Handbook of Statistics on Indian States, RBI.

Table 2: *Per Capita Income at Current US$*

Country	**Bangladesh**	**Indonesia**	**India**	**South Korea**	**Sri Lanka**	**Malaysia**	**Pakistan**	**China**
1960	89.04		82.19	158.25	142.78	234.94	83.34	89.52
1970	140.00	79.71	112.43	279.30	183.93	357.66	172.47	113.16
1980	227.75	491.58	266.58	1715.43	267.67	1774.74	303.05	194.80
1990	306.27	585.08	367.56	6610.04	463.62	2441.74	371.68	317.88
2000	418.07	780.19	443.31	12256.99	869.70	4043.66	576.20	959.37
2010	781.15	3122.36	1357.56	23087.23	2799.65	9040.57	987.41	4550.45
2020	1961.61	3869.59	1927.71	31631.47	3680.67	10412.35	1188.86	10434.78

Source: World Development Indicators.

Table 3: *Criterion for a Developed Country*

Year	Criterion (in US$)
2022	13,205
2021	12,696
2020	12,535
2019	12,376
2018	12,055
2017	12,235
2016	12,476
2014	12,746
2013	12,616
2012	12,476
2011	12,276

Source: World Bank Helpdesk

Table 4: *Decadal Growth Rate*

Year	GDP Growth rate (per cent)
1951-52 - 1959-60	3.88
1960-61 - 1969-70	4.06
1970-71 - 1979-80	2.93
1980-81 - 1989-90	5.69
1992-93 - 1999-00	6.39
2000-01 - 2009-10	6.9
2010-11 - 2019-20	6.83

Source: RBI DBIE

Table 5: *Ranking of India According to Size of GDP*

Year	World Bank	IMF
1992	16th	15th
1993	16th	15th
2013	10th	10th
2014	10th	10th
2020	6th	6th
2021	6th	6th
2022		5th

Source: IMF rankings from World economic outlook.

World Bank rankings from World bank databank.

APPENDIX

Required Growth Rates Under Different Scenarios

I. To achieve US$5 trillion in five years

Table 1a: *With No Change in Exchange Rate*

FY 27	GNI target	US$5 trillion
FY 22	GNI FY 22	US$3.13 trillion
FY 22 to FY 27	Required nominal growth in rupee terms	9.82 per cent per year
FY 22 to FY 27	Required real growth at 4 per cent inflation and stable exchange rate	5.82 per cent per year

Table 1b: *With Change in Exchange Rate*

FY 27	GNI target with exchange rate depreciation of ₹2 per year	₹422.5 trillion
FY 22	GNI FY 22	₹232.96 trillion
FY 22 to FY 27	Required nominal growth in rupee terms	12.62 per cent per year
FY 22 to FY 27	Required real growth at 4 per cent inflation	8.62 per cent per year

II. To Achieve the Status of a Developed Country

Table 2a: *With Unchanged Criterion*

FY 47	GNI target with exchange rate depreciation of ₹2 per year with the criterion of US$13205 GNI per capita	₹2630.68 trillion
FY 22	GNI FY 22	₹232.96 trillion
FY 22 to FY 47	Required nominal growth in rupee terms	10.18 per cent per year
FY 22 to FY 47	Required real growth rate at 4 per cent inflation	6.18 per cent per year

Table 2b: With Change in the Criterion

FY 47	GNI target with exchange rate depreciation of ₹2 per year with the criteria of US$15000 GNI per capita	₹2988 trillion

FY 22	GNI FY 22	₹232.96 trillion
FY 22 to FY 47	Required nominal growth in rupee terms	10.74 per cent per year
FY 22 to FY 47	Required real growth rate at 4 per cent inflation	6.74 per cent per year

(*) Average annual exchange rate in 2022 is ₹74.5 per dollar.

(*) The exchange rate in 2027 is taken to be ₹84.5 per dollar.

(*) Exchange rate in 2047 is taken to be ₹124.5 per dollar.

Structural Transformation of the Indian Economy: Past performance and way forward to 2047

S. Mahendra Dev

INTRODUCTION

The historical experience of different countries shows that structural transformation from low-productive to high-productive sectors led to higher economic growth and the creation of greater productive employment. Economists like Lewis (1954), Kaldor (1966) and Kuznets (1966, 1971) emphasised the relationship between structural transformation and economic growth. This is reflected in the economy transforming from agriculture to industry and services in terms of changes in the composition of output and employment. The literature on structural transformation is derived mostly from stylised facts than from economic theorising (Nayyar, 2019). For example, Kuznets (1971) summarises the results of his studies of the economic growth of nations in modern times based on stylised facts. He examines long-term trends in growth in total output and labour force change in production structure across countries. There are two sources of productivity. One is productivity increase within sectors. The second one is shifting workers from low-productivity sectors to high-productivity sectors. Countries focus on these both sources of productivity.[1]

The pattern of structural change observed by the advanced countries in the second half of the nineteenth century and the first half of the twentieth century has been that initially, the shares of agriculture in output and employment declined while that of manufacturing increased.[2] At the next stage, the share of output and employment in manufacturing declines while that of services rises. Nayyar (2019) examines the experience of structural transformation for 14 countries in Asia over 50 years from 1970–2016. The conclusions of this study on Asia-14 are the following: (a) There were significant differences in the paths of structural transformation among these 14 Asian countries; (b) Countries like South Korea, Taiwan, and Singapore, followed by Malaysia, China and possibly Indonesia confirmed to the so-called classical pattern of change from agriculture to manufacturing (industry) and subsequently to services; (c) On the other hand, countries like India, Philippines, Pakistan, Turkey, Thailand, Sri Lanka, followed by Bangladesh and Vietnam later did not experience

1. On structural transformation, see Diao et al (2017)
2. This pattern is observed by Fisher (1935), Clark (1940) and Kuznets (1966, 1971)

the classical pattern of structural change. In these countries, the agriculture sector was dominant in the 1970s but in 2016, the service sector was dominant although the changes were not uniform; (d) In many countries, as manufacturing has not been able to employ surplus labour in agriculture, service sector progressively became the largest employer; (e) Except South Korea, Taiwan, Singapore and Malaysia, the process of structural transformation is uneven and incomplete in the 14 Asian countries; (f) The progress of industrialisation is slow, particularly in South Asia; (g) The service sector has led economic growth in many countries and absorbed unskilled labour which may not be sustainable.

Against the above background, this paper examines the Indian experience and the way forward for the country on structural transformation by 2047.

1. INDIA'S EXPERIENCE IN STRUCTURAL TRANSFORMATION

Regarding economic growth, India recorded 3.5 per cent per annum Gross Domestic Product (GDP) growth from 1950–1980. It is well known that India moved beyond 'Hindu Rates of Growth'[3] in the last four decades and registered a growth rate of more than 6 per cent per annum. Particularly, the GDP growth rate was higher in the post-economic reform period. There have been significant changes in the structure of output and employment in the last five decades.

Structural change in output

(a) The share of agriculture and allied activities in output declined from 41 per cent in 1972–73 to 15 per cent in 2019–20 – around 25 percentage points over 50 years. (Table 1)

(b) The share of industry (consisting of mining, construction, manufacturing and utilities) rose from per cent in 1972–73 to 28 per cent in 2004–05 but the share increased only marginally later. Similarly, the manufacturing share has increased from 13.3 per cent in 1970 to 15.7 per cent in 2011–12. It increased to 18 per cent and 17 per cent, respectively, in 2018–19 and 2019–20. In other words, there is only a marginal rise in the share of manufacturing in output over five decades.

(c) In contrast to the share in manufacturing, the share of services in output rose significantly from 34.5 in 1970 to 55.3 per cent in FY 2020, an increase of 21 percentage points over 50 years. In other words, India 'leap frogged' from agriculture to services bypassing the manufacturing stage of development.

3 The term 'Hindu rate of growth' was coined by late Prof. Rajkrishna.

Table 1. *Structural Change: Share in GDP (per cent) in constant prices*

	1972–73	1993–94	2004–05	2011–12	2018–19	2019–20
Agriculture and allied activities	**41.1**	**28.4**	**19.0**	**14.1**	**14.8**	**15.0**
Manufacturing	13.3	14.6	15.3	15.7	18.3	17.1
Construction	7.6	6.6	7.7	7.9	8.0	7.9
Industry (Secondary sector)	**24.4**	**26.8**	**27.9**	**27.5**	**31.2**	**29.7**
Trade, hotels, transport, communications.	14.5	18.1	24.5	27.5	19.9	20.3
Financing real estate and business services	7.9	13.3	14.7	18.1	21.3	21.9
Community, social and personal services	12.1	13.5	13.8	12.8	12.7	13.1
Services (Tertiary sector)	**34.5**	**44.8**	**53.0**	**58.4**	**53.9**	**55.3**
Non-agriculture	58.9	71.6	81.0	85.9	85.2	85.0
Total	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**

Note: Shares of GDP for 2018–19 and 2019–20 are not strictly comparable with earlier data because of a change in methodology.

Source: IHD (2014) for the period 1972–73 to 2011–12 at 2004–05 constant prices; National Accounts Statistics for 2018–19 and 2019–20 at 2011–12 constant prices.

Within services, the share of trade, hotels, transport and communications rose from 14.5 per cent in 1972–73 to 20.3 per cent in 2019–20 - about a 6 percentage points rise over 50 years. But the highest rise in the share of GDP was noted in the high-value financing, real estate and business services. Their share increased from 8 per cent in 1972–73 to 22 per cent in 2019–20 -an increase of 14 percentage points.

1.2 Structural change in Employment

(a) The share of agriculture in employment declined from 73.9 per cent in 1972–73 to 42.5 per cent in 2018–19 – a decline of 31 percentage points over five decades (Table 2). This is a substantial decline, although it is still high. Fig 1 also shows that the share of agriculture decelerated to 41.4 per cent in 2018–19 from 61.9 per cent in 1993–94 before rising slightly to 44.8 per cent in 2020–21.

(b) The share of the industry rose from 11 per cent to 24 per cent in five decades. This increase was mainly due to rise in the share of construction. The share of manufacturing increased initially from 8.9 per cent in 1972–73 to 10.5 per cent in 1993–94. Subsequently, it was between 11.2 per cent to 12.8 per cent during 1993–94 to 2019–20. It shows that there was hardly any increase in the share of manufacturing in employment in the last four decades. The share of construction in employment was marginally higher than that of manufacturing in 2019–20 (Table 2).

(c) In contrast to the share of manufacturing, the share of services in employment increased significantly from 14.8 per cent in 1972–73 to 30.7 per cent in 2019–20 – an increase of 16 percentage points over 50 years. Within services, the share of trade, hotels and restaurants rose faster than other services. Their share increased from 5 per cent in 1972–73 to 13 per cent in 2019–20 – an increase of 8 percentage points. These jobs are mostly in the informal sector. Similarly, the share of transport and communications rose from 1.8 per cent to 5.6 per cent during the same period. The high-value financing, real estate and business services absorbed only around 3 per cent of the workforce in 2019–20.

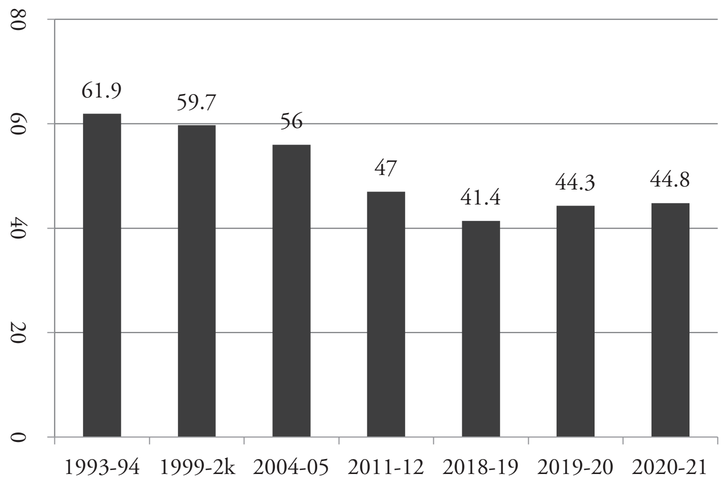
Table 2. *Structural Change: Share in Employment (per cent)*

	1972–73	1993–94	2004–05	2011–12	2018–19	2019–20
Agriculture and allied activities	**73.9**	**64.8**	**58.5**	**48.9**	**42.5**	**45.6**
Manufacturing	8.9	10.5	11.7	12.8	12.1	11.2
Construction	1.8	3.1	5.6	10.6	12.1	11.6
Industry (Secondary sector)	**11.3**	**14.7**	**18.1**	**24.4**	**25.2**	**23.7**
Trade, hotels and restaurants	5.1	7.4	10.2	11.4	12.6	13.2
Transport, storage and communications	1.8	2.8	3.8	4.4	5.9	5.6
Financing, real estate, business services	0.5	0.9	1.5	2.6	3.4	3.1
Community, social and personal services	7.4	9.4	7.7	8.2	10.5	8.9
Services (Tertiary sector)	**14.8**	**20.5**	**23.4**	**26.7**	**32.3**	**30.7**
Non-agriculture	26.1	35.2	41.5	51.1	57.5	54.4
Total	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**

Source: IHD (2014) for the period 1972–73 to 2011–12; PLFS for 2018–19 and 2020–21

(d) Structural transformation in terms of employment shows that the decline in agriculture is absorbed by construction and services in the informal sector like trade, hotels, and restaurants.[4] The share of the non-farm sector in rural areas has increased over time. It rose from 19.3 per cent in 1977–78 to 44.6 per cent in 2019–20 for rural males, while it increased from 11.8 per cent to 24.3 per cent for females. If we combine males and females, the share of non-farm in total rural employment is around 40 per cent in 2019–20.

Fig 1. *Percentage share of the workforce in agriculture*



Source: Damodaran (2022)

1.3 Labour reallocation and productivity across sectors: India and China

Ghose (2020) examines the structural transformation in the Indian economy and compares it with China, as given in Table 3. It shows that the scale of reallocation was smaller in India than in China in both periods. In the second period, 1994–2020, around 20 per cent of the workers in agriculture moved to non-agriculture in India, while the corresponding period for China is 48 per cent. It is smaller in India than in China because of differences in the absorption of reallocated workers in different sectors. In China, it is absorbed by the manufacturing sector and services, while in India, low productive construction and informal sector services absorbed the labour (Table 3).

4. Basole (2022) shows that India pulled workers out of agriculture but not from informal sector. The structural change is from agriculture to construction and informal services.

Table 3. Labour Reallocation across sectors: India and China

	India		China	
	1978–1994	1994–2010	1978–1994	1994–2010
Labour Reallocation across sectors (numbers in millions)				
Agriculture	–27.4	–59.7	–94.6	–115.8
Manufacturing	1.9	4.2	12.3	25.7
Construction	5.3	28.3	18.1	17.1
Other industries	1.5	0.9	0.6	–2.6
Services	18.8	26.3	63.6	75.6
Reallocation from Agriculture (in millions)	27.4	59.7	94.6	115.8
Reallocation from Agriculture: Scale (in per cent)	10.2	19.8	23.0	48.0
Absorption of Reallocated Labour by sectors (in per cent)				
Manufacturing	6.8	7.0	13.0	22.2
Construction	19.2	47.4	19.1	14.7
Mining and Utilities	5.5	1.5	0.6	-2.2
Services	68.5	44.1	67.3	65.3

Source: Ghose (2020)

1.4 Labour Productivity across sectors in India and China

The levels of labour productivity in China are higher than those in India for all sectors except services. The output per worker in China was higher than in India by 72 per cent, 50 per cent, 41 per cent, 132 per cent and 77.2 per cent for the economy, agriculture, non-agriculture, manufacturing and construction, respectively, in 2010 (Table 4). The growth rates of labour productivity are also higher for China as compared to those of India. One of the reasons is the much higher within-sector productivity growth in China. The contribution of structural change to the overall growth of labour productivity in the economy was positive and significant in both countries. However, the structural change in India was from agriculture to construction and services, while in China, it was from agriculture to manufacturing and services.

Table 4. *Output per worker in 2011 International (in US$): India and China*

	India			China		
	1978	1994	2010	1978	1994	2010
Agriculture	1720	2083	3192	2036	2728	4795
Non-agriculture	6828	9336	19676	6374	10615	27770
Manufacturing	4384	6467	15807	4922	12255	36763
Construction	14173	9843	9514	8239	8148	16862
Mining and Utilities	17579	22788	38007	9982	15309	86245
Services	7081	10042	24027	7011	9635	22202
Economy	3185	4698	11228	3315	6332	19342

Source: Ghose (2020)

2. STRUCTURAL TRANSFORMATION: LOOKING AHEAD TO 2047

This section examines challenges and opportunities for structural transformation in India by 2047.

2.1 Agriculture

There is a need for the transformation of agriculture in the next 25 years by focusing on three goals of agricultural development. These are: (a) achieving high growth by raising productivity; (b) inclusiveness by focusing on lagging regions, small farmers and women; and (c) sustainability of agriculture. The following policies and reforms are needed for attaining these goals:

(1) *Need for change in the narrative in the new context:* We have to change the narrative on agriculture towards more diversified high-value production, better remunerative prices and farm incomes, marketing and trade reforms, high productivity with fewer inputs, cost-effective, less chemical and pesticide-based, inclusive in terms of women and youth farmers, small farmers and rain-fed areas, nutrition-sensitive, environmental friendly and sustainable agriculture. By 2027, the share of cereals in agriculture value of output should decline in favour of pulses, oilseeds, horticulture, livestock, poultry and fisheries. There are two types of agriculture in India – one is cereal-based and the other one is non-cereal based.[5] Government policies have been biased towards cereals, particularly rice and wheat.

(2) *We have to walk on two legs (agriculture and non-agriculture) in the changing context*: Rural areas are changing. We have to invest in agriculture for raising

5. See Subrahmanian, 2018

livelihoods but simultaneously shift the population from agriculture to non-agriculture over time. Thus, both agriculture and non-agriculture are important for raising the income of farm households.

(3) *Remunerative price is the most important factor for farmers*: Even after 75 years of independence, we are not able to provide remunerative prices for farmers. Farmers have been getting low prices in normal, drought and good years because of distortions in price and marketing policies. Many reforms in marketing are needed.

(4) *Beyond harvest and freedom for farmers:* Agriculture GDP indicates that we have to go beyond farming and develop a value chain comprising farming, wholesaling, warehousing, logistics, processing, and retailing. Farmers want freedom from restrictions on markets and exports. There have been new generation start-ups coming up in agriculture.

(7) *Do not forget basics like water and technology*: Basics like seeds, fertilizers, credit, land and water management and technology are important and they should not be forgotten. Similarly, investment in infrastructure and Research and Development (R and D) is needed.

(8) *Inclusiveness for broad-based growth and equity*: Inequalities in agriculture are high. There is a need to focus on small and marginal farmers, women, youth, rainfed areas, Eastern and other lagging regions, and social groups like Schedule Caste (SC) and Schedule Tribe (ST) farmers. The role of women in agriculture has been increasing. Women collectives and group farming can be encouraged to benefit female farmers.

(9) *Measures to take care of impacts of climate change and improving resilience in agriculture and sustainability:* Resilience in agriculture has to be improved. Climate-smart agriculture is being discussed throughout the world to reduce Green House Gases (GHG) emissions and increase resilience. Conservation agriculture and zero-budget natural farming are some of the methods that have to be used as part of adaptation and mitigation measures for climate change.

To conclude, agriculture is a state subject according to the Indian constitution. States have to play an active role along with the Central Government in achieving the three goals of growth, inclusiveness and sustainability. Agriculture transformation has to be viewed more holistically in terms of rural transformation and urban linkages.

2.2 Manufacturing and Services

India does not have the luxury of following China's development experience in manufacturing. In this context, the 'Make in India' campaign is in the right direction. As shown by Ghose, (2016) labour-intensive manufacturing is important for quality job creation particularly increase in the organised sector. It is important to examine the prospects of manufacturing, particularly in job creation in light of the East Asian experience and in the present context of global protection. A study by Ramaswamy and Agarwal (2013) strongly suggests that the services sector would be an unlikely destination for the millions of low-skilled job seekers. The study argues that India needs to focus on the manufacturing sector to provide large-scale employment. Manufacturing has the capability because it has stronger backward linkages, unlike the services sector. We cannot afford to neglect manufacturing at this stage of development. The policy signals have to clearly say that we stand to support manufacturing activity in a big way. The labour intensity of the organised manufacturing sector has to be improved apart from increasing the productivity of MSME (Micro, small and medium-sized enterprises) and unorganised manufacturing. Inequalities are high in services which is a heterogeneous sector. Trade, hotels, transport and communications are labour-intensive with lower wages, while financial and professional services are capital-intensive with higher wages. Most of the employment is created in informal services with lower wages. However, it is also argued that one has to include services in the 'Make in India' program for the creation of employment. Both manufacturing and services have to be developed together.

A study by Chanda (2017) deals with the interdependence between services and manufacturing and argues that a vibrant service sector should be seen as an enabler for the manufacturing sector and not as a competitor to manufacturing. The contribution of the service sector to manufacturing exports is dominated by traditional services. Modern services such as Information Technology (IT), R and D and business services are not significantly contributing to manufacturing exports. The three-year action plan (NITI Ayog, 2017) also indicates that India has an advantage of walking on two legs: manufacturing and services. It offers specific proposals for jumpstarting some of the key manufacturing and services sectors, including apparel, electronics, gems and jewellery, financial services, tourism and cultural industries and real estate[6]. Among other things, it recommends the creation of a handful of Coastal Employment Zones (CEZ), which may attract multinational firms in labour-intensive sectors from China to India. There are a lot of opportunities for India in the service sector. Can you think of the top 10 global service brands? These are the names that come to our minds: Facebook, Google, Airbnb, Amazon, Linkedin, Mckinsey, Master Card, Visa, FedEx, covering hospitality, consulting firms or even food and beverages like Starbucks. What is common about all of them? Most of the names come from the United States of America (USA). What is that Americans are focusing on which Europeans, Asians, Indians, and Japanese do not focus? It essentially consists of products and scaling, customer centricity and marketing. Brand and

6. On services also see Nayyar (2012), Eichengreen and Gupta (2011)

customer centricity is important. India can also think of more business in the service sector.

India has undertaken several structural reforms such as the announcement of privatisation and asset monetisation; tax reforms (Goods and Services Tax (GST) and corporate tax rationalisation); the Production-Linked Incentive (PLI) scheme; Insolvency And Bankruptcy Code (IBC) to improve the credit culture and resource allocation mechanism; labour reforms (four codes); and a fiscal policy focus on Capital expenditures (CapEx) and infrastructure (RBI, 2022).

As the Reserve Bank of India (RBI 2022) noted, along with these reforms, other measures are needed to reverse the sustained decline in private investment and low productivity in the economy. These measures given in RBI (2022) are: (a) access to litigation-free low-cost land; (b) raising the quality of labour through large-scale expansion of public expenditure on education and health and the skill India mission; (c) reducing the cost of capital for industry and improving resource allocation in the economy by promoting competition; (d) encouraging industries and corporates to scale up R and D activities with an emphasis on innovation and technology; (e) creating an enabling environment for startups and unicorns; (f) encouraging corporate investment in agriculture; (g) addressing the challenges faced by the debt-ridden telecom industry and Distribution Companies (DISCOMs); (h) rationalisation of subsidies that promote inefficiencies; (i) encouraging urban agglomerations by improving the housing and physical infrastructure. 'The next wave of global structural transformation is likely to be powered by both technology and environmentally sustainable production processes.' (p.75, RBI, 2022).

Exports

It is well known that exports are one of the main engines of growth and employment creation. When India had high growth, during 2000–2011, exports grew at an annual rate of 21 per cent and 24 per cent, respectively, for goods and services. However, exports of goods completely stagnated, with an annual growth rate of nearly 0 per cent during 2012–19. More recently, the COVID-19 pandemic has impacted world trade negatively. Similarly, the Russia-Ukraine war may have some impact on trade. A study done at Indira Gandhi Institute of Development Research (IGIDR) argues that two groups of industries hold the greatest potential for export growth and employment generation (Veeramani and Garima, 2017). First, there is a huge unexploited potential in traditional unskilled labour-intensive products, such as textiles, clothing, footwear, toys, and the like. Second, the study also identifies several specific product categories for which India can emerge as a major hub for final assembly-related activities within Global Value Chains (GVCs). The government has announced a performance-linked incentive scheme for 10 sectors. These are more capital-intensive. But private investment depends on many other factors such as ease of doing business, honouring contracts, availability of land and other infrastructure. However, one problem is that in recent years India's trade policy has become more protectionist. Import tariffs have increased significantly during the last few years. India's import tariff rates (Most Favoured nation (MFN) based average) increased from the lowest-ever level of about 12 per cent in 2008 to 15 per cent in 2019. For the year 2018, China's import tariff rate was 9.6 per cent compared to India's 13.5 per cent. India may miss the emerging opportunity if protectionist policies are followed at this juncture. There are several opportunities for India to occupy the space vacated by China to boost exports.

A study by RBI examines empirical constraints to exports (RBI, 2022). The findings are : (a) Past Free Trade Agreements (FTAs) have not been trade creating; (b) Without higher import and technology –intensity of exports, raising India's participation in the global value chain may be difficult; (c) Exchange rate stability helps promote exports; (d) Green export opportunities for exports; (e) Greater opportunities to imports at lower tariff and non-tariff restrictions; (f) Foreign direct investment (FDI) can boost exports and enhance the capacity to absorb foreign capital.

2.3 MSMEs:

Micro, Small And Medium Enterprises (MSMEs) play an important role in the Indian economy providing large-scale employment. This sector contributes around 30 per cent of India's Gross Domestic Product (GDP) and, based on conservative estimates, employs around 50 per cent of industrial workers and contributes half of the overall exports. India has 63 million enterprises and 107.6 million employees under MSMEs. More than 90 per cent of the enterprises and employment of the MSMEs are in the micro sector. The three critical barriers faced by MSMEs are market access, overall productivity and getting access to more finances. Access to institutional credit is the most important constraint. Technology can be used to empower and transform MSMEs. This can be used to provide credit to the entire value chain of production, distribution, and consumer service. The problem with SMEs is their small size. 98.6 per cent of the enterprises employs less than 10 workers, of which 95 per cent employ less than 5 workers. Only 20 thousand firms have paid up capital of ₹10 crore. Preventing the collapse of these enterprises is important. Large firms have a big role to play in the success of MSMEs. Linkages between small and large firms have to be strengthened instead of looking at them as separate silos. There are a lot of opportunities for MSMEs in the next 25 years to improve productivity and contribute to structural transformation.

2.4 Digital transformation

The digital economy will continue to expand in all sectors of the economy. Digitalisation could potentially exert powerful positive externalities in the economic and social spheres to improve agriculture, industry, services, the financial sector, education, the environment, and health services.

2.5 India's Employment Challenge

A study by Ghose (2019) estimates the employment challenge up to 2035. Some of the findings are the following: (a) If the Lewis turning point is to be reached by 2035, around 13 million (between 12 and 14 million) productive jobs, particularly low-skilled, will have to be generated annually; (b) Even if the absolute number of workers in agriculture is to remain the same as in 2018 and if unemployment and surplus labour are to fall to zero by 2035, employment in non-agriculture need to be increased from 265 million in 2018 to 486 million by 2035 (c) Construction is estimated to generate 67 million by 2035 (d) Excluding construction, non-agriculture has to generate 419 million by 2035 (e) If the pace and pattern of growth of non-agriculture excluding construction observed during 2000–12 is the same during 2018–35, the employment challenge will not be met. This could be true for the period 2035–2047. In other words, the rate of output growth has to be faster and the structural pattern of growth needs to change to have significantly larger employment elasticity.

Table 5: *India's Employment Challenge*

	2018	**2018–35 (a)**	**2018–35 (b)**
Employed but surplus workers	50	–	–
Unemployed	29	–	–
Backlog	79	–	–
New Entrants into Labour Force	–	116	155
Job Creation required	–	195	234
Job creation required, per annum	–	12	14

Source: Ghose (2019)

Notes: The underlying assumptions are (a) that employment conditions in 2018 were no different from those in 2016, and (b) that there will be no surplus workers or unemployed persons in 2035.

2.6 Participation of Women in the Labour Market

As mentioned above, the participation rates of women are low and declined in India (Table 27). Work participation rate (WPR) for women declined from 41.6

per cent in 2004–05 to 22 per cent in 2017–18 before rising to 28.7 per cent in 2019–20 and to 31.4 per cent in the pandemic year. The difference in the WPR between men and women increased from 41 percentage points in 2004–05 to 49 percentage points in 2017–18 before declining to 44 percentage points in 2019–20. In fact, in urban areas, only 18 per cent of women participated in work compared to 69 per cent of men in 2017–18 – a difference of 51 percentage points. The former International Monetary Fund (IMF) Chief Christine Lagarde said an increase in women's participation rates would increase by 40 per cent of GDP in India.

Table 6: *Work participation rates (15 years and above), Usual Status (ps+ss): Female and male.*

Years	Male			Female		
	Rural	**Urban**	**Total**	**Rural**	**Urban**	**Total**
2004–05	84.6	76.3	82.2	48.5	22.7	41.6
2009–10	81.2	74.0	79.1	37.2	18.3	31.8
2011–12	80.0	74.1	78.1	35.2	19.5	30.5
2017–18	72.0	69.3	71.2	23.7	18.2	22.0
2018–19	72.2	68.6	71.0	25.5	18.4	23.3
2019–20	74.4	69.9	73.0	32.2	21.3	28.7
2020–21	75.1	70.0	73.5	35.8	21.2	31.4

Source: Periodic Labour Force Surveys, National Statistical Office, Delhi. ps: principal status; ss: subsidiary status

The gender balance in India in labour force participation, entrepreneurship, and growth remains among the lowest in the world (Ghani et al, 2016). This study says that improving this balance is an important first step for India's development and its achievement of greater economic growth and gender equality.

3. CONCLUDING OBSERVATIONS

India 'leap frogged' from agriculture to services bypassing the manufacturing sector in both output and employment. The share of agriculture in both output and employment declined significantly over time. However, the employment share in agriculture is still high. The manufacturing sector has shown very little improvement in the shares of both output and employment. In the case of construction, the share of output has not increased while that of employment rose rapidly. There was a rapid rise in the share of services for both output and employment. But, the share of employment in services is much lower than that of output. Regarding trade, hotels, and restaurants, the share of both output and employment increased. On the other hand, in the case of high-value financing, real estate and business services, the output share increases significantly while that of employment showed only a marginal rise. In other words, structural change in terms of output is from agriculture to all the sub-sectors of services except community, social and personal services. In the case of employment, the structural transformation is from agriculture to construction and informal sector services.

The country has to focus both on improving productivity within a sector and transforming employment from low-productivity to high-productivity sectors. Productivity increases and structural transformation in the economy are important if India wants to be a developed country by 2047. Agriculture has to move from cereals to pulses, oilseeds and horticulture, while the share of allied sectors like livestock, poultry and fisheries will rise over time. The food systems approach can strengthen agriculture value chains and agro-processing. The share of agriculture in GDP and employment will reduce significantly. Its share in employment should come down from the present level of 45 per cent to 25 per cent by 2047. The share of manufacturing in the output should increase to 30 per cent, while the share of services could be around 60 per cent. Simultaneously, the share of manufacturing in employment could rise from the present level of 12 per cent to 22 per cent, while the share of services could improve from 31 per cent to 40 per cent by 2047. India should make use of several opportunities in the space vacated by China to boost manufacturing, services and exports.

The formal sector's share in output and employment could rise significantly in the next 25 years. Productivity increase in all the sectors is needed for structural transformation and the country cannot afford to ignore any sector of the economy. Finally, women's empowerment and an increase in the work participation rates of women will contribute immensely to the structural transformation and make India a developed country.

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The Cobra Effect and Super-Cycles: Will India Become Prosperous @100?

Ajay Chhibber

INTRODUCTION

As we celebrate the seventy-fifth anniversary of independence from the British and look forward to becoming an advanced economy by 2047, we must remember the Cobra Effect, where the solution is worse than the problem. It gets its name from India's colonial period—when the British tried to solve the newly built Lutyens Delhi's serious cobra problem by offering a cash incentive for every dead cobra skin brought in. But despite the many dead cobras brought in for cash under the scheme, Delhi's cobra problem was not improved. Cobra farms had sprung up around Delhi and were being used to breed cobras for the cash offered. When the British discovered this and ended the incentive, the cobra breeders released all the now-worthless cobras—further swelling the city's cobra population and making the problem much worse than before.

Solutions to some of our problems have a Cobra Effect feel to them. We need a reset in the way we think of our problems and their possible solutions. In this paper, I give some examples of the Cobra Effect in some of our policies and argue that to become an advanced economy, we must not only strive for the right reforms—which are laid out in a book called *Unshackling India: Hard Truths and Clear Choices for Economic Revival* ,[1] which I co-authored last year—but also avoid doing more harm than good by looking for politically-expedient solutions which end up locking us into costly outcomes. I will then argue that India's demographics give us an opportunity not only to become a global economic leader but the next centre of gravity for the world economy. Whether we will grasp that opportunity is in our hands. However, whether we will take it, given our penchant for political expediency, remains to be seen.

SOME EXAMPLES OF THE COBRA EFFECT

The most egregious Cobra Effect was, of course, demonetisation. To get at black wealth, an ill-advised and poorly implemented solution, demonetisation, was unleashed on the

1. Ajay Chhibber and Salman Anees Soz Unshackling India: Hard Truths and Clear Choices for Economic Revival Harper Collins India 2021 November.

economy at a huge cost to growth and welfare—especially in farming and the unorganised sector, with no verifiable signs of any dent in black wealth.

The decision to use the Life Insurance Corporation (LIC) to bail out the worst performing state bank, Industrial Development Bank of India (IDBI), thereby putting in jeopardy the life insurance of millions of policyholders, has a Cobra Effect feel to it. How can we now expect a life insurance company with no expertise to run a bank to turn things around in a bank with a culture of incompetence and a third of its loans in the non-performing assets (NPA) status? As if the use of LIC to rescue IDBI was not enough, a more egregious Cobra Effect is the use of LIC to bailout a private company[2], Infrastructure Leasing and Financial Services (IL&FS), which has Japan's Orix Corporation (23.5 per cent) and Abu Dhabi Investment Fund (12.6 per cent) as shareholders, along with Housing Development Finance Corporation (HDFC) (9 per cent), State Bank of India S(BI) (6 per cent), and Central Bank (3 per cent). Here, we have an inexplicable and unheard-of bailout of a private company by a public company with LIC also taking over ₹650 billion of the company's debt, bailing out foreign investors and becoming the majority shareholder. It is not clear why putting in more good money after bad, instead of accepting the losses, is in anyone's interest—especially of the hapless LIC policyholders.

The Cobra Effect can also be seen in our trade policy. India has done well in service-related sectors, especially in IT.[3] However, it has not done so well in industrialisation. India is, in fact, de-industrialising as its share of industrial gross domestic product (GDP) is declining—especially in the last decade.[4] A large part of the reason is that significant parts of Indian industry are not competitive—especially against China and many East Asian economies.[5] Since 2018, India is going back to its bad old autarchic days. These autarchic policies cost India hugely and kept it down to the 'Hindu growth rate' of 3–4 per cent for almost four decades until a major foreign exchange crisis forced us to liberalise our economy, which then unleashed private enterprise and moved our growth into the 7–8 per cent range. 'Make in India' has become 'Make in India for India'. [6]An economy which should be striving to become more open and take a bigger share of global markets is turning inwards—the surest path back towards the so-called Hindu growth rate.

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2. https://www.business-standard.com/topic/lic
3. Deepa Kurup, 'Bengaluru: The Success Story of ICT Industry,' *The Hindu* (28 September 2010). thehindu.com/books/Bangalore-the-success-story-of-ICT-industry/article16050731.ece.
4. Dani Rodrik, 'Premature Deindustrialization,' NBER Working Paper No. 20935 (The National Bureau of Economic Research, 2015). doi:10.3386/w20935.
5. Mary Hallward-Driemeier and Gaurav Nayyar, *Trouble in the Making? The Future of Manufacturing-Led Development* (Washington, DC: World Bank Group, 2017). doi:10.1596/978-1-4648-1174-6.
6. M. Suresh Babu, 'Why 'Make in India' Has Failed,' *The Hindu* (20 January 2020). thehindu.com/opinion/op-ed/why-make-in-india-has-failed/article30601269.ece.

India has announced a scheme to help attract firms leaving China called the Production Linked Incentive (PLI) scheme for the following fourteen sectors:

1. Prescription medications
2. Technology or Electronic Products
3. Networking and Telecom Products
4. Food Products
5. ACs and LED (White Goods)
6. Energy-Efficient Solar Photovoltaic (PV) Modules
7. Auto Components and Automobiles
8. Advance Chemistry Cell (ACC) Battery
9. Speciality Steel
10. Manmade Fiber and Technical Textiles
11. Drug Intermediates (DIs)/Key Starting Materials (KSMs), and Active Pharmaceutical Ingredients (APIs)
11. Electronics Manufacturing on a Large Scale
12. Medicinal Devices Manufacturing
13. Drones and Drone Equipment.

Under this scheme, firms get a subsidy of 5 per cent on increased sales. But rising tariffs may end up negating all the benefits of the scheme. A study by the Indian Cellular and Electronics Association[7] shows that tariffs have increased costs by more than 5 per cent on mobile phones for 2020 and 2021 cumulatively.

Another policy which has a Cobra Effect-like feel to it is the policy to keep low floor-to-area ratio (FA's)[8] at the lowest in the world.[9] This is an absurd policy in a country where land is so scarce—as it depresses land values, leading to huge urban sprawl. As a result, cities have become inefficient and unlivable, and municipal and city infrastructure very costly.

One-Rank-One-Pension (OROP), which sounds like a villain in a science-fiction movie, is another policy with a Cobra Effect-like feel to it. That huge giveaway has hobbled the finances for our defence by reducing the budget for the army for purposes other than pensions to under 1.5 per cent of the GDP—

7. A Comparative Study of Import Tariffs in Electronics India • China • Vietnam •Thailand • Mexico High Import Tariffs can Negate PLI and Adversely Impact Competitiveness & Scale, ICEA ,
8. India also uses the concept of Floor Space Index (FSI) which allows higher buildings along transport corridors but overall, India's FAR's and FSIs are amongst the lowest in the world.
9. Apoorva Shenvi and Ron H. Slangen, 'Enabling Smart Urban Redevelopment in India through Floor Area Ratio Incentives,' ADB South Asia Working Paper Series No. 58 (Manila: Asian Development Bank, 2018). adb.org/sites/default/files/publication/435936/swp-058-smart-urban-redevelopment-india.pdf.

one of the lowest in India's history since independence. India now spends more on army pensions than on the army itself. This fiscal pressure has resulted in the Agnipath scheme,[10] which tried to reduce the intake into the armed forces and contain the size of promised benefits but has led to huge violent protests by prospective applicants to the defence forces.[11] However, the costs of OROP remain unaddressed. Any pension scheme which allows a few years of service to end up in a lifetime of pension is unworkable and needs to be reformed, but given its sensitive nature, difficult to address.

NEEDED A SECOND GREEN REVOLUTION

Our agriculture policy is following another Cobra Effect. Of the 42 per cent of the population still dependent on farming, more than 50 per cent do not even own land but work as labourers, as they have nowhere else to go for work. A Centre for the Study of Developing Societies (CSDS)/Lokniti study revealed more farmers prefer direct income support to their bank accounts than even input subsidies and only 8 per cent of the farmers feel their problems come from low prices. Almost 50 per cent feel their problems are linked to low productivity, lack of irrigation and poor institutional arrangements in agriculture.

What India needs is a second Green Revolution. Agricultural economist, S.S. Johl[12] has been arguing for this for the last thirty years. He argued against the M.S. Swaminathan committee formula of fixing the minimum support price (MSP) at 50 per cent above the cost of production. Instead, he argued to encourage farmers—especially in Punjab and Haryana—to shift their crop production away from wheat and rice to fruit, vegetables, pulses, and oilseeds, whose demand has been growing. Such a shift will also allow other states to increase their production of these items and increase incomes. Johl argued that free electricity is destroying the water table. Farmers should, instead, have the income support to pay for electricity. Heavy fertiliser and pesticide use, combined with a lowered water table, has created a cancer crisis in Punjab, and burning stubble to get in an early rice crop has contributed to massive air pollution in the Yamuna–Gangetic plain, including in Delhi–NCR.

India's heavy reliance on underground water—mainly through free electricity—has been in sharp contrast to China's strategy of water use in

10. OPINION | What's the real intent behind Agnipath scheme? There are no clear answers. - Opinion Columns News (indiatoday.in).
11. Promise of 'One Rank One Pension' turned towards 'No Rank No Pension' through Agnipath: SKM | India News - Times of India (indiatimes.com).
12. Sardara Singh Johl, *Agricultural Production Pattern Adjustment Programme in Punjab for Productivity and Growth* (Chandigarh: Government of Punjab, 2002).

agriculture.[13] The average farm size in China is even smaller than in India, but they have much higher levels of productivity. One way to achieve this is to set up a system of incentives towards these crops and away from wheat and rice. Instead of increasing MSPs under pressure, the Government should increase payments under PM-Kisan and an expanded Mahatma Gandhi National Rural Employment Guarantee Act (MGNREGA). It should also improve the farm price information systems through mobile telephony and vital infrastructure for the food supply chain. But the bulk of India's population dependent on farming is caught in a low productivity trap. A few have benefited hugely from free electricity, no income tax, cheap fertilisers, and assured MSPs in government mandis. However, India's farming is in trouble and the farm protests in response to laws hurriedly passed during the COVID-19 pandemic have exposed the vulnerability of India's farmers. If, instead of tinkering with farm laws in a heavy-handed manner, the Government laid out a more comprehensive strategy to usher in a second Green Revolution—and an industrial strategy that creates more jobs outside agriculture—farmers may see a win-win way forward and not get stuck trying to defend wasteful and unsustainable policies from a different era.

By now being forced to go back to even higher MSPs, we are not freeing the farmer to produce the most lucrative crops; instead, we are locking him into a cost-plus socialistic pricing scheme and cropping patterns that end up producing crops that are not needed, are then stored at an enormous cost in the Food Corporation of India (FCI) godowns, and paid for by the taxpayer. The correct solution has been laid out in the government's own Shanta Kumar Committee report.[14] It would involve reducing the role of the FCI, freeing up agricultural markets, and paying small farmers direct benefit income support. Instead, we have a solution that will make farmers even more dependent on costly price supports for crops for which there is no market.

INFLATION-TARGETING: GIMMICK, USEFUL TOOL, OR DOWNRIGHT HARMFUL?

Even the inflation-targeting framework has a Cobra Effect feel to it. India's inflation is largely driven by international commodity prices and supply-side factors over which monetary policy has limited effect.[15] Yet, we have now set

13. Uma Lele, 'Growing Water Scarcities: Responses of India and China,' *Applied Economic Perspectives and Policies* (2020). doi:10.1002/aepp.13146.
14. Shanta Kumar Committee Report. *Report of the High-Level Committee on restructuring of the Food Corporation of India* (New Delhi: Government of India, 2016).
15. Pros and cons of Inflation targeting in India - INSIGHTSIAS (insightsonindia.com) see also Ashok Gulati and Manish Kumar Prasad write: On food inflation, the humble tomato has challenged the mighty RBI (indianexpress.com)

up an elaborate monetary framework to fight inflation with a Monetary Policy Committee (MPC) that always errs on keeping interest rates too high, which lowers growth, helps keep the rupee overvalued, and hurts competitiveness. The MPC objectives must at least give equal weight to growth and inflation. Several analysts have assessed the flexible inflation targeting regime (FIT) to have been useful in bringing inflation down[16]—but inflation has resurfaced.

India's inflation-targeting regime is once again in the spotlight as consumer price index (CPI) inflation has surged to over 7 per cent on an annualised basis for several quarters—well above the upper limit of the target range of 2–6 per cent. If it persists for two quarters at this level, the MPC is obliged to act to bring it down by tightening monetary policy. However, is inflation-targeting—which gives primacy to fighting inflation over growth or employment—right for India, and does it focus on the right target? In early 2022 we again saw that it was a rising food and fuel prices, which was largely linked to the Russia–Ukraine war, that has driven inflation up. Monetary policy, however, will not solve any of this. And any increase in repo rates to tighten monetary policy will make things worse, not better. India must rethink its inflation-targeting regime. It has not been the main factor driving inflation up or down.

Even in earlier periods, it was not monetary policy but instead, it was the global commodity cycle that saw a huge decline in international oil and food prices that reduced inflation. Cereal prices fell by over 60 per cent between 2011 and 2016, and overall food prices fell by 40 per cent in that period. Oil prices fell even more sharply—from US$108 a barrel in early 2013 to US$27 a barrel in early 2016. The decline in inflation had very little to do with tighter monetary policy, with high real repo rates that only hurt growth. In developing countries, the principal factors driving inflation are domestic supply shocks and imported inflation. Monetary policy can, at best, play a supportive role. In any case, at best, it can affect core inflation, not headline inflation. To allow for equal focus on growth, some have suggested targeting nominal GDP instead of inflation. But this also makes no sense as the problem with using nominal GDP growth as a target is that its composition matters. A nominal GDP growth with 4 per cent real growth and 8 per cent inflation is quite different from one with 8 per cent real growth and 4 per cent inflation. Targeting nominal GDP makes no distinction between those two scenarios. A more constructive approach for emerging economies—where food and fuel prices can be volatile—is to target core inflation. Core inflation is not subject to volatile movements. Core inflation is also more reflective of overall demand conditions than food and fuel prices.

India must rethink its so-called 'flexible' inflation-targeting regime and at

16. "Eichengreen, Barry; Gupta, Poonam; Choudhary, Rishabh. 2020. *Inflation Targeting in India: An Interim Assessment*. Policy Research Working Paper; No. 9422. World Bank, Washington, DC. © World Bank.

least evaluate its effectiveness some more.[17] It has not been the main factor driving inflation up or down. If anything, it has allowed interest rates earlier to remain either too high or now too low. But the way inflation-targeting has been used in the past has kept interest rates between mid-2014 and mid-2018 at around 250 bps, at least 100 bps higher than they should have been. This kept the exchange rate overvalued by 10–15 per cent, encouraging imports and hurting exports. It dampened demand and lowered overall growth. Since 2019, the Reserve Bank of India (RBI) Governor has followed a more pragmatic approach—but has now allowed interest rates to remain too low. However, with food and fuel CPI surges again exposing its absurdity, it is time to rethink the inflation-target regime itself. If you must keep it, at least focus on the right target—core inflation rather than CPI inflation.

Planning: Did we Throw out the Baby With the Bathwater? [18]

Another example of the Cobra Effect is seen in trying to run the economy with broad targets—like US$5 trillion—but without a plan or strategy. Shutting down the Planning Commission in 2014 was a good idea as it had become an ossified 'Control' Commission, but we may have thrown the baby out with the bathwater by abolishing planning altogether. India went away from planning just when the rest of the world discovered the 'new' national development planning. A review of planning across the world by Chimhowu et al (2019)[19] shows that over 130 countries have produced national development plans to show their priorities for achieving sustainable development goals (SDGs). Many of the plans are a product of national consensus processes, although, some are produced mainly by technocratic elites. The five-year (medium-term) plan is the most popular, although some countries have longer-term vision documents. Even though National Planning Commissions are back and play a lead role, Economic Ministries still dominate the process. Most national plans lack financing strategies—a factor that can affect the implementation and achievement of SDGs.

For India, clearly, the old Planning Commission had fulfilled its role and its life had to come to an end. That said, India still needs some form of planning. NITI Aayog needs a revamp. It should be given a much clearer and central role with a leadership team that has the requisite political heft and technical skills.

17. Vol. 3 No. 4 (Jul-Sep) (2022): Indian Public Policy Review / Flexible Inflation Targeting: Performance evaluation overlooks vital issues Renu Kohli DOI: https://doi.org/10.55763/ippr.2022.03.04.004.
18. A more detailed discussion can be found in Chhibber, Ajay Indian Economic Planning: Did we throw the Baby out with the Bathwater. Vol. 3 No. 3 (May-Jun) (2022): Indian Public Policy Review.
19. The 'New' national development planning and global development goals: Processes and partnerships by Admos O. Chimhowu , David Hulme b, Lauchlan T. Munro in World Development World Development Volume 120, August 2019, Pages 76-89.

The institution should be authorised through an Act of Parliament so that it can have the required legitimacy and be answerable the to Parliament. To achieve the SDGs, the technical skills in NITI Aayog, in addition to sectoral expertise, should also include expertise in economic systems and behavioural modelling, critical to understanding how market forces react to policy changes under indicative planning and how development outcomes are affected by a variety of interventions. It should have the expertise to be a systems reform commission—to address intersectoral linkages and future challenges such as climate change; meet the SDGs targets; ensure greater horizontal equity between states through a few core Centrally Sponsored Schemes; and lead the way forward—not be just a reactive body tasked with piecemeal special projects.

The NITI Aayog should be preparing a long-term perspective vision, now possibly all the way to 2047—India's 100th anniversary—with an interim target of 2030 to dovetail that vision to the agreed SDGs and five-year plans that are needed to move towards that vision. Without such a compass, it is not clear what direction is the country headed towards and how it should try and get there. The NITI Aayog should also prepare a National Investment Financing Framework to outline how best to achieve that vision and in the interim, phase to achieve the SDGs.

Will We Muddle Along or Will India Create the Next Super-Cycle?

As Independent India moves forward in finding solutions to its myriad problems it must avoid the Cobra Effect with—just as the British found while dealing with poisonous vipers of Lutyens Delhi—solutions that leave us worse off than the problem itself.

The last time India saw bold comprehensive reforms was in 1991—triggered by a balance of payments (BoP) crisis. Those first-generation reforms eventually paid off across the board. India's dollar GDP almost quadrupled from about US$450 billion in 2000 to US$1.67 trillion in 2010, but since then, it has not even doubled to US$3.1 trillion in 2022. Had we quadrupled our GDP after 2010, we would have reached US$6.7 trillion by 2020—just before the pandemic—and that would have made us the third largest economy in the world by a stretch and just half the size of China's economy. In such a scenario, we would have been aiming now for US$10 trillion—not struggling to reach US$5 trillion. [20] But because we did not do serious reforms, the last decade was a period of lost opportunity. The GDP per capita almost tripled from US$439 in 2000 to US$1,346 in 2010 but has since only increased to under US$2,000 in 2022. Trade and finance played a key part in this phenomenal rise in income in the

20. Ajay Chhibber Narendra Modi is India's $10 trillion bet - The Economic Times (indiatimes.com)

previous decade. India's trade-to-GDP ratio almost doubled from 26.9 per cent in 2000 to 49.2 per cent in 2010 but has since declined to 43 per cent in 2022. Moreover, exports, as a share of the GDP, rose from 13 per cent in 2000 to 22.5 per cent in 2010 and have since declined to 14 per cent of the GDP.

Some claim that this was also the period when credit-fueled growth laid the basis for the banking sector problems India faces today. The private credit-to-GDP ratio shot up from 28.3 per cent in 2000 to 50.5 per cent in 2010, then continued rising until 2013, peaking at 53 per cent before declining to 50 per cent in 2022. That rapid credit expansion then became the NPA crisis for this decade, exposed due to slower growth and stronger regulatory pressure and norms by the RBI. At this stage, a 1991-style BoP crisis seems unlikely, given India's huge reserves. What is more likely, unless the economy turns around quickly, is a downward spiral feeding on itself—an internal fiscal, financial sector crisis. The Narendra Modi administration cannot lay all these recent NPAs onto the credit binge of the previous government. Neither can it blame anyone else for the growing Micro Units Development and Refinance Agency (MUDRA) loan problems.

What will be the way out? Strong factor market reforms are unlikely. Given recent farm and Agnipath protests, the Government will be unwilling to want to take on sensitive labour and land reforms. A combination of inflation and exchange rate depreciation is the most likely outcome. Historically, the rupee has followed a stepwise adjustment—it stays flat for a while, and then suddenly adjusts sharply. A big exchange rate adjustment in 1989–1992 from ruppes-16-a-dollar to rupees-33-a-dollar helped competitiveness and cushioned the domestic industry from sharp import tariff cuts. The rupee drifted to rupees-45-a-dollar by 2000, but then stayed flat for much of the golden decade, even appreciating briefly. It has depreciated in steps to rupees-70-a-dollar over the last decade, ready for a sharp adjustment to over rupees-75-a-dollar to correct the over-valuation as market sentiment towards India weakens. The rupee has now fallen to rupees-80-a-dollar and the RBI should allow this exchange rate adjustment and not waste reserves fighting it. A sharp exchange rate adjustment may reduce the pressure to turn more protectionist and help boost exports further.

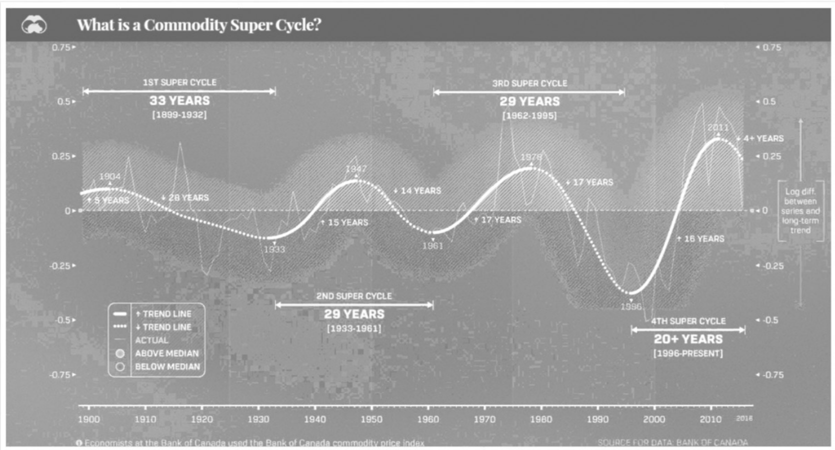
While our democratic politics make it difficult, India must focus on what it must do over the next twenty-five years to become an advanced economy. If used well, its demographics are in its favour. Slow-down in the world economy, since the 2008 Great Recession, has resurrected the idea of secular stagnation—an idea first proposed by Alvin Hansen in the 1930s and 1940s during the Great Depression.[21] The most well-known proponent of this idea today is former US

21. Economic Progress and Declining Population Growth, Alvin H. Hansen, The American Economic Review, Vol. 29, No. 1 (Mar., 1939), pp. 1-15 (15 pages), Published By: American Economic Association.

Treasury Secretary and Harvard Professor, Lawrence Summers.[22] The basic tenet of this idea is that a lack of aggregate demand slows down investment even as savings pile up. He thinks the world entered secular stagnation around the time of the Great Recession of 2008, and since then, recovery has been anaemic globally and well below potential. But this thesis has been challenged by other competing theories of global growth. One compelling alternative is the idea that commodity markets go through cycles and when these cycles combine—they form commodity super-cycles.[23]

The first super-cycle (Figure 1) corresponds to the rise of the US, when in 1890, it surpassed Great Britain—the first American Express cheque was issued, Coca-Cola was patented, and the first electronic telephone exchange was established. Then came the First World War and the Great Depression. The next super-cycle came with industrialisation and re-armament for the Second World War and the subsequent recovery of Europe through the Marshall Plan. The rise of Japan and East Asia formed the next super-cycle in the late 1970s and 1980s—aided by an Organisation of the Petroleum Exporting Countries (OPEC)-led spike in oil prices. The rise of China at the beginning of this century was the next big super-cycle.

Figure 1: *Super-Cycles: Global Commodities Prices Since 1900*



Source: Bank of Canada.

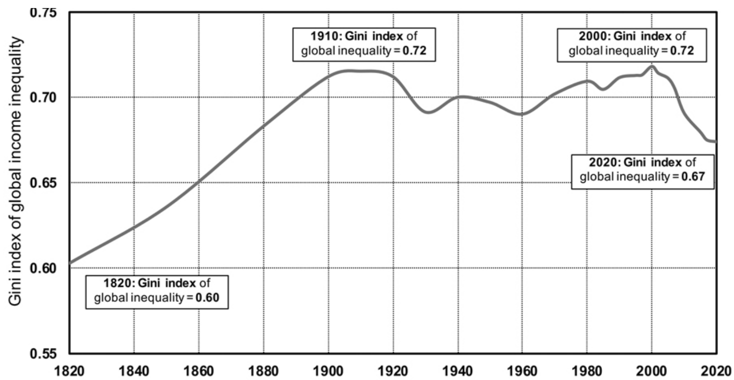
Clearly, demographics have a lot to do with these super-cycles—but turning demography into a dividend is not inevitable. Latin America went through a demographic transition in the 1980s without a dividend—and instead, it

22. Harvard's Larry H. Summers on Secular Stagnation – IMF F&D.
23. Commodity Price Super cycles: What Are They and What Lies Ahead? (bankofcanada.ca)

experienced joblessness, inequality, ethnic conflict, and massive social and political instability. The Middle East, too, saw a huge demographic transition from 1990–2010. Education spread and urbanisation occurred but without adequate growth and job creation and stifling political and social systems—the region exploded into the Arab Spring.

Rising global savings with no good options for investment are already setting alarm bells ringing uncomfortably—like what was seen in the 1920s. Ruchir Sharma at Morgan Stanley showed that in 2019, the US stock market as a share of the GDP is above 160 per cent—roughly where it was at the start of the Great Depression in 1929. There has since been a correction, but stock markets remain at very high levels. Inequality has also risen to levels last seen during the Great Gatsby period of the roaring 1920s (Figure 2). Central Banks, often under huge political pressure injected massive doses of money into the global economy—with limited economic impact while increasing risk and volatility. And trade wars are breaking out just as they did in the inter-war period of the 1920s and 1930s—creating greater uncertainty across the world. Rising natural disasters and the looming threat of climate change add to the uncertainty. If no one steps up to lead the global economy, the world could be headed for another Great Depression or at least, another deep recession.

Figure 2: *Global Inequality: Last 200 Years*

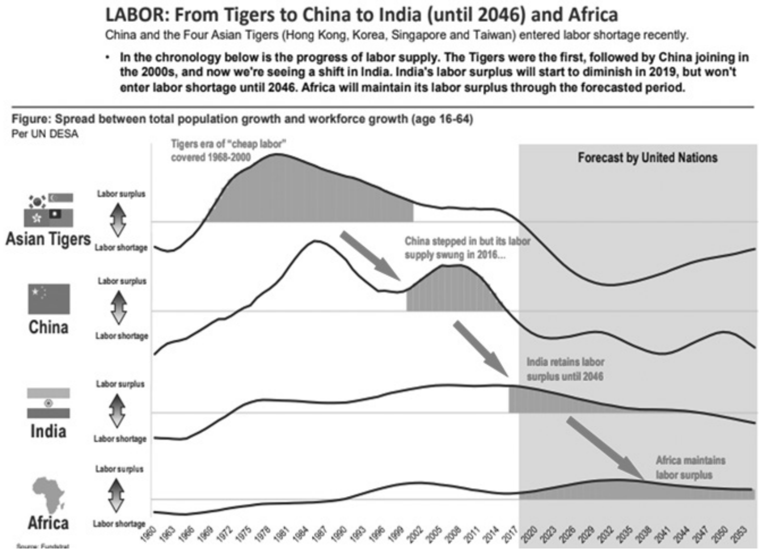


Interpretation. Global inequality, as measured by the global Gini coefficient, rose from about 0,6 in 1820 to about 0,7 in 1910, and then stabilized around 0,7 between 1910 and 2020. It is too early to say whether the decline in the global Gini coefficient observed since 2000 will continue. **Sources and series**: Chancel and Piketty (2021). See wid.world/longrun

China's growth saved the world in 2001 and post-2008 (Figure 3). Based on demography, it is now India's turn to begin the next uptick in the super-cycle over the next decade, followed by Africa from 2030 onwards. Africa is now seeing a huge demographic explosion—but will eventually see a transition. By 2040, the African continent will have a larger working-age population than China or even India and by 2050, one-quarter of the world's working-age population will be in Africa. Inadequate growth and lack of jobs will create huge problems for the African continent and massive migration into Europe, intensifying populism. Climate change will further increase this pressure.

While India's labour surplus has already peaked and will now begin a decline—it will, nevertheless, remain in surplus until 2047—its 100th year of independence. There remains an opportunity for India to generate very rapid double-digit growth of the kind China witnessed, but it will require substantial policy and institutional reforms in freeing factor markets, upgrading social and physical infrastructure, and modernising administration. The stakes are massive for India and the world.

Figure 3: *India's Turn to Create a Global Super-Cycle*



Source: Fundstrat.

By no means do I mean to suggest that India will solve all of the world's problems, but if India grows rapidly—over 8 per cent—and sustainably over the next two decades, it could become the next engine for the global economy, like Japan, East Asia, and China. If not, it will become mired in social conflict and political instability—as we saw in Latin America and the Middle East—and it will remain a prisoner of a middle-income trap or worse.

Will India make its 'world premiere' and become an indispensable nation to the world—not just the most populous country—or get itself entangled again in the viperous machinations of Lutyens's New Delhi?

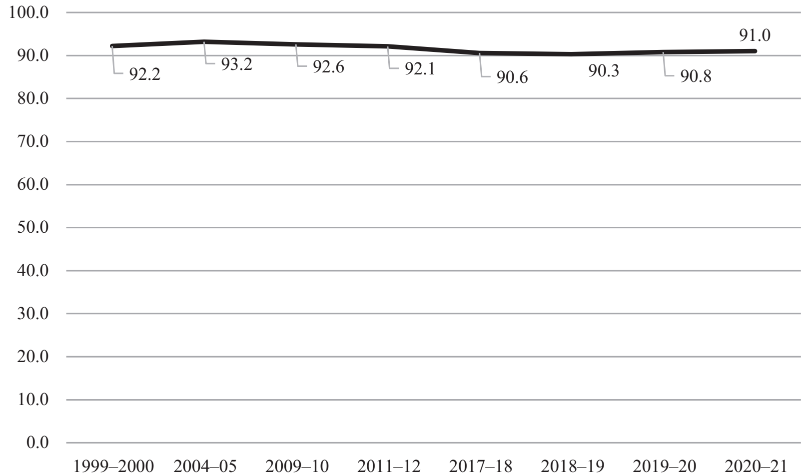
Tackling Informality

Radhicka Kapoor

INTRODUCTION

Despite witnessing rapid economic growth for almost three decades, an overwhelming share of India's workforce continues to remain informally employed. Data from multiple rounds of employment-unemployment surveys conducted by the National Sample Survey Office (NSSO) indicate that over 90 per cent of India's workforce is informally employed (Figure 1). Informal firms and workers operate in restricted local markets, have limited access to capital, skills, and technologies, and are not covered by formal labour contracts or social protection systems. Significant productivity gaps exist between the formal and informal sectors—resulting in inefficiency, inequality, and limited upward mobility. As India aspires to become a developed nation by 2047, informality remains a major development challenge.

Figure 1: Informal Employment as a share of Total Employment



Source: NSS Employment Unemployment Surveys and Periodic Labour Force Surveys (PLFS) (various rounds).

formalisation processes are not simply about legal considerations, they are also about increasing their productivity.

The prevailing discourse on informality revolves around the recommendation that the informal economy should be formalised, a desirable objective indeed. Registration and taxation of informal enterprises are seen as common approaches to formalising informal enterprises. This is typically done by simplifying the bureaucratic procedures involved in registration and offering benefits and incentives in return for paying taxes. This approach views informality as a consequence of policy-induced rigidities and the informal sector as comprising of entrepreneurs who seek to avoid or evade the costs, time, and effort of regulations and taxation.

In India, in recent times, several measures, such as the introduction of the Goods and Services Tax (GST) and digitalisation of financial transactions, have sought to encourage formalisation. Undeniably, these are important steps that help lower entry barriers in the formal sector. However, they are limits to how far they alone can formalise the economy. This is because while some of the enterprises in the informal sector deliberately seek to avoid registration to evade the costs associated with doing so, there are several other enterprises that can simply not afford to survive in the formal sector due to their low productivity. Many such enterprises have linkages with formal sectors. They source raw materials from and/or supply finished goods to formal firms either directly or through intermediate (formal/informal) firms. However, on account of their low productivity, they choose to remain in the informal sector as they are deterred by the costs of formalisation or do not see much benefit from formalisation.

For such informal enterprises, formalisation processes are not simply about legal considerations, they are also about increasing their productivity. As noted by Chen (2012) standard approaches to enhance productivity of informal enterprises include: targeted measures, such as financial services, enterprise support, and training; and general measures of State support, such as infrastructure services. Further, the informal workforce needs productive assets, technical and business skills, and infrastructure services to better compete in the markets. Many people working in the informal economy have real business acumen and dynamism and could flourish if obstacles in the path to entrepreneurship were removed. This would enable an organic process of transition and many informal enterprises would welcome efforts to reduce barriers to registration and related transaction costs as they expect to reap the benefits of formalising.

Evidence from informal enterprise surveys shows that productivity increases have taken place in the informal sector in India. Ghose (2016) finds evidence of growth in labour productivity and conditions of employment in the informal sector for the period between 1999–2000 and 2011–2012. For the same time period, Majid (2019) also finds that productivity-increasing labour transfers occurred more within the informal economy and less from the informal to the formal part of the economy. Given that there is a continuum of different productivities both within the informal and formal parts of an economy, he notes that in typical labour surplus economies, where there are large numbers of workers in informal segments, labour transfers are more likely to occur first within the informal sector. This is because productivity gaps between sectors in the informal economy are smaller than those between the formal and informal economy. Thus, while in the long run, we can expect dualism in the production organisation to decline and output and employment to move in favour of the formal economy, in the near-medium term, labour transfers will be dominated by movement within the informal economy (ibid, 2019).

OWN ACCOUNT ENTERPRISES ACCOUNT FOR AN OVERWHELMING SHARE OF THE INFORMAL SECTOR

It is also important to remember that while some self-employed choose to be in the informal economy due to policy-induced distortions, such enterprises are just the tip of the iceberg of the informal sector. What remains hidden are the large swathes of low-productivity own account enterprises working as subsistence enterprises that are best described as 'petty production' (Nagaraj & Kapoor, 2021). In the absence of alternative employment opportunities, these individuals eke out a subsistence living by using surplus labour intensely on meagre capital, typically operating in isolation from formal firms. For them, survival is the biggest challenge and precarity defines their existence.

For such individuals, there is a need to create more gainful employment opportunities through a process of labour-intensive growth. This not only calls for raising agricultural productivity and incomes but also for making industrialisation—in particular, labour-intensive manufacturing—the central focus of our growth strategy. A focus on labour-intensive industrialisation not only generates employment but also enhances earnings of those at the bottom of the income distribution, who have a high marginal propensity to consume. This can potentially create a virtuous circle of consumption of manufacturing goods and industrial development and thereby accelerate the growth of output and employment in the manufacturing and services sectors (UNIDO, 2018).

A big push for labour-intensive industrialisation requires addressing oft-recognised constraints such as infrastructural bottlenecks, regulatory impediments, and India's complex tariff structure which has inhibited access to affordable inputs. However, over and above these factors, three key elements are crucial. One, a change in India's industrial policy framework which has typically laid greater emphasis on capital-intensive industries. Second, a radical rethink of our labour regulatory regime where the discourse has been dominated by the narrow agenda of labour flexibility. For India to convert its comparative advantage in labour-intensive industries to a competitive advantage, it needs to recognise that labour is not a mere factor of production whose factor cost has to be pushed down but human capital which needs to be invested. Employment arrangements which enhance labour productivity, as opposed to precarious arrangements which do the opposite are the need of the hour. And third, a comprehensive cluster development policy which allows small and medium-sized firms to enjoy collective efficiency (Kapoor, 2022).

INFORMAL EMPLOYMENT IN THE FORMAL SECTOR

Finally, it needs to be noted that as defined by the ILO (2018), informal employment comprises not just of those who are employed in the informal sector but also those who are informally employed in the formal sector. Using the International Labour Organisation's (ILO's) definitions, Table 1 disaggregates employment in the informal sector and the share of informal employment in the formal sector. The informal sector's share of total employment has declined, very sluggishly, from 88.0 per cent in 1999–2000 to 81.1 per cent in 2017–2018—mainly on account of the decline in the share of agriculture in total employment. Disappointingly, this decline has been nullified by an increase in the share of informal employment in the formal sector, from 4.2 per cent to 9.5 per cent. Thus, cumulatively, informal employment in total employment remained unchanged at over 90 per cent over the close to three decades when India witnessed rapid growth. The phenomenon of informalisation of wage employment in the formal sector is a consequence of formal firms trying to avoid payroll taxes and employers' contributions to social security or pensions to reduce labour costs.

Table 1: *Share of Informal Employment in Total Employment*

	Share of Informal Employment in Total Employment (%)	**Share of Informal Employment in Formal Sector (%)**	**Share of Informal Employment in Total Employment (%)**
1999–2000	88.0	4.2	92.2
2004–2005	87.4	5.8	93.2
2009–2010	85.0	7.5	92.5
2011–2012	82.6	9.5	92.1
2017–2018	81.1	9.5	90.6

Source: Nagaraj and Kapoor (2022).

Extending social protection to the informally employed, both in the formal and informal sector workforces, is an important element of a comprehensive strategy to tackle informality. Globally, all governments have become aware of the challenges of extending social protection to their informal workforce in a post-pandemic world. In India, the introduction of the e-Shram registration, a national database of unorganised workers (including migrant workers, construction workers, gig workers, and platform workers) which will help provide social security to them, is a stepping stone towards the protection of informal workers. While mandatory registration of all unorganised workers is the need of the hour, two key issues vis-à-vis the design of social protection programmes merit attention. First, the structure of the programmes needs to be sensitive to the huge diversity in employment relations as well as incomes. For instance, those below the poverty (deprivation) line should not be expected to contribute. As incomes rise beyond a threshold, households above the poverty line can be expected to contribute towards their social security alongside the government. Second, the design of the programme also needs to be cognisant of the lack of standard employer–employee relationships in the labour market where workers either work with no employer or work with multiple employers. One possible approach to this challenge is the formation of national- and state-level welfare boards for unorganised sector workers as proposed in the 2008 Unorganised Sector Social Security Act (Mehrotra, 2020).

A MULTI-PRONGED APPROACH TO ADDRESSING INFORMALITY

Given that there are multiple drivers of informality and there is enormous heterogeneity within the informal sector, it is clear that there is no single, overarching policy goal or prescription which can address the concerns associated with all categories of informal enterprises, activities, or workers. Recognising the heterogeneity of the informal sector and adapting policy interventions to different cases is also important to build resilience.

In countries where informality is tied to regulatory distortions, an appropriate policy package could streamline regulatory and tax frameworks while improving the efficiency of public revenue collection and regulatory enforcement as well as strengthening public service delivery to bolster tax morale (Ohnsorge and Yu, 2022). In countries where informality remains predominantly a reflection of underdevelopment, an appropriate policy package could include measures to expand access to finance, markets, and inputs to foster firm productivity and growth; better education to facilitate formal sector employment; and enhanced safety nets to cushion household risks. Policies will more likely succeed in addressing the challenges of informality if they are comprehensive and tailored to suit the country's circumstances.

Clearly, there is no silver bullet to address the challenge of informality. In countries such as India, a comprehensive policy framework is required (Chen, 2012). While there is an urgent need to simplify the bureaucratic procedures involved in registration, there is also a need to create more formal jobs through labour-intensive growth; extend social protections to the informal workforce; and finally, increase the productivity of informal enterprises and the income of the informal workforce.

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India and Competitiveness

Dr Amit Kapoor and Shivani Kowadkar

INTRODUCTION

For any nation, the world outside—or the external context—bears the winds of change that shape its trajectory. To say that the external context is constantly changing may come across as a cliché. However, it holds a powerful truth—which, if understood and prepared for, has the potential to empower a nation to traverse onwards with stability. In this context, historian Yuval Noah Harari's words can be mentioned. He says, 'People are usually afraid of change because they fear the unknown. But the single greatest constant of history is that everything changes'.

Winds of globalisation, the technological revolution, and digitisation, made the turn of the century a rather speedy one—making change particularly accelerated in the last two decades. As per World Bank estimates, on a global level, trade, as a share of gross domestic product (GDP), has increased from about 25 per cent in 1970 to 52 per cent in 2020. Digital technologies have undergone a rapid spread—reaching around half of the developing world's population within two decades (UN, 2022). Over two-thirds of the world's population now uses a mobile phone and the number of global internet users has increased rapidly, with internet penetration at 62.5 per cent of the world's total population (Kemp, 2022).

In a globalised world, where success or failures are not necessarily limited by national boundaries due to interlinkages of all kinds, global happenings may come in the form of tailwinds presenting opportunities or headwinds posing challenges. While reality does not pan out in such a simplistic manner, it is clear that any external event has the potential to impact you in ways unpredictable. The COVID-19 pandemic stands as testimony to the unprecedented effects of a global event on all walks of life. Recent global events, such as the war in Ukraine, triggered an energy crisis causing price volatility, supply shortages, and economic uncertainty. History is replete with events that have changed the contours of world order and the trajectories of nations. Factoring in the external context has become imperative for any economy aiming for higher and more resilient growth.

In this changing global context, how should India strategise to gain from opportunities and overcome challenges successfully? India's seventy-fifth year of independence has been an opportunity to assess gains and learnings from the past and mark ambitions for our future. The Indian growth story is marked by substantial improvements in multiple social, health, and economic indicators. However, the gains are yet to see a more uniform spread within the country—across different regions, communities, and classes.

India is home to one-sixth of the global population. Additionally, the country is expected to contribute massively to the working population (people between fifteen and sixty-four years of age) between 2020 and 2050—a contribution to the tune of another 183 million people (UN Population Statistics Database). It is in our remit to ensure that this contribution bears fruit by becoming a resource for the world. This is a matter of ensuring that the labour force is well-equipped in terms of education, skills, and health. India's labour force also has the potential to be a stronger demand base for the economy. The World Economic Forum projects India to be led by the middle class by 2030, with the middle class expected to drive a major portion of consumer spending in 2030. It would present industries across the globe with an unparalleled opportunity to serve a colossal market. India's demographic dividend holds the capacity to benefit the world. Recently, India surpassed the UK to become the fifth-largest economy in the world—accounting for about 15 per cent of global growth as per International Monetary Fund (IMF) estimates. Thus, owing to its global ramifications, India's success matters globally as much as it does to its inhabitants.

With the goals India has set for itself, what should be done differently to achieve the aspired transformation? There is substantial ground to be covered in terms of progressing in providing access to good quality health and education, expanding opportunities for gainful employment, and bridging the divide between classes, communities, and geographies. For this transformation to manifest, a new conceptualisation of India's ambitions grounded on a renewed development approach is the need of the hour. In this regard, the competitiveness approach lends itself as a promising framework to address India's challenges and make a transformative leap. Typically, the term 'competitiveness' gets defined and utilised in multiple ways—higher exports, improved market share, a competitive exchange rate, greater foreign direct investment (FDI) inflows, and so forth. However, it has a precise meaning in the way that Michael Porter—the world's foremost thinker in the field of strategy and management—envisages it and the authors here refer to it.

It is essential to make a clear distinction between what competitiveness is and what it is not. Michael Porter defines competitiveness in terms of productivity. Productivity is the key to understanding what drives long-term prosperity for any economy. At its simplest, an economy becomes competitive to provide a context that allows firms to be productive and individuals to partake in the value being generated through their productivity. Value creation lies at the heart of this approach, wherein it is important to fulfil the needs of different sections of society—be it consumers or the producers themselves. Sustaining prosperity, as per the competitiveness approach, is not just about producing more with less, but producing more of what has value for society.

The approach rests on a dual emphasis on the macroeconomic as well as microeconomic components of an economy. While macroeconomic aspects include broad social and political institutions and fiscal and monetary measures, microeconomic aspects encompass factors directly affecting individual companies and the labour force. India aims to embark on a journey from a lower-middle-income country to a high-income economy. The competitiveness approach offers a solid grounding for this journey. A thorough assessment of the contours of Indian Competitiveness, its challenges, and its strengths will help shape India's trajectory in the coming twenty-five years in a way that our ambitions for India at 2047 are truly fulfilled.

KEY CHALLENGES

An overview of India's growth trajectory would give an insight into how India has gone from strength to strength but still faces significant roadblocks on the path to higher growth. India's total food production has risen six-fold since its independence (PIB, 2022). With FDI inflows increasing twenty-fold in the last two decades, the country reached the highest annual FDI inflow in financial year (FY) 2021–2022 (PIB, 2022). Some of the defining achievements of the Indian economy include advancements in infrastructure, technology, telecom, services, and basic education and healthcare provision. There have been extensive policy discussions on a range of Indian socio-economic challenges. In a landscape such as that of our country, identifying a few challenges as priority areas is a difficult task. However, there are a few concerns that are particularly pronounced in their adverse impact. One of the major challenges that call to be addressed is the labour force mobilisation challenge. A glimpse into what it entails is an important aspect that should be a part of our conversation on India at 2047.

India entered the phase where it can reap demographic dividends owing to a larger pool of working-age population. When there is a larger proportion of people falling in the working-age bracket, there is immense potential to tap into it and increase income, consumption, investment, and overall growth in the economy. However, the mere availability of a labour force is not sufficient—mobilising the available labour force into the employed group is vital. According to the National Sample Survey Office's (NSSO's) Periodic Labour Force Survey (PLFS) (2020–2021) estimates, India's labour force participation rate for all age groups is 41.6 per cent (57.5 per cent for males and 25 per cent for females). This shows that India has a huge scope to double down on mobilising the existing working-age populace.

The competitiveness approach emphasises the importance of mobilising the available workforce—it does so in its very definition of competitiveness by defining it as the expected level of output per potential worker. Here, the term 'potential' adds a critical nuance to the definition as it broadens the notion of productivity. The approach views both productivity of the employed and the ability of a country to mobilise the working-age population. An economy must lend significance not just to its employed populace but also to its potentially employable people. There are umpteen factors that can help in employing a greater portion of the working-age population. Creating gainful employment in the economy and providing an individual with multiple entry points into the workforce through skilling, reskilling, and upskilling, are some of the key areas that warrant attention as well as action. India, in recent years, has seen a greater thrust in the skilling arena. There have been multiple initiatives since 2015—*inter alia*, the setting up of Pradhan Mantri Kaushal Vikas Yojana (PMKVY) 1.0, PMKVY 2.0, and PMKVY 3.0 training centres (including Pradhan Mantri Kaushal Kendras); Jan Shikshan Sansthans; and Industrial Training Institutes (PIB, 2022). Labour mobilisation is key to overcoming a major competitiveness performance gap, and skill- and education-induced increase in employability is a critical lever in this regard.

There is no set number of challenges to overcome, and there does not exist a single pathway to development and growth. However, a thorough assessment of India's major socio-economic and political parameters helps understand that the nation is at a stage of economic development where fundamental competitiveness dimensions, such as education and skills, business environment, and labour productivity, need to be enhanced. These key fundamentals require a greater thrust of action. One of the key fundamentals that call for attention is the education and skills area. Some of India's achievements on this front include an increase in the gross enrolment rate (GER) in elementary education from 81.6 per cent in 2001 to 93.03 in 2018 (UNESCO, 2021) and a boost in secondary enrolment from 45 per cent in 2000 to 75 per cent in 2020 (World Bank Database). The conversation, now, must focus not just on expanding access to education, but also on providing a good quality of education to students belonging to different regions and backgrounds.

As per the United Nations International Children's Emergency Fund (UNICEF), since 2014, the reading level at the grade-three level has improved by 7 per cent in seven states—Chhattisgarh, Gujarat, Maharashtra, Punjab, Haryana, Telangana, and Uttarakhand. India should direct significant efforts in the direction of improving educational outcomes by delivering quality education. What stands to be directly associated with the quality of education and skills fundamental is labour productivity—yet another key fundamental that India must consider a priority. For sustained prosperity, the competitiveness approach puts forth the importance of both empowering and employing the reserves of potential labour and making the labour force more productive. Enhancing competitiveness is a continuous process and one that depends on a multitude of mutually reinforcing factors.

In order to leverage this range of interlinked and mutually reinforcing factors that shape a nation's competitiveness, India has invested in them. Yet another major challenge that the country faces is what hinders these investments from translating into real benefits—market distortions. A market that experiences distortions at multiple points sees trouble translating inputs into actual outcomes. Market distortions occur when interventions in the supply and demand equations cause a misallocation of resources in the economy as a result of which the economy underutilises its own potential. For instance, while India has made tremendous gains in expanding access to electricity, a regular and consistent supply of electricity is yet to be guaranteed. Some of the market distortions in this area are inefficient power generation and transmission and distribution issues. As discussed earlier, the fact that outcomes in the education sector are yet to adequately match up to the inputs is a reflection of underperformance in terms of the quality of education—which serves to be a major market distortion.

Yet another factor that hinders the translation of inputs into real gains or outcomes plays out at the policy implementation level. Much has been discussed about policy implementation in India. The need for effective execution of policy reforms at the grassroots level happens when all stakeholders involved are engaged in the process. The implementation architecture must be strengthened further to ensure that policy reforms reach people in the way that they were intended to on paper. For this, the first step is an assessment to identify areas of improvement in the implementation architecture. It is of essence to understand that a certain policy may be driven by a particular arm of the government machinery, however, its impact ultimately depends on complementary policy actions as well. India must work towards developing an all-of-government approach that facilitates a dialogue between various parts of the government machinery.

WAY FORWARD

The transformation that India intends to undergo in the coming twenty-five years will require us to thoroughly assess and address the challenges outlined above. The Indian landscape is heterogeneous in several aspects. Going forward, an understanding of this heterogeneity should be central to policymaking and implementation. There are wide differences in regional economic performance within India that stem from variations in the strengths and weaknesses of different locations. One question that should remain key in our journey to 2047 is: How should India attain balanced development? The competitiveness approach would help India gain nuanced insights into drivers of growth at a disaggregated level. What drives productivity in one location is a location-specific attribute.

Determinants of prosperity vary from region to region. A bottom-up approach to policymaking and implementation should be a cornerstone of the transformation India aims to witness in the coming years. The goal should be to help locations compete productively by utilising existing capacities—be it human resources, capital, or natural endowments. In this regard, an understanding of the concept of 'clusters' is a starting point. To define simply, clusters are closely located groups of related and supporting industries. They are home to interlinked firms and institutions. One form of clusters that serves as an engine of growth in a region are - the IT sector in Bengaluru, Video Production and Distribution in Mumbai, Financial Services in New York City.

In the coming years, India should identify means to increase the presence of clusters. Regions are the building blocks of a nation. Understanding a location's strengths is a prerequisite to transforming it into a powerful cluster. Furthermore, what renders more power to such a location-specific, bottom-up approach in policy reform is a renewed approach to what India is striving towards. The '4 S' framework, as envisaged in the 'Competitiveness Roadmap for India@100' document, redefines success by focusing on four crucial dimensions of prosperity. It calls for India to work towards attaining prosperity that is 'matched by social progress, shared across different regions, is environmentally sustainable, and solid in the face of external shocks'. India's journey till 2047 and beyond is a window of opportunity to emerge as an economy that sustains prosperity in the long run.

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Financial Inclusion and Equitable Growth

State of Financial Inclusion

Sameer Kochhar

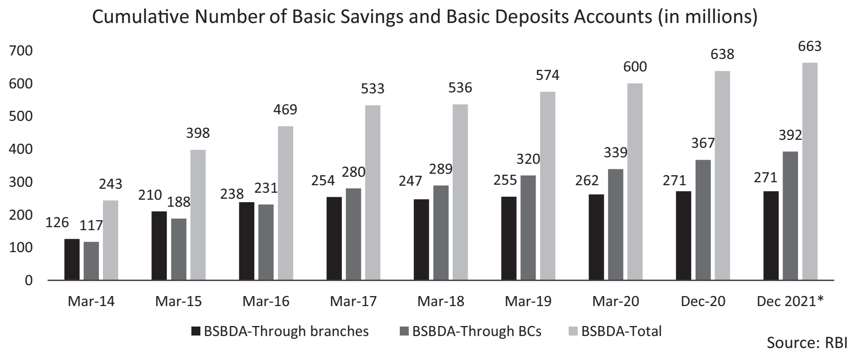
In my book *Defeating Poverty: Jan Dhan and Beyond*, published after the introduction of Pradhan Mantri Jan Dhan Yojana (PMJDY) in 2014, I noted that a poverty alleviation programme has to be financially viable if it has to succeed. Jan Dhan Yojana, launched on 28 August 2014, is undoubtedly the most extensive concerted effort taken in the financial inclusion sphere in India. More than 46 crore bank accounts were opened as per government figures released on the eighth anniversary of the PMJDY scheme. Around 56 per cent of the Jan Dhan account holders are women, and 67 per cent of account holders are from rural and semi-urban areas.

Bank accounts opened under the PMJDY scheme in a mission mode. Initially, the target was to ensure a bank account for every household, and the targets broadened over years from ensuring an account for 'every household' to 'every adult'. The scheme has been a phenomenal success when it comes to opening bank accounts, and it has also been successful in increasing banking habits.

In the scheme's first year, the number of accounts opened stood at 17.74 crores with deposits of around ₹ 22,000 crore. The average deposit in the Jan Dhan account in August 2015 stood at around ₹ 1,240. By August 2022, the total number of accounts opened under the PMJDY increased to 46.25 crore, nearly three-fold from August 2015. The gross deposit balance of the Jan Dhan accounts rose to ₹ 1.74 lakh crore in August 2022, roughly eight-fold compared to August 2015. The average deposits per Jan Dhan account increased to ₹ 3,762 in August 2022, more than three times the average of ₹ 1,240 recorded in August 2015. An increase in deposits shows increased use of accounts and forming of a saving habit among the accountholders.

As per data from World Bank's Global Findex Database, as of 2021, 78 per cent of Indian adults (population 15 years or older) had a bank account compared to 53 per cent in 2014. Banking is accessible to almost every village within a 5 kilometre radius.

Since 2014, the number of Basic Savings and Basic Deposits Accounts (BSBDA) have almost tripled going from 243 million BSBDA accounts to 663 million. In the recent years, BCs have been more effective in facilitating the creation of BSBDA accounts.



However, financial inclusion is about more than just bank accounts. The Committee on Financial Inclusion, chaired by former Reserve Bank of India (RBI) Governor Dr C Rangarajan, in its report (2008), defined financial inclusion as 'the process of ensuring access to financial services and timely and adequate credit where needed by vulnerable groups such as weaker sections and low-income groups at an affordable cost.'

As per the Committee on Financial Sector Reforms, chaired by Dr Raghuram G Rajan, 'Financial Inclusion, refers to universal access to a wide range of financial services at a reasonable cost. These include banking products and other financial services such as insurance and equity products.'

The Committee on Medium-Term Path to Financial Inclusion chaired by Mr Deepak Mohanty (2015) has set the vision for financial inclusion as, 'convenient access to a basket of basic formal financial products and services that should include savings, remittance, credit, government-supported insurance and pension products to small and marginal farmers and low-income households at a reasonable cost with adequate protection progressively supplemented by social cash transfers, besides increasing the access of small and marginal enterprises to formal finance with a greater reliance on technology to cut costs and improve service delivery.'

According to the World Bank, Financial Inclusion is an enabler for 7 of the 17 Sustainable Development Goals (SDGs). The World Bank Group considers Financial Inclusion a key enabler in reducing extreme poverty and boosting shared prosperity. Financial inclusion means that individuals and businesses can access valuable and affordable financial products and services that meet their needs – transactions, payments, savings, credit and insurance – delivered responsibly and sustainably.

Financial access facilitates day-to-day living and helps families and businesses plan for everything from long-term goals to unexpected emergencies.

As accountholders, people are more likely to use other financial services, such as credit and insurance, to start and expand businesses, invest in education or health, manage risk, and weather financial shocks, which can improve the overall quality of their lives, the World Bank has noted in its overview on Financial Inclusion.

Access to banking services has progressed impressively. Still, challenges remain in the usage of accounts and also when it comes to the access and the cost of financial products like credits and insurance.

Focusing on financial inclusion started in 2005 following startling revelations of exclusion data in the National Sample Survey. As per the fifty-nineth round of the National Sample Survey released in 2005, 45.9 million or 51.4 per cent of the total farmer households in the country were financially excluded from both formal and informal sources of credit. Seventy-three per cent of the total farmer households had no access to formal sources of credit. Only 27 per cent of the total farmer households had access to formal sources of credit. However, one-third of this group also borrowed from non-formal sources.

Rangarajan committee, in its report in 2008, recommended the constitution of two funds – the Financial Inclusion Fund (FIF) and the Financial Inclusion Technology Fund (FITF). Subsequently, these two funds were created with the National Bank for Agriculture and Rural Development (NABARD). In July 2015, FIF and FITF merged into a single Financial Inclusion Fund (FIF). The objective of the FIF is to support 'developmental and promotional activities', including creating FI infrastructure across the country, capacity building of various stakeholders, creation of awareness to address demand side issues, enhanced investment in Green Information and Communication Technology (ICT) solution, research and transfer of technology, the increased technological absorption capacity of financial service providers/users to secure greater financial inclusion.

Banking Infrastructure

There have been concerted efforts to enhance the banking infrastructure. The total number of branches of Scheduled Commercial Banks stood at 68,681 in March 2006. These units rose to 1,02,343 in March 2013 and increased further to 1,50,631 in 2021. There has been a consistent increase in the number of bank branches in the country. The total number of branches of Scheduled Commercial

Banks stood at 35,707 in 1981. This increased from 60,220 in 1991 to 65,919 in 2001 and 90,777 in 2011. In the past five decades, the number of branches of Scheduled Commercial Banks has jumped 4.2-fold. Between 2011 and 2021, 59,854 new branches of the Scheduled Commercial Banks were opened. The abovementioned data suggest this is the sharpest increase ever. In the previous decade (2001-2011), only 24,858 new branches of the SCBs were opened.

In 1969, when the first phase of nationalisation of banks took place, there were 6955 public sector bank branches, and the average population per branch office was 64,000. To boost rural development, the Reserve Bank of India prescribed a 1:3 ratio for opening branches in urban and rural/semi-urban centres.

As of June 2022, there are 1.59 lakh branches operated by the Scheduled Commercial Banks. This translates to nearly 15 branches per 1 lakh of the population. This banking infrastructure in the country is complemented by a network of 2.17 lakh ATMs and close to 32 lakh Business Correspondents (BCs) engaged by banks. Nearly 47 per cent of the ATMs in the country are in rural and semi-urban areas.

The total deposits in the Scheduled Commercial Bank accounts stood at over ₹ 170 lakh crore as of June 2022. Just around 1 per cent of this deposit is in Jan Dhan's accounts.

There has been a significant increase in bank branches and ATMs in the country after the RBI advised banks to open brick-and-mortar branches in villages with a population of more than 5000. To strengthen financial inclusion, the RBI relaxed the branch authorisation guidelines. The Financial Inclusion Fund (FIF) was set up with an initial corpus of ₹ 2000 crore to support technology and capacity-building adoption.

Providing banking access to every village within a 5 km radius/hamlet of 500 households in hilly areas is one of the critical objectives of the National Strategy for Financial Inclusion (NSFI) for 2019-24. As per the status reported by the concerned State/Union Territory Level Bankers' Committees' (SLBC/UTLBC) convenor banks, the milestone has been fully achieved in 22 states and 6 UTs as on 31 March 2021. The percentage of coverage of all identified villages/ hamlets across the country is 99.87 per cent, according to the RBI Annual Report released in May 2021.

Payments Bank

In 2015, the Reserve Bank of India (RBI) issued differentiated banking licenses for Small Finance Banks (SFBs) and Payments Banks (PBs). Some touted these licences as a masterstroke to deepen financial inclusion. Small Finance Banks, were also set up to further financial inclusion through tailored deposit products. SFBs provide credit to small business units, small and marginal farmers, micro and small industries, and other unorganised sector entities through technology-led low-cost operations.

On the other hand, Payments Banks were set up to provide small savings accounts and payments/remittance services to the migrant labour workforce, low-income households, small businesses, and other unorganised sector entities and users.

Small Finance Banks have been playing a progressive role in providing credit to small businesses. The guidelines of SFBs were drafted to promote inclusive growth taking care of the lacunae in some of the earlier experiments involving differentiated banks, such as narrow capital base, restrictive geographical jurisdiction, lack of diversification in the source of funds and concentration risk. The 'small' in SFBs refers to the importance given to the objective of serving the section that is excluded and not the size of a bank. At least 50 per cent of their loan portfolio should comprise loans of up to ₹ 25 lakh.

There are pros and cons associated with small banks compared to the conventional banking system. On the one hand, bigger banks have a better spread of Automated Teller Machines (ATMs) and branches; the smaller banks are known to be more flexible in providing personalised service to smaller clients. While larger banks tend to allocate more assets to more significant entrepreneurs, local banks serve neighbourhood communities. Large banks generally rely more on complex information like the creditworthiness of borrowers, collateral and audited statements for lending. Small banks rely on soft information based on feedback from the local community.

According to an RBI report, 'Performance of Small Finance Bank – An Early Reflection' released in August 2021: A high credit deposit (CD) ratio is observed for SFBs compared to other bank groups, implying a high conversion rate of available funds into lending activity. An essential objective of SFBs was to provide credit to the priority sector. This is indeed found to be in place with a share of priority sector advances of SFBs considerably higher vis-a-vis other traditional banking groups. Both the growth rate of deposits and credit of SFBs is also generally high due to the small base. Profitability and asset quality figures for SFBs are also better than other bank groups.

On the other hand, Payments Banks have yet to deliver the desired results, and their future remains uncertain. How was it possible for me to predict that the Payments Banks would not help much in financial inclusion and are doomed to fail? I am not an astrologer! The reason is related to economic viability, as I noted at the beginning of this chapter and in my book *Defeating Poverty: Jan Dhan and Beyond*, that a poverty alleviation programme has to be financially viable if it has to succeed.

Payments Banks need to be financially viable. The result is in front of all of us to see. Five out of the 11 Payments Banks have already shut shops. Some dropped off within months of being granted licenses, while a few more fizzled out in a couple of years.

Out of 11, five have already surrendered their licenses. Only six are now in the fray - Airtel Payments Bank, Fino Payments Bank, India Post Payments Bank, Jio Payments Bank, National Securities Depository Limited (NSDL) Payments Bank and Paytm Payments Bank. Even among these six, only three have seen active transactions going to RBI's statistics on mobile and National Electronic Fund Transfer (NEFT) transactions — Airtel Payments Bank, Fino Payments Bank and Paytm Payments Bank. India Post Payments Bank also evaluates options for converting to a Small Finance Bank (SFB).

As I argued earlier, the main reason behind the failure of the Payments Banks is financial viability. The Payments Banks have minimal revenue streams and small margins. Traditional banks earn profit by lending money raised from deposits. Payments Banks have little scope to earn good margins. Payments Banks face a blanket ban on any type of lending. Moreover, they can only accept deposits up to ₹ 1 lakh. Payments Banks are required to maintain a cash reserve ratio (CRR) and statutory liquidity ratio (SLR) on the outside liability.

Payments Banks income comprises mainly interest from investments in safe government securities and fee income, which they can earn by distributing simple financial products such as mutual funds and insurance. Payments Banks are required to invest 75 per cent of their deposits in government securities with maturity of up to one year, and the balance 25 per cent can be parked with commercial banks. In recent years, the yield on one-year Government Securities has been 5-7 per cent. Leading commercial banks offer 3.5 per cent interest on low-value savings deposits. A few private banks, including YES Bank, Kotak Mahindra Bank and IndusInd Bank, offer 4-5 per cent interest on savings deposits. To compete with traditional banks, Payments Banks are required to offer attractive interest rates to their customers on their deposits. Low returns on government securities force the Payments Banks to operate on wafer-thin margins.

As a result, Payments Banks, in general, are incurring losses. The overall loss of Payments Banks stood at ₹ 242 crore in 2016-17. The losses widened to ₹ 516 crore in FY 2017-18, per the RBI's report on 'Trend and progress of banking in India 2017-18'.

National Strategy for Financial Inclusion 2019-2024

In January 2020, the Reserve Bank of India released the National Strategy for Financial Inclusion 2019-2024. The strategy aims to provide access to affordable formal financial services, broadening and deepening financial inclusion and promoting financial literacy and consumer protection.

The National Strategy for Financial Inclusion has identified six strategic objectives: (i) universal access to financial services, (ii) providing a basic bouquet of financial services, (iii) access to livelihood and skill development, (iv) financial literacy and education, (v) customer protection and grievance redressal, and (vi) effective coordination.

The strategy has been prepared by the RBI under the aegis of the Financial Inclusion Advisory Committee and is based on the inputs and suggestions from the Government of India, other Financial Sector Regulators, namely, the Securities Exchange Board of India (SEBI), Insurance Regulatory and Development Authority of India (IRDAI) and Pension Fund Regulatory and Development Authority of India (PFRDA).

The approach paper prepared by the RBI notes that every willing and eligible adult needs to be provided with a basic bouquet of financial services, including a Basic Savings Bank Deposit Account, credit, a micro life and non-life insurance product, a pension product and a suitable investment product.

Providing Universal Access to Financial Services by expanding the outreach is the foundation for a successful financial inclusion strategy. Over the last five years, especially with the launch of the PMJDY in 2014, the country's total number of access points has increased. However, some parts of the country include difficult-to-reach terrain in the North Eastern Region, Left Wing Extremists affected districts and the aspirational districts in the country wherein the number of access points needs to be increased to improve coverage.

As per the strategy paper, every adult should have access to a financial service provider through a mobile device by March 2024. The paper has suggested moving towards an increasingly digital and consent-based architecture for customer onboarding by March 2024.

Financial Inclusion Index

The Financial Inclusion Index constructed by the Reserve Bank of India shows consistent progress in financial inclusion in the country. The value of the Financial Inclusion (FI) Index rose to 56.4 in March 2022 compared to 53.9 recorded in March 2021, as per the latest data released by the RBI in August 2022.

The FI Index – which ranges from 0 (denoting financial exclusion) to 100 (indicating total financial inclusion) – is meant to gauge the extent of financial inclusion in the country. A multidimensional composite Financial Inclusion Index (FI-Index) has been constructed based on 97 indicators which quantify the degree of financial inclusion and is responsive to availability, ease of access, usage, unequal distribution and deficiency in services, financial literacy, and consumer protection.

The FI-Index constructed by the RBI is based on the three dimensions of financial inclusion, namely, 'Access', 'Usage' and 'Quality' with weights as 35, 45 and 20 per cent, respectively. The weights were determined to make the Index forward-looking, emphasising the deepening aspect of financial inclusion ('Usage' and 'Quality'). Broadly, one-third of the total weight is to 'Access', where most of the past initiatives have been undertaken, which reflects the extent of supply-side financial infrastructure made available. Two-thirds of the weight has been assigned to the deepening aspect of financial inclusion, that is, 'Usage' and 'Quality'. Each of these three sub-indices is further composed of a distinct set of dimensions computed based on a non-overlapping set of indicators.

Of the 97 indicators in the Index, 90 are primary indicators and the remaining seven indicators are inequality measures of respective seven primary indicators, namely, distribution of bank branches, distribution of fixed-point business correspondents (FBCs) outlets, distribution of ATMs, distribution of the number of savings account and savings amounts, distribution of the number of credit accounts and outstanding credit. Lorenz curve and inequality measure in terms of Gini coefficients of these seven indicators are presented in Annex 1. All indicators, wherever necessary, are adjusted for inflation based on the Consumer Price Index (CPI).

Although the RBI released the FI-Index results first in 2021, it has made the calculations from 2017 onwards. FI-Index stood at 43.4 in March 2017. There has been a consistent improvement. In March 2018, the Index rose to 46. In March 2019, it improved to 49.9 and 53.1 in March 2020. During the COVID-19 pandemic period, the growth in the Index has been at a slower pace. In March 2021, the Index grew to 53.9 compared to 53.1 recorded a year earlier.

The FI-Index has been constructed without any 'base year' and reflects all stakeholders' cumulative efforts over the years towards financial inclusion.

Financial products are broadly accessible thanks to the massive success of the Pradhan Mantri Jan Dhan Yojana. In the 2021 report, the access sub-index stood at 73.3. This report reflects ordinary people's access to bank accounts and other financial products.

'Access' sub-index, which is further divided into four dimensions, namely, 'Banking', 'Digital', 'Pension', and 'Insurance', reflects the efforts made on the supply side of financial inclusion, such as availability of physical and digital infrastructure and measures for making basic products and services available for the excluded segments. The 26 indicators across four dimensions have been selected to capture the number of banking outlets, including Business Correspondents (BCs), Non-Banking Financial Companies (NBFCs), post offices, etc., the total number of savings accounts, including small savings, all types of cards and electronic payment infrastructure, JAM ecosystem, subscription base of various pension schemes and offices and agents of life and non-life insurance, etc.

'Usage' sub-index is divided into five dimensions, namely, 'Savings and Investment', 'Credit', 'Digital', 'Insurance' and 'Pension'. Comprised of 52 indicators, it is more of a demand-side measure. It reflects the extent of active usage of financial infrastructure through savings, investment, insurance, availing of credit and remittance facilities, etc. The indicators are designed to reflect savings and investment habits, availing of credit from banks and non-banks, use of retail digital payments, penetration of insurance, both life and non-life and contribution to various pension schemes.

'Quality' sub-index has three dimensions, namely, 'Financial Literacy', 'Consumer Protection', and 'Inequality' in the distribution of financial infrastructure with 19 indicators. These indicators capture the efforts undertaken by the stakeholders to make citizens aware of the appropriate financial services available, safe ways of using them and making them aware of their rights, such as overcoming psychological barriers. They also reflect the effectiveness of the grievance redress mechanism and account for the uneven distribution of specific financial access and usage indicators. The Gini coefficient based on the Lorenz curve with district-level data granularity has been used to measure inequality.

While there is impressive progress in the access sub-index, a usage with 45 per cent weight in the FI-Index, remains the primary drag. In 2017, the Usage sub-index stood at 30.8 against the access sub-index at 61.7. The usage sub-index rose sharply in 2019 to 38.7 from 33.7 in the previous year. In March 2020, the usage sub-index improved to 42 and further to 43 in March 2021. However, despite the improvement, the usage sub-index remains sharply down compared to the other two indices – access and quality. The usage sub-index stood at 43 in 2021, while the access sub-index was at 73.3 and quality at 50.7.

The Index shows that while vulnerable groups and weaker sections of society have mostly access to the financial system, most are still unable to use banking, credit and other services.

Credit

Availability and delivery of credit are perhaps among the biggest challenges in financial inclusion. Many people have come under the banking network in the past eight years. But the majority of them still need adequate access to credit.

The overarching principle of priority sector lending (PSL) is to enhance credit flow to those vulnerable sections of society, which despite being credit-worthy, may not get timely and adequate credit in the absence of a special dispensation. Priority sector loans include small-value loans to farmers for agriculture and allied activities, MSMEs, housing, education, and other low-income groups and weaker sections. Social infrastructure and renewable energy have also been brought under the ambit of priority sector lending.

Credit to MSMEs

Micro, Small and Medium Enterprises (MSMEs) are the growth engines. They contribute nearly 31 per cent to India's GDP, 45 per cent to exports and provide employment opportunities to more than 11.1 crore skilled and semi-skilled people. There are approximately 6.33 crore MSMEs in India.

Lack of access to credit and cost of credit are among the significant challenges facing the MSMEs in the country, and the challenges are more acute for micro and small enterprises. From time to time, the Government comes out with schemes and programmes to address the challenges related to cost and access to credit to the MSMEs. In November 2018, the Government announced a 2 per cent interest subvention for the MSME sector, applicable for FYs 2018-19 and 2019-20. The scheme was extended to 2020-21. All fresh or incremental amounts of working capital or new term loan to the extent of only ₹ 10 million in the sector were eligible for interest subvention during the scheme period.

Other schemes implemented by the Government to support MSMEs include the Prime Minister's Employment Generation Programme (PMEGP), Scheme of Fund for Regeneration of Traditional Industries (SFURTI), A Scheme for Promoting Innovation, Rural Industry & Entrepreneurship (ASPIRE), Interest Subvention Scheme for Incremental Credit to MSMEs, Credit Guarantee Scheme for Micro and Small Enterprises (CGTMSE), Micro and Small Enterprises Cluster Development Programme (MSE-CDP) and Special Credit Linked Capital Subsidy Scheme (SCLCSS).

The debt requirement for India's MSME sector is estimated at ₹ 69 lakh crore. About half of the funding needs of the segment are currently being met through informal sources, and despite the rural economy contributing to about half of India's Gross Domestic Product (GDP), the rural segment's share in the overall bank credit remains low at around 8–10 per cent.

Agricultural Credit

More than half of India's workforce is involved in agriculture. As per the 2011 Census, out of the total workers of 481.7 million, there are 118.7 million cultivators and 144.3 million agricultural labourers, which means approximately 55 per cent of the total workers were employed in the agriculture and allied sector.

There has been a consistent push from the Government to boost the availability of credit to the farm sector. The growth in credit to the farm sector is reflected in the data.

The ratio of Agri-Credit outstanding to Agri-GDP jumped from 0.6 per cent in 1950-51 to 9.81 per cent in 1971-72. Post-1972, the ratio shows an upward trend up to 1987-88, increasing to 21.76 per cent. The impressive achievement of agricultural credit against agricultural GDP during the 1950s-1980s is due to the nationalisation of banks and the introduction of RRBs, which expanded the reach of formal credit in the country.

However, the reverse trend in the ratio started from 1990-91 onwards and fell to 13.34 per cent in 1998-99. Post-1999, the percentage increased steeply and reached 39.55 per cent in 2006-07, which indicates that the introduction of Kisan Credit Card (KCC) was a big booster for agricultural credit and brought about a sea change in improving the reach of credit to the farming community. Many other policy initiatives started in 2004-05 also played an important role. In later years, despite a fluctuating trend, it rose to 49.63 per cent in 2015-16 and 51.56 per cent in 2017-18, as per a report of the Internal Working Group of the RBI to Review Agricultural Credit.

Priority sector lending is a significant policy intervention to boost credit to the farm sector. Per the Priority Sector Lending norms, all Scheduled Commercial Banks must meet a target of 40 per cent of their Adjusted Net Bank Credit (ANBC) or credit equivalent of Off-Balance Sheet Exposure, whichever is higher for Priority Sector Lending. RRBs and SFBs are required to meet a target of 75 per cent towards PSL. Besides the overall PSL targets, banks are required to achieve an agriculture target of 18 per cent and a sub-target of 8 per cent of ANBC for small and marginal farmers.

Under the revised PSL guidelines of 2015, direct and indirect agricultural lending has been dispensed. The eligible activities include farm credit, agri-infrastructure and ancillary activities. As per the new guidelines, the approach of agriculture under the priority sector is to focus on 'credit for agriculture instead of' credit in agriculture to give impetus to the financing of the supply value chain in the sector.

To address the issue of cost credit, the Government of India introduced the interest subvention scheme (ISS) for short-term crop loans in 2006-07. It has been continuing since then with minor modifications.

Interest on short-term crop loans up to ₹3 lakh is fixed at 9 per cent per annum by banks and made available to farmers at a reduced rate of 7 per cent per annum to farmers. The 2 per cent interest subvention is reimbursed to banks (through RBI and NABARD) based on the funds released by the Government against their claims. Besides a 2 per cent interest subvention, a 3 per cent prompt repayment incentive (PRI), introduced in 2009-10, is given, reducing the loan cost to 4 per cent.

To prevent the distress sale of produce, the interest subvention benefit is extended for a period of up to six months (post-harvest) to small and marginal farmers having Kisan Credit Card (KCC) on loan against negotiable warehouse receipts issued on the produce stored in warehouses accredited with Warehousing Development Regulatory Authority (WDRA). The scheme also provides a 2 per cent interest subvention to farmers for the first year on loans restructured due to natural calamities.

Despite these interventions, availability and cost of credit have been among the primary reasons for farmers' distress in the country.

As per the NABARD All India Rural Financial Inclusion Survey (NAFIS) Report 2016-17, the average loan taken by agricultural households indicated that 70 per cent of the credit requirement was met through institutional sources and 30 per cent from non-institutional sources. Further, without a proper legal framework and lack of records relating to agricultural activity, tenant farmers/share croppers/oral lessees/landless labourers need help accessing institutional credit. As per the PSA Annual return (2015-16), only 41 per cent of small and marginal farmers could be covered by public and private sector banks. Besides these problems and challenges of accessibility in credit, the share of credit to allied activities, that is, livestock, forestry and fisheries, was suboptimal compared to its contribution to agricultural output.

Financial Literacy

Financial literacy is critical to enable customers to use their accounts to their advantage and enhance their economic well-being. Financial literacy and education are the bedrock of a vibrant financial system; it is essential to make sustained efforts in this direction.

The strategy paper has recommended that the existing mechanism of SLBC/DCC/DLRC be leveraged and coordinated efforts are made by RBI, NABARD, NRLM resource persons, NGOs, PACS, Panchayats, SHGs, Farmers' Clubs, etc., to promote financial literacy at grassroots levels.

Initially from a bank-led model for propagating financial literacy in the country, several steps have been taken over the year to make financial literacy a multi-stakeholder community-led approach to reach out to various groups of the population who require financial literacy.

The RBI strategy paper has set a target to expand the Centers for Financial Literacy (CFL) reach to every block in the country by March 2024. It also talks about the focus on process literacy and concept literacy, which empowers the customers to understand not only what the product is about and helps them use the product by using technology-led Digital Kiosks, Mobile apps, etc.

General people, banking customers, in particular, need to be explained in simple language the nature of the product, its suitability to their requirements and the cost vis-à-vis return. Concerted efforts are required to ensure coordination among the ground-level functionaries. Lead District Manager (LDM), District Development Manager (DDM) of NABARD, Lead District Officer (LDO) of RBI, District and Local administration, Block level officials, NGOs, SHGs, BCs, Farmers' Clubs, Panchayats, PACS, village level functionaries, etc. while conducting financial literacy programmes.

The National Strategy for Financial Education (2020–2025) talks about a 5C approach to achieve the objective of financial literacy.

The strategy includes a '5Cs' approach for dissemination of financial education through emphasis on the development of relevant Content (including Curriculum in schools, colleges and training establishments), Capacity of the intermediaries who provide financial services and education, leveraging on the positive effect of a community-led model for financial literacy through appropriate Communication Strategy; and enhancing Collaboration among various stakeholders.

The focus of the financial literacy initiative has been on TV advertisements and now is shifting to digital.

SKOCH Group has been conducting financial literacy and awareness programmes for several years. Our experience shows that the initiatives taken at the grassroots level are far more impactful.

One significant gap that we have noticed in the financial literacy initiative is the mobilisation of beneficiaries. Poor and marginalised people are still largely out of the digital space and need to be mobilised and trained in person.

A hybrid mode could be the best suited to implement financial literacy programmes. A part of the programme can be implemented digitally. At the same time, substantial activities are a must on the ground, from mobilisation to training and handholding in access to financial services.

Financial literacy programmes could be attractive by clubbing some banking activities like credit. For example, those who complete the financial literacy session could be given small credit in the form of an overdraft or, ₹ 5,000 each. This will help generate much attraction for the programme among ordinary people.

SHGs

Self-Help Group (SHG)-Bank Linkage Programme has played a crucial role in increasing access of the poor, especially women, to the formal banking system. The initiative was launched in 1992 by NABARD with the policy support of the RBI. NABARD initially implemented the programme in selected locations on a pilot basis, and was mainstreamed with banks in 1996.

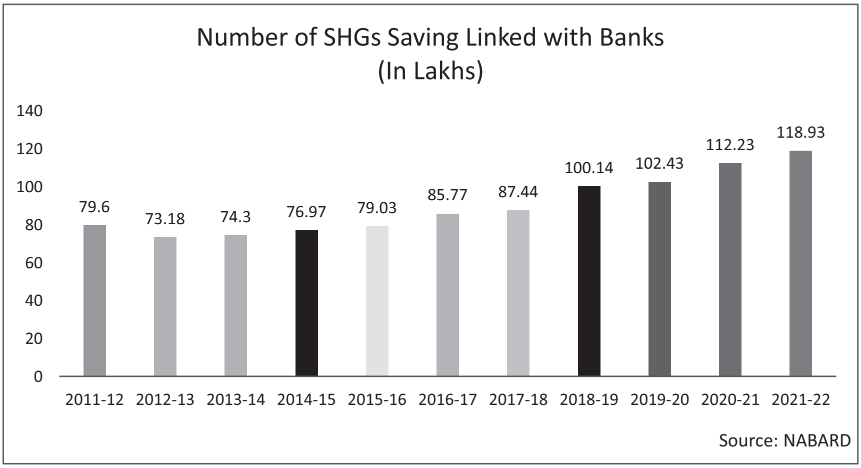
Since then, the RBI, from time to time, issued several guidelines/instructions to banks on SHG-Bank Linkage Programme. In April 2022, the RBI created a

'Master Circular on SHG-Bank Linkage Programme'.

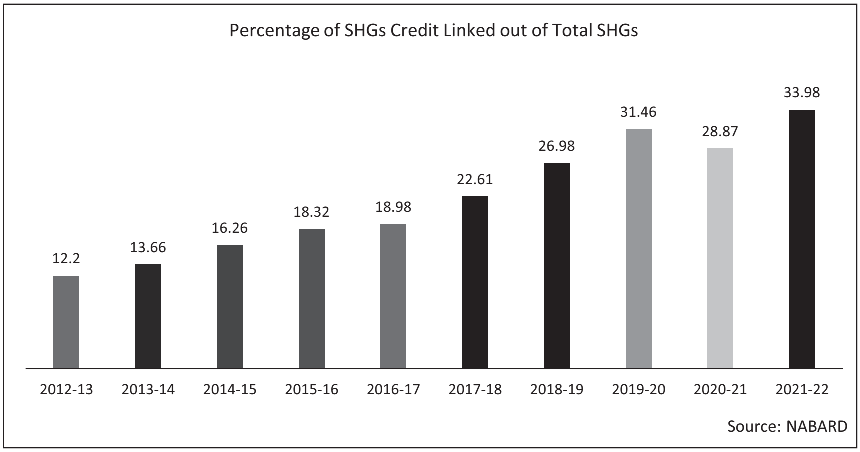
In the circular, the RBI noted: Self Help Groups have the potential to bring together the formal banking structure and the rural poor for mutual benefit. Studies conducted by NABARD in a few states to assess the impact of the linkage project have brought out encouraging and positive features like an increase in loan volume of the SHGs, a definite shift in the loaning pattern of the members from non-income generating activities to production activities, nearly 100 per cent recovery performance, a significant reduction in the transaction costs for both the banks and the borrowers, etc., besides leading to a gradual increase in the income level of the SHG members. Another significant feature observed in the linkage project is that about 85 per cent of the groups linked with banks were formed exclusively by women.

The SHGs, registered or unregistered, which are engaged in promoting savings habits among their members, are eligible to open savings bank accounts with banks. These SHGs need to have yet to avail of credit facilities from banks before opening savings bank accounts, the RBI said in a circular addressed to the head of all scheduled commercial banks.

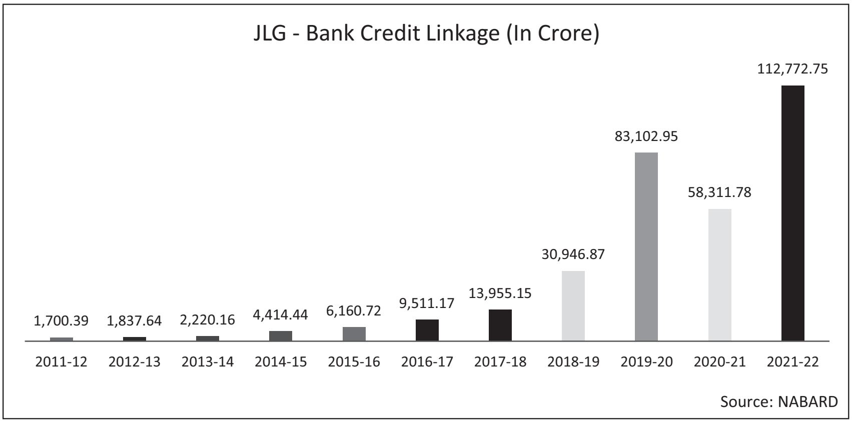
As per NABARD's recent report,[1] the SHG bank linkage programme has covered 14.2 crore households through 119 lakh SHGs with deposits of ₹ 47,240 crore. During FY21-22, credit amounting to ₹ 99,729 crore was disbursed to 34 lakh SHGs, an increase of 72 per cent and 18 per cent from the previous financial year, respectively.[2] An average of ₹ 2.93 lakh was disbursed to SHGs in FY21/22 compared to ₹ 2.01 lakh during the previous financial year, an increase of 46 per cent. As of 31 March 2022, more than 67 lakh SHGs have outstanding loans, averaging ₹ 2.24 lakh per SHG.[3]



1 Status of Microfinance in India, NABARD, 2021-22.
2 SKOCH Analysis, February 2023.
3 Ibid.



Nealy fifty-four lakh JLGs were promoted during FY21/22, bringing the total number of JLGs formed and credit linkage to 188 lakh during 2012-22. More than ₹ 1.12 lakh crore was disbursed to JLGs during FY21/22, an increase of 93 per cent from the previous year, bringing the cumulative loan amount disbursed to JLGs to ₹ 3.25 lakh crore.



In December 2021, a scheme was launched to provide overdraft (OD) of ₹ 5,000/- to verified SHG members under Deendayal Antyodaya Yojana - National Rural Livelihoods Mission (DAY-NRLM). Finance Minister Nirmala Sitharaman announced in this regard in her budget speech for 2019-20.

It is estimated that about five crore women SHG members under DAY-NRLM will be eligible for this facility. DAY-NRLM is a flagship programme of the Ministry of Rural Development. It aims to eliminate rural poverty by mobilising poor women into community institutions like Self Help Groups (SHGs) and strengthening their livelihood by accessing necessary credit from banks. The Mission was launched in June 2011. It was renamed as DAY-NRLM

(Deendayal Antyodaya Yojana - National Rural Livelihoods Mission) w.e.f. 29 March 2016.

As on 15 December 2021, 8.04 crore rural women have been mobilised into 73.5 Lakh Self Help Groups, and it is envisaged that by 2024, about ten crore women will be mobilised into Self Help Groups. As per the Ministry of Rural Development, the ultimate aim of DAY-NRLM is to cover at least one woman member from each poor rural household (about 9-10 crore) under the fold of Self Help Groups (SHGs).

SHGs are provided financial support on their borrowings through interest subvention.

Under the DAY-NRLM interest, subvention is provided on loans taken by women Self Help Groups from Banks. In 250 backward districts, called Category-I districts, all women SHGs are eligible to get bank loans up to ₹3 lakh at an interest rate of 7 per cent per annum. An additional interest subvention of 3 per cent per annum is provided to women SHGs maintaining prompt repayment, reducing the effective interest rate to 4 per cent. This part of the scheme is implemented directly by the Ministry of Rural Development and funded entirely from the central component under DAY-NRLM.

In the remaining districts of the country, referred to as Category-II districts, women SHGs under DAY-NRLM availing loans up to ₹3 lakh from banks; interest subvention is given to the extent of the difference between bank's lending rate and 7 per cent subject to the maximum ceiling of 5.50 per cent per annum. State Governments implement this part of the scheme and are funded from the allocation provided to each State under DAY-NRLM, which includes State share as per norms.

However, the Government has approved a uniform interest subvention scheme for women SHGs across all districts in the country from the financial year 2022-23. Under the uniform interest subvention scheme, women SHGs will be eligible for loans up to ₹3 lakh at an interest rate of 7 per cent per annum. Further, women SHGs can avail of loans above ₹3 lakh and up to ₹5 lakh at an interest rate equivalent to 1-year MCLR (Marginal Cost of Funds based Lending Rate) of respective lending banks. As on March 2022, the 1-year MCLR of major Public Sector Banks ranges between 7 per cent to 7.5 per cent.

DAY-NRLM has a provision for providing a Revolving Fund (RF) at the rate of ₹10,000-15,000 per SHG and a Community Investment Support Fund (CISF) to the extent of ₹2,50,000 per SHG. These funds remain with the SHGs and their federations in perpetuity. They are utilised to provide loans to their members to undertake socio-economic activities per their micro-credit/ investment plans. As of 28 February 2022, the Mission provided ₹17,342 crore of Capitalisation Support (Revolving Funds and Community Investment Support Funds) to SHGs and their federations.

Unified Payments Interface (UPI)

Unified Payments Interface (UPI) has emerged as a revolutionary product in the payment ecosystem. Launched in 2016, it has emerged as one of the most popular tools in the country for carrying out digital transactions and played a crucial role in furthering the cause of financial inclusion.

UPI is an instant payment system developed by the National Payments Corporation of India (NPCI). It powers multiple bank accounts into a single mobile application, merging several banking features, seamless fund routing and merchant payments into one hood. It also caters to the 'Peer to Peer' collection request, which can be scheduled and paid as per requirement and convenience.

UPI has become the most inclusive mode of payment in India, with over 26 crore unique users and five crore merchants on the platform. UPI currently constitutes over 40 per cent of all digital transactions in India. It has boosted small businesses and street vendors as it enables fast and secure bank-to-bank transactions, even for considerably small amounts. It also facilitates quick money transfers for migrant workers.

The technology is convenient as it requires minimum physical intervention, making it possible to transfer money simply by scanning a QR code. UPI has also been a saviour during the COVID-19 pandemic, with its adoption expanding rapidly due to its ability to allow easy, contactless transactions.

UPI has gone a long way in making digital payments a habit and firmly placing India toward a cashless economy. In August 2022 alone, 346 banks were live on the UPI interface, with 6.58 billion financial transactions being carried out for a total value of nearly ₹ 10.73 lakh crore.

Digital payments mode, including Bharat Interface for Money-Unified Payments Interface (BHIM-UPI), Immediate Payment Service (IMPS), prepaid payment instruments (PPIs) and National Electronic Toll Collection (NETC) system, have registered substantial growth and have transformed the digital payment ecosystem by increasing person-to-person (P2P) as well as person-to-merchant (P2M) payments. At the same time, pre-existing payment modes such as debit cards, credit cards, National Electronic Funds Transfer (NEFT) and Real-Time Gross Settlement (RTGS) has also proliferated. BHIM-UPI has emerged as the preferred payment mode of users.

As per data presented by the Government in the Lok Sabha in August 2022, the total number of digital transactions rose to 8,840 crore in the financial year 2021-22 from 4,572 crore in 2019-20. The total value of digital transactions increased to ₹ 3,021 lakh crore in 2021-22 from ₹ 2,953 lakh crore in 2019-20.

UPI has been a hugely successful technology. India is leading the world in this revolutionary digital payment technology, and India is way ahead of China and even the developed countries in UPI transactions. Total transactions through

UPI in India stood at around 48 billion in 2021, while in China, it stood at 18 billion.

In June 2022, the RBI announced allowing the linking of credit cards to UPI. This is a pioneering initiative by the RBI. This will position India as one of the pioneering countries in digital payments by giving the extra convenience of paying through credit. By doing so, India's economy will not only receive a boost but also extend the influence of its financial systems beyond the country.

UPI for Feature Phones

The UPI system works on smartphones. In March 2022, the RBI launched UPI 123Pay, which enables people with feature phones to make financial transactions.

UPI 123Pay is an instant payment system for feature phone users using the Unified Payments Interface (UPI) payment service safely and securely. Through UPI 123Pay, feature phone users will now be able to undertake a host of transactions based on four technology alternatives. They include calling an IVR (interactive voice response) number, app functionality in feature phones, missed call-based approach, and proximity sound-based payments.

While launching this initiative in March 2022, RBI Governor Shaktikanta Das highlighted the importance of the initiative in enhancing the diversity, utility and transformational power of digital innovations in the country.

The RBI has also launched a 24 × 7 Helpline called DigiSaathi to provide round-the-clock support for digital payments.

These initiatives will further deepen the digital ecosystem and financial inclusion.

Before the launch of UPI 123Pay, UPI was available only on smartphones. UPI can be accessed through NUUP (National Unified USSD Platform) using the short code *99#. But this option needs to be more convenient and popular. Considering that there are more than 40 crore feature phone mobile subscribers in the country, UPI 123pay will materially improve the options for such users to access UPI. UPI 123Pay includes four distinct options as below:

(a) App-based Functionality: An app would be installed on the feature phone through which several UPI functions, available on smartphones, will also be available on feature phones.

(b) Missed Call: This will allow feature phone users to access their bank account and perform routine transactions such as receiving, transferring funds, regular purchases, bill payments, etc., by giving a missed call on the number displayed at the merchant outlet. The customer will receive an incoming call to authenticate the transaction by entering UPI PIN.

(c) Interactive Voice Response (IVR): UPI payment through pre-defined IVR numbers would require users to initiate a secured call from their feature phones to a predetermined number and complete UPI onboarding formalities to be able to start making financial transactions without an internet connection.

(d) Proximity Sound-based Payments: Sound waves enable contactless, offline, and proximity data communication on any device.

Direct Benefit Transfer (DBT)

The Direct Benefit Transfer (DBT) system has emerged as a game-changer for financial inclusion in India. It has transformed the delivery system of subsidies and welfare schemes and helped make the system simpler, faster, accurate and leak-proof.

The DBT system was rolled out on 1 January 2013. The first phase brought seven schemes under the DBT in 43 districts. The system was expanded across the country in 2014, and in 2015, the total schemes under DBT were 34. The number of schemes under DBT was 140 in 2017, which increased to 312 in 2021-22. These included vital subsidies being offered by 54 central government ministries and departments.

Around ₹ 6.3 lakh crore was transferred to beneficiaries' accounts through DBT in 2021-22. The cumulative transfer through the DBT mode stands at ₹ 24.8 lakh crore. During 2021-22, an average of more than 90 lakh DBT payments were processed daily.

DBT emerged as a boon in relieving people during the COVID-19 pandemic. Even during the nationwide lockdowns, relief money was transferred to the 'beneficiaries' accounts. Under the DBT, money is transferred using the Public Financial Management System (PFMS). On 30 March 2020, during the first lockdown after the outbreak of the COVID-19 pandemic, the PFMS recorded 2.19 crore transactions, the highest number of single-day transactions. DBT payments largely drove this.

Between 24 March and 17 April, the DBT payments under all the central sector/centrally sponsored schemes through PFMS amounted to ₹ 27,442.08 crore in the accounts of 11.42 crore beneficiaries through schemes like PM-KISAN, Mahatma Gandhi National Employment Guarantee Scheme (MGNREGS), National Social Assistance Program (NSAP), Prime Minister's Matru Vandana Yojana (PMMVY), National Rural Livelihood Mission (NRLM), National Health Mission (NHM), scholarship schemes of various ministries through the National Scholarship Portal (NSP). In addition, states like UP, Bihar, Madhya Pradesh, Tripura, Maharashtra, Jammu and Kashmir, and Andhra Pradesh also leveraged the DBT platform of PFMS. Through 180 welfare schemes, the state governments using PFMS have disbursed to 4.59 crore beneficiaries, an amount of ₹ 9,217.22 crore between 24 March and 17 April.

DBT played an increasingly important role as the COVID-19 crisis deepened. The International Monetary Fund (IMF) lauded India's DBT scheme as a 'logistical marvel'. DBT ensured fast, targeted and leak-proof delivery of subsidy and relief material to the people across the country during the unprecedented crisis of COVID-19. Through DBT, money goes to the beneficiary's bank account, which gives people the flexibility to use the funds per their needs.

DBT has led to significant savings for the exchequer and enabled efficient utilisation of government resources. Fake or ghost beneficiaries have been weeded out, and now the funds have reached genuine beneficiaries. The Public Distribution Scheme (PDS) has seen the maximum gains with the deletion of 3.99 crore duplicate and fake/non-existent ration cards (between 2013 and 2020), which resulted in an estimated saving of over ₹ 1 lakh crore. MGNREGS saw 10 per cent savings on wages because of the deletion of duplicate, fake/non-existent, ineligible beneficiaries. That apart, 4.11 crore duplicate, bogus/non-existent, inactive LPG connections have been eliminated.

e-RUPI

The National Payments Corporation of India (NPCI), which oversees the digital payments ecosystem in India, has launched e-RUPI, a voucher-based payments system to promote cashless transactions. Prime Minister Narendra Modi launched this cashless and contactless instrument for digital payment on 2 August 2021. e-RUPI is expected to play a massive role in making Direct Benefit Transfer (DBT) more effective in digital transactions in the country.

e-RUPI is a digital voucher a beneficiary gets on his phone as an SMS or QR code. It is a prepaid voucher, which they can redeem at any centre that accepts it. For example, suppose the Government wants to cover a particular treatment of an employee in a specified hospital. In that case, it can issue an e-RUPI voucher for the determined amount through a partner bank. The employee will receive an SMS or a QR Code on his feature phone/smartphone. They can go to the specified hospital, avail of the services and pay through the e-RUPI voucher received on their phone.

Thus e-RUPI is a one-time contactless, cashless voucher-based mode of payment that helps users redeem the voucher without a card, digital payments app, or internet banking access. e-RUPI should be distinct from Digital Currency which the Reserve Bank of India is contemplating. Instead, e-RUPI is a person-specific, even purpose-specific digital voucher. e-RUPI being a prepaid voucher, would assure real-time payments to the service provider.

Financing to MSMEs

India's MSMEs face humungous challenges in access to credit on two fronts. Firstly, there is a massive scarcity of credit availability. And second, whatever credit is available must address small businesses felt needs. Only 16 per cent of the MSMEs have access to formal channels of financing. The IFC-Intellecap report states that there is a credit outreach gap of ₹16.67 lack crores in the MSME sector.

I have made several recommendations to the Government and the RBI to address the issue of the credit needs of the MSMEs. My submissions sent to the RBI in March 2019 noted the following:

Even after providing collateral, be it property or fixed deposits, etc, only a small percentage of the collateral value is provided to MSMEs as a cash-credit limit. A concept of margin collateral should be introduced. For example, the cash-credit limit could be 2x or higher than the collateral value. SKOCH can help with providing inputs for carefully calibrated criteria for eligibility. For example, eligibility should be based on a minimum of seven-years of average turnover, average profit, banking history of good standing, etc.

Most MSMEs in a particular sector tend to do similar things but do them reasonably well. The opportunities for a windfall, etc., due to innovations, efficiencies, etc. are somewhat limited. What is possible, however, is that these organisations can scale and create more jobs. This sector then becomes the lowest priority for investors. Here, the banking system can play a significant catalytic priority sector development role by directing the treasuries to make 5 per cent of their investments in SME stocks. This will impact the sector positively over a period, making SME investments desirable and impactful.

SIDBI, perhaps is the single most significant point of failure for SMEs. Over the years, a lazy habit of parking all the funds with SIDBI has developed. Most of these funds are not performing or even disbursed. The policy on this needs to be reviewed and ground created for a more professional intervention from the private sector.

The growth of the MSME sector in India is severely stressed due to the lack of formal credit and other supports. True, credit to small enterprises is a high risk. But the return is also higher. The Government should ensure credit to MSMEs on a risk and reward-sharing basis with financial institutions. Another prudent move could be to ensure that bank treasuries invest at least 5 per cent of their money in SME stocks. The presence of SMEs in the equity markets is negligible. Investment by treasuries would encourage SMEs to go to equity markets for fund generation.

It is heartening to note that the policymakers have acted upon the issue. In the Union Budget 2020–21, Finance Minister Nirmala Sitharaman has proposed to make necessary amendments to the Factor Regulation Act, 2011 to enable NBFCs to extend invoice financing to MSMEs through Trade Receivable Discounting Systems, or TReDS.

SKOCH report card on Pradhan Mantri MUDRA (Micro Units Development and Refinance Agency) Yojana first published in 2016 and again in 2017 pitched for addressing the felt need for cash flow credit. We advocated in the report that instead of extending collateral-based credit for setting up businesses, the focus should be on providing credit to meet the working capital requirements of small businesses. Lack of access to working capital credit stifles the growth of small businesses. However, this was not the first time we started advocating the need to address the felt needs of MSMEs credit requirements. *Speeding Financial Inclusion* book published by SKOCH in 2010 advocated for the creation of alternate mechanisms to promote credit to MSMEs.

An expert committee on MSME chaired by U K Sinha, former chairman of the Securities and Exchange Board of India (SEBI), has noted: 'With a limited number of entrepreneurial development and incubation centres, the entrepreneurial ethos of the MSME ecosystem is not evolving. Utilisation and reach of various schemes and credit support are constrained due to lack of formalisation and low registration of MSMEs in Udyog Aadhaar Memorandum (UAM)'. Promoting formalisation and digitisation amongst MSMEs and encouraging them to register in UAM has remained challenging. In India's severely challenged background, SME Forum deliberates on ways and means to make small businesses vibrant, which is critical to bring India back on a high growth trajectory and create jobs.

In its report submitted to the RBI Governor in June 2019, the Committee made recommendations about amendments to the MSME Development Act, strengthening of financial delivery mechanism, improving marketing support, encouraging technology adoption and strengthening of cluster development support for MSMEs, etc. The progress on recommendations needs to be more satisfactory.

Open Network for Digital Commerce (ONDC)

Open Network for Digital Commerce (ONDC) is a UPI-type protocol. It is aimed at promoting open networks for all aspects of exchanging goods and services over digital or electronic networks. ONDC is based on open-sourced methodology, using open specifications and open network protocols independent of any specific platform.

Incorporated on 31 December 2021, Open Network for Digital Commerce (ONDC), a Section 8 company, is an initiative of the Department of Promotion of Industry and Internal Trade (DPIIT), Ministry of Commerce, Government of India, envisioned to create a facilitative model to revolutionise digital commerce, giving greater thrust to penetration of retail e-commerce in India. ONDC is not an application, platform, intermediary, or software but a set of specifications designed to foster open, unbundled, and interoperable open networks, thereby eliminating the dependency on a single platform.

The initiative is being touted as a rival to e-commerce biggies such as Flipkart and Amazon. The Government is testing the network in select cities. In September 2022, ONDC opened its network to consumers in 16 locations across Bengaluru. To begin with, consumers can place their orders in two domains – groceries and restaurants through buyer apps participating in the ONDC network.

ONDC goes beyond the current platform-centric digital commerce model where the buyer and seller have to use the same platform or application to be digitally visible and do a business transaction. ONDC protocols would standardise operations like cataloguing, inventory management, order management and order fulfilment. Thus, small businesses could use any ONDC-compatible applications instead of being governed by specific platform-centric policies. This will provide multiple options for small businesses to be discoverable over the network and conduct business. It would also encourage easy adoption of digital means by those not on digital commerce networks.

ONDC is expected to make e-Commerce more inclusive and accessible for consumers. Consumers can discover any seller, product or service by using any compatible application or platform, thus increasing freedom of choice for consumers.

It will enable the consumers to match demand with the nearest available supply, giving consumers the liberty to choose their preferred local businesses. Thus, ONDC would standardise operations, promote the inclusion of local suppliers, drive logistics efficiencies and enhance value for consumers.

Impact of Credit on GDP growth

There is a strong correlation between credit and economic growth. These two are interdependent. While some economists argue that credit is a byproduct of economic growth, others see it as a critical element of economic expansion. Different metrics are being used to buttress the arguments on both sides. However, being a development thinker, I have witnessed that credit's role is critically important for economic growth, and it becomes all the more important for inclusive growth.

A working paper on 'Economic Growth and Banking Credit in India' co-authored by Charan Singh, RBI Chair Professor at IIM Bangalore, argues that there has been a strong correlation between credit and GDP growth across sectors. In the working paper, published in December 2016, the authors analysed the relationship between bank credit growth and GDP growth rate from 1974 to 2014. 'Credit Growth and GDP Growth exhibit a strong correlation across sectors. Both series move together with a good alignment of turning points between Credit growth and GDP growth. The direction of causality, however, is not apparent the first glance. Econometric data analysis using the Granger Causality test provides further insight into the relationship. It can also be observed from the figure that the growth of total credit experienced a slowdown and contraction in the early 1990s and began to take off in the mid to late 1990s. The economic boom following the liberalisation, privatisation and globalisation policies of the late 1980s to early 1990s may have primarily been responsible for this surge in credit.'

According to a report published in the *Hindu Business Line*, credit growth has been 2.5-3 times the real GDP growth in the past. However, this shrank to 1.2-1.4 times post-demonetisation in the next three years. Bank credit grew 25-30 per cent yearly between 2004-05 and 2007-08, when GDP growth was robust, around 8-9 per cent. When GDP growth slowed, bank credit growth also dipped. When GDP growth fell in 2011-12 and 2012-13, credit growth slipped to 14-16 per cent. Post-2013, credit growth declined, further putting pressure on economic growth.

According to an RBI working paper titled 'Asset Quality and Credit Channel of Monetary Policy Transmission in India: Some Evidence from Bank-level Data' published in December 2020, the decline in credit growth post-2013 was mainly due to a surge in bad loans, accentuated by a slowdown in GDP. The downturn in deposits and the rise in investment growth also added to the slowdown in credit growth. Accommodative monetary policy, however, helped cushion the slowdown in credit growth.

The disaggregated analysis at the bank group level – public sector, private and foreign banks – suggests that results are broadly in line with those at the aggregate level except the following. First, in the short-run, the credit channel of monetary transmission was found to be stronger concerning public sector banks than private sector banks. Second, the coefficient of nominal GDP growth of private sector banks was higher than that of public sector banks, suggesting that the behaviour of private sector banks is more pro-cyclical than that of public sector banks. Third, in the case of foreign banks, only economic activity and deposit growth were found to be the drivers of credit growth; the credit channel coefficient was statistically insignificant, the RBI working paper noted.

The paper presented a statistical analysis of credit and GDP growth. The results show that nominal GDP growth had a statistically significant positive impact on credit growth with a maximum of one-quarter lag, indicating that an increase in economic activity leads to an expansion in credit within one quarter. Deposit growth also had a statistically significant positive effect on credit growth with a lag of zero to two quarters. This suggests that credit growth could suffer up to two quarters when banks cannot mop up deposits. Investment growth, as expected, was related negatively to credit growth, and the investment growth coefficient is statistically significant. The negative sign indicates that banks that allocate more funds for financing SLR and non-SLR investments reduce credit with a lag of up to two quarters, the paper noted in its analysis.

Bridging the Credit Gap

Significant progress has been registered in financial inclusion. Prime Minister Narendra Modi's Government has laid the necessary infrastructure. Considerable progress has been achieved in ensuring access to financial services for the marginalised. Pradhan Mantri Jan Dhan Yojana has played a significant role in providing access to banking services to the poor. The access is now almost universal. Those who want can open a bank account. The bank account opening has mainly become hassle-free.

However, financial inclusion still has a long way to go. As several gaps remain, financial inclusion's actual social and economic benefits still need to be realised. Credit and financial literacy are among the significant gaps. Most critical sectors of the economy, including the MSMEs, agriculture and small businesses, face challenges in access to credit.

A Financial Inclusion Task Force (FITF) has been formed under the aegis of the SKOCH Development Foundation and the CEO's Association for Inclusive Growth (CAII) to give recommendations on digital lending and markets - bridging credit and literacy gaps. Following are the Terms of Reference of the Financial Inclusion Task Force:

- Articulate credit gaps in both consumption, as well as livelihood, linked credit.
- Articulate financial literacy gaps.
- Leveraging the digital infrastructure established since 2014 to fulfil these gaps.
- Identify innovative solutions for making available credit from within and outside the banking system.
- Suggest how digital lending and technology can create universal access to credit.
- Creating newer models of underwriting risk, collateral, credit rating and raising capital.
- Accelerating participation in Markets.
- Introduction of bonds, market instruments and ESG financing for the excluded.
- Other relevant recommendations.

So far, the Financial Inclusion Task Force has accomplished in articulating and analysing the credit outreach gaps in the country.

Articulating Credit Outreach Gaps

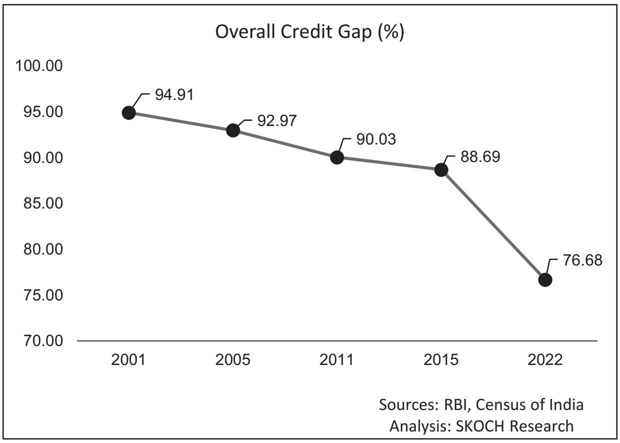
Access to credit plays crucial role in driving economic growth and development. In India, the credit to GDP ratio has been among the lowest in the world. Moreover, the vast majority of the people don't have access to credit. However, a number of initiatives taken by Prime Minister Narendra Modi government has helped narrow the credit outreach gaps in the country.

A research study conducted by the Financial Inclusion Task Force shows that credit outreach gaps in India declined by 12.01 percentage points in seven years between 2015 and 2022 as against a mere 6.22 percentage points drop in the previous 14 years between 2001 and 2015.

In 2001, credit outreach gaps in India stood at 94.91 per cent. This declined marginally to 92.97 per cent in 2005 and further to 90.03 per cent in 2011 and 88.69 per cent in 2015. Though there was a consistent decline in credit outreach gap between 2001 and 2015, the progress was marginal.

Time Period	Average Rate of Decline in Credit Gap (%)	Total Decline (% Points)
2001 – 2005	.51	2.24
2005 – 2011	.41	2.24
2011 – 2015	.37	1.34
2015 – 2022	2.06	12.01

Considerable progress was witnessed between 2015 and 2022. During this 7-year period, the credit outreach gap fell from 88.69 per cent in 2015 to 76.68 per cent in 2022, registering a decline of 12.01 percentage points.



Methodology for Credit Gap Study

Credit outreach gap refers to the proportion of people having no access to formal credit. The Financial Inclusion Task Force research report on credit outreach gaps uses the same methodology of calculation as used by Rangarajan Committee in its report released in 2008.

A Committee on Financial Inclusion headed by former RBI Governor C Rangarajan analysed credit outreach gaps for the year 2005. The Rangarajan Committee for Financial Inclusion charted out the credit outreach gaps in the country by using the population, bank offices, and credit accounts.

The Financial Inclusion Task Force has used the same methodology for calculating credit outreach gaps in the country for 2001, 2005, 2011, 2015, and 2022.

All credit account and bank office figures have been taken from RBI – Basic Statistical Returns for the respective years. The Population Statistics have taken from the 2001 and 2011 censuses. For calculation of credit outreach gaps for the years 2015 and 2022, projected population figures given by the Office of Registrar General & Census Commissioner of India, have been used.

The Financial Inclusion Task Force research report includes credit outreach gaps to district level. For the district-wise analysis of credit outreach gaps, the 2011 Census and the Projected Population Figures given by the Office of Registrar General & Census Commissioner of India have been used.

Nation-wide analysis

There has been significant progress in bridging the credit outreach gaps since 2015. Between 2015 and 2022, the credit outreach gaps declined by 12.01 percentage points. The average annual rate of decline in the credit outreach gaps during 2015-2022 period stood at 2.06 per cent. This is the best performance since the analysis has been done.

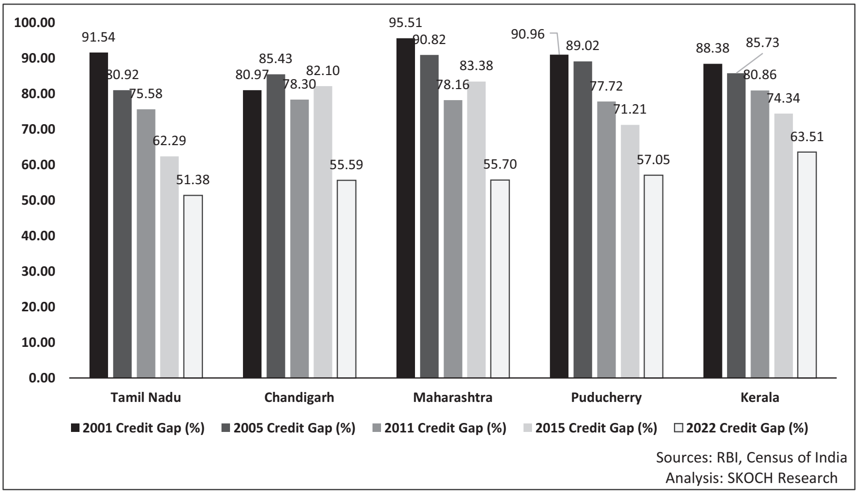
We have analysed the data since 2001. In 2001, the overall credit outreach gaps in the country stood at 94.9 per cent. It was a level of acute credit outreach gap in the country.

Although the gaps have narrowed consistently since 2001, the progress till 2015 was far from satisfactory. Between 2001 and 2005, the credit outreach gap narrowed by 2.24 percentage points. The average yearly decline during this period stood at 0.51 per cent. During the subsequent 10 years the decline was even slower. The credit outreach gap declined by 2.24 percentage points between 2005 and 2011. The average annual decline in credit outreach gaps during 2005 to 2011 period stood at 0.41 per cent. Between 2011 and 2015, the credit outreach gap declined by 1.34 percentage points. The average decline during 2011 and 2015 stood at 0.37 per cent annual.

The overall credit outreach gap in the country reduced to 76.68 per cent in 2022 from 94.91 per cent in 2001. The sharpest decline in credit outreach gaps at the all India level was recorded during the period 2015 and 2022. During this period the credit outreach gaps declined by an annual average rate of 2.06 per cent. Remember, this includes the Covid pandemic period of 2020-21, during which huge socio-economic disruptions were caused. Despite the Covid challenges the credit outreach gaps narrowed significantly during 2015 to 2022 period. A similar annual average decline in 2005 to 2015 period would have narrowed the credit outreach gaps to below 50 per cent by 2022.

Star States

The Financial Inclusion Task Force research report reveals wide geographical variation in credit outreach gaps. States/UTs that have witnessed sharp drop in credit outreach gaps include Tamil Nadu, Chandigarh, Maharashtra, Puducherry and Kerala. For the purpose of analysis, these states have been categorised as 'Stars'.



In Tamil Nadu, the credit outreach gaps fell to 51.38 per cent in 2022 from 91.54 per cent in 2001. Tamil Nadu's performance has been consistently impressive since 2001. Credit outreach gap in Tamil Nadu fell from 91.54 per cent in 2001 to 75.58 per cent in 2011 and further to 62.29 per cent in 2015.

On the other hand, the major gains in Maharashtra and Chandigarh were recorded post 2015.

In Maharashtra, the credit outreach gaps declined from 95.51 per cent in 2001 to 83.38 per cent in 2015, a decline of 12.13 percentage points in 15 years. However, the state registered impressive performance post 2015. Credit outreach gaps in Maharashtra fell to 55.70 per cent in 2022 from 83.38 per cent in 2015, registering a decline of 27.68 percentage points in seven years. In fact, the credit outreach gaps in Maharashtra widened during the period 2011 to 2015. In 2011, credit outreach gaps in Maharashtra stood at 78.16 per cent. It rose to 83.38 per cent in 2015.

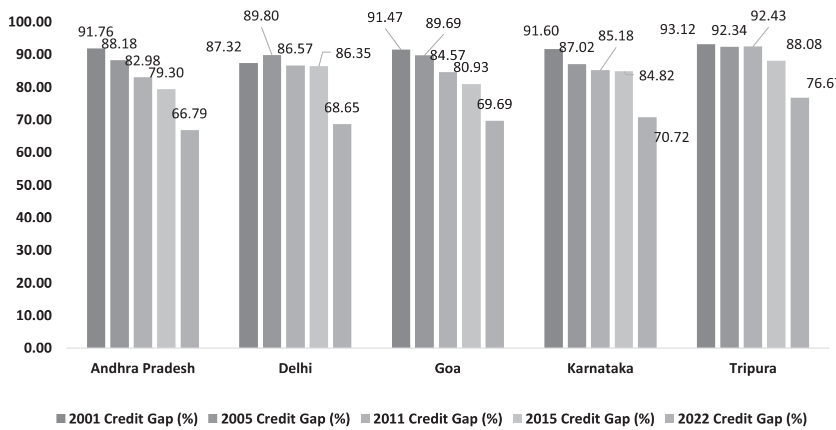
The Union Territory Chandigarh also witnessed volatile performance. In fact, during 2001 and 2015, the credit outreach gap in Chandigarh widened. The credit outreach gaps in Chandigarh stood at 80.97 per cent in 2001. This rose sharply to 85.43 per cent in 2005. It narrowed to 78.30 per cent in 2011 but again widened to 82.10 per cent in 2015. So, between 2001 and 2015, the credit outreach gaps in Chandigarh rose by 1.13 percentage points. However, the UT Chandigarh posted an impressive 26.51 percentage points decline in the credit outreach gaps in the seven years period from 2015 to 2022. Credit outreach gaps in Chandigarh declined to 55.59 per cent in 2022 from 82.10 per cent in 2015.

Puducherry and Kerala witnessed consistent decline in the credit outreach gaps. In Puducherry, the credit outreach gaps declined from 90.96 per cent in 2001 to 89.02 per cent in 2005. It narrowed to 77.72 per cent in 2011 and to 71.21 per cent in 2015. Credit outreach gaps in Puducherry declined further to 57.05 per cent in 2022.

In Kerala, credit outreach gaps declined to 63.51 per cent in 2022 from 88.38 per cent recorded in 2001. The state has witnessed consistent improvement in enhancing credit outreach. Credit outreach gaps in Kerala narrowed to 85.73 per cent in 2005. It declined to 80.86 per cent in 2011 and narrowed further to 74.34 per cent in 2015. Between 2015 and 2022, the credit outreach gaps in Kerala declined by 10.83 percentage points, registering an annual average decline of 1.54 percentage points.

Performer States

Five states/UTs that have occupied a place in the performer category are – Andhra Pradesh, Delhi, Goa, Karnataka and Tripura.



Sources: RBI, Census of India
Analysis: SKOCH Research

In Andhra Pradesh, the credit outreach gap declined from 91.76 per cent in 2001 to 66.79 per cent in 2022. The state has witnessed consistent improvement in bridging the credit outreach gaps. Credit outreach gaps in undivided Andhra Pradesh declined to 88.18 per cent in 2005 as compared to 91.76 per cent in 2001. It declined further to 82.98 per cent in 2011 and to 79.30 per cent in 2015. Between 2015 and 2022, credit outreach gaps in Andhra Pradesh declined by 12.51 percentage points. Telangana was carved out of Andhra Pradesh in 2014. 2015 and 2022 data is for divided Andhra Pradesh.

Delhi witnessed an impressive progress in narrowing the credit outreach gaps between 2015 and 2022 after sluggish performance in the previous 15 years. Credit outreach gaps in Delhi rose from 87.32 per cent in 2001 to 89.80 per cent in 2005. It declined to 86.57 per cent in 2011 and narrowed marginally to 86.35 per cent in 2015. So, the credit outreach gap declined by only 0.97 percentage point in 15 years period from 2001 to 2015. In the next seven year period from 2015 to 2022 the credit outreach gap declined by 17.7 percentage points. The credit outreach gap in Delhi declined to 68.65 per cent in 2022 from 86.35 per cent recorded in 2015.

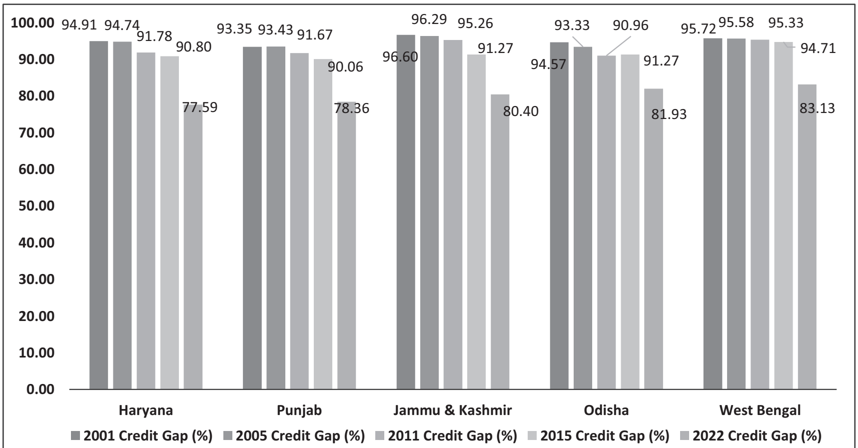
Goa has witnessed consistent improvement in narrowing the credit outreach gaps. The credit outreach gaps in Goa declined to 69.69 per cent in 2022 from 91.47 per cent recorded in 2001. There has been a gradual decline in the credit outreach gaps in Goa. However, the seven year period from 2015 to 2022 witnessed a sharper decline. The credit outreach gaps in Goa declined 89.69 per cent in 2005 from 91.47 per cent in 2001. It narrowed to 84.57 per cent in 2011 and further to 80.93 per cent in 2015. In 2022 the credit outreach gaps in Goa declined to 69.69 per cent, registering a fall of 11.24 percentage points from the level of 2015.

The credit outreach gaps in Karnataka declined by 14.1 percentage points between 2015 and 2022. It fell to 70.72 per cent in 2022 from 84.82 per cent recorded in 2015. Between 2005 and 2015 the credit outreach gaps in Karnataka declined by only 2.2 percentage points. In 2001 the credit outreach gaps in Karnataka stood at 91.60 per cent. It declined to 87.02 per cent in 2005 and further to 85.18 per cent in 2011. Between 2011 and 2015, the credit outreach gap in Karnataka declined marginally only by 0.36 percentage point.

Tripura is the only state from the Eastern part of the country to find a place in top 10 in terms of bridging the credit outreach gaps. The credit outreach gaps in Tripura stood at 93.12 per cent in 2001. It declined to 92.34 per cent in 2005. However, between 2005 and 2011, the credit outreach gaps in Tripura widened marginally. It rose to 92.43 per cent in 2011 from 92.34 per cent recorded in 2005. By 2015 the credit outreach gaps in Tripura declined to 88.08 per cent and it narrowed further to 76.67 per cent in 2022. In the seven years period from 2015 to 2022, the credit outreach gaps in Tripura declined by 11.41 percentage points.

Catching-up States

The states/UTs that have found place in the catching-up category include Haryana, Punjab, Jammu & Kashmir, Odisha and West Bengal. All these states have registered significant performance in narrowing the credit outreach gaps during 2015 and 2022.



Sources: RBI, Census of India
Analysis: SKOCH Research

In Haryana, the credit outreach gaps declined to 77.59 per cent in 2022 from 94.91 per cent in 2001. Most gains made between 2015 and 2022. The credit outreach gaps in Haryana declined only marginally to 94.74 per cent in 2005 from 94.91 per cent recorded in 2001. It declined to 91.78 per cent in 2011 and further to 90.80 per cent in 2015. Between 2001 and 2015, the credit outreach gaps in Haryana declined by only 4.11 percentage points. In the seven year period between 2015 and 2022, the credit outreach gaps declined by 13.21 percentage points.

Punjab witnessed significant improvement in bridging credit outreach gaps during 2015-2022 period after sluggish progress in the preceding 15 years. Credit outreach gaps in Punjab stood at 93.35 per cent in 2001. It rose to 93.43 per cent in 2005. Between 2005 and 2015 it declined by 3.37 percentage points. However, the state witnessed a significant improvement of 11.7 percentage points between 2015 and 2022.

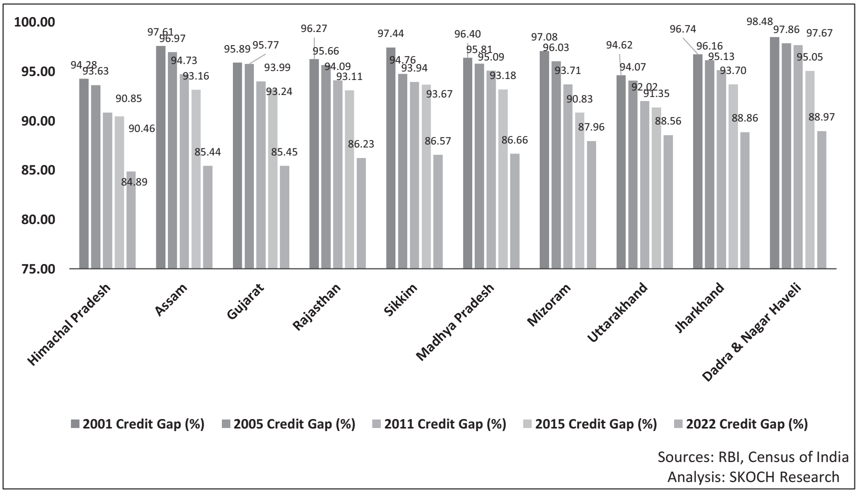
The credit outreach gaps in Jammu & Kashmir was among the highest till 2011. It stood at 96.60 per cent in 2001 and declined only by marginally to 96.29 per cent in 2005. Credit outreach gaps in Jammu & Kashmir eased to 95.26 per cent in 2011 and further to 91.27 per cent in 2015. The credit outreach gaps in Jammu & Kashmir narrowed to 80.40 per cent in 2022, registering a decline of 10.87 percentage points in 7 years.

The credit outreach gaps in Odisha declined to 81.93 per cent in 2022 from 94.57 per cent in 2001. The state witnessed good improvement in narrowing the credit outreach gaps between 2015 and 2022 after sluggish progress in the previous decade. The credit outreach gaps in Odisha declined to 93.33 per cent in 2005 from 94.57 per cent recorded in 2001. It fell to 90.96 per cent in 2011. However, the credit outreach gaps widened in Odisha between 2011 and 2015. The credit outreach gaps in the state rose to 91.27 per cent in 2015 from 90.96 per cent recorded in 2011. The significant gains made during 2015 to 2022 helped Odisha gain a place in the catching-up category.

In the first decade of this century 2001 to 2011, the credit outreach gaps in West Bengal remained almost unchanged. This means there was hardly any progress. In 2001, the credit outreach gaps in West Bengal stood at 95.72 per cent. It declined only marginally to 95.58 per cent in 2005 and 95.33 per cent in 2011. The credit outreach gaps in West Bengal eased to 94.71 per cent in 2015 and made a significant improvement of 11.58 percentage points to reach a level of 83.13 per cent in 2022.

Other States

Credit outreach gaps in more than half of the states/UTs remain pretty high despite some good performance recorded in the period between 2015 and 2022.



The credit outreach gaps in Himachal Pradesh declined from 94.28 per cent in 2001 to 84.89 per cent in 2022. The state recorded gradual decline in credit outreach gaps between 2001 and 2015. The credit outreach gap in Himachal Pradesh declined from 94.28 per cent in 2001 to 93.63 per cent in 2005 and to 90.85 per cent in 2011. It fell further to 90.46 per cent in 2015. The credit outreach gaps in Himachal Pradesh declined by 5.57 percentage points in the seven year period from 2015 to 2022.

At the beginning of this century, the credit outreach gaps in Assam was among the highest. It stood at 97.61 per cent in 2001 and declined to 85.44 per cent in 2022. The credit outreach gaps in Assam declined gradually between 2001 and 2015 and posted good improvement post 2015. The credit outreach gaps in Assam declined to 96.97 per cent in 2005 and to 94.73 per cent in 2011. It fell to 93.16 per cent in 2015. Between 2015 and 2022 the credit outreach gap in Assam declined by 7.72 percentage points.

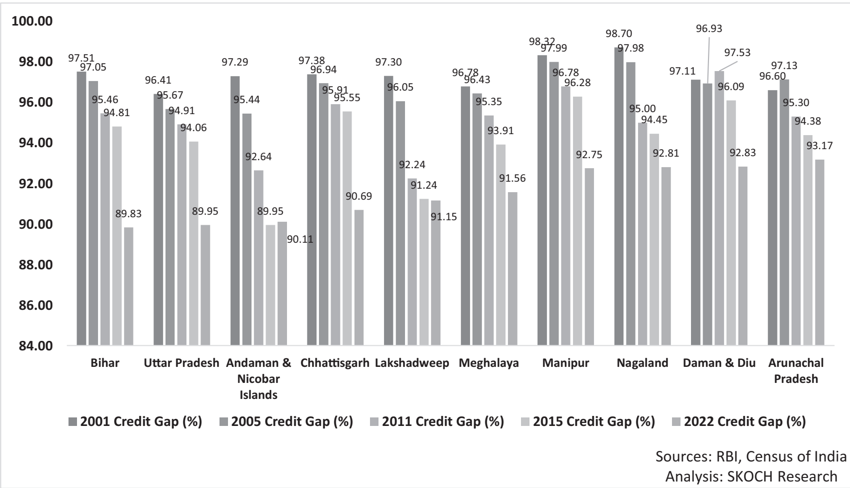
The credit outreach gap in Gujarat declined from 95.89 per cent in 2001 to 85.45 per cent in 2022. It declined by 7.79 percentage points between 2015 and 2022 after posting a sluggish performance in the preceding 15 years.

In Rajasthan, the credit outreach gaps declined from 96.27 per cent in 2001 to 86.23 per cent in 2022. The credit outreach gaps in Rajasthan declined from 93.11 per cent in 2015 to 86.23 per cent in 2022, registering a decline of 6.88 percentage points in seven years.

In Sikkim, the credit outreach gap declined from 97.44 per cent in 2001 to 86.57 per cent in 2022. The credit outreach gap in Sikkim declined from 93.67 per cent in 2015 to 86.57 per cent in 2022, registering a decline of 7.1 percentage points in 7 years.

North Eastern states still face acute credit outreach gaps and are struggling to make progress. In Arunachal Pradesh, credit outreach gaps stood at 93.17 per cent in 2022 as compared to 96.60 per cent in 2001. The state and union territories where credit outreach gaps are over 90 per cent include Chhattisgarh, Lakshadweep, Meghalaya, Nagaland and Daman & Diu.

Bihar and Uttar Pradesh also remain among the major drag. The credit outreach gap in Bihar dropped to 89.83 per cent in 2022 from 94.81 per cent in 2015. In Uttar Pradesh credit outreach gaps dropped from 94.06 per cent in 2015 to 89.95 per cent in 2022. In these two major states the progress between 2001 and 2015 was pretty slow.

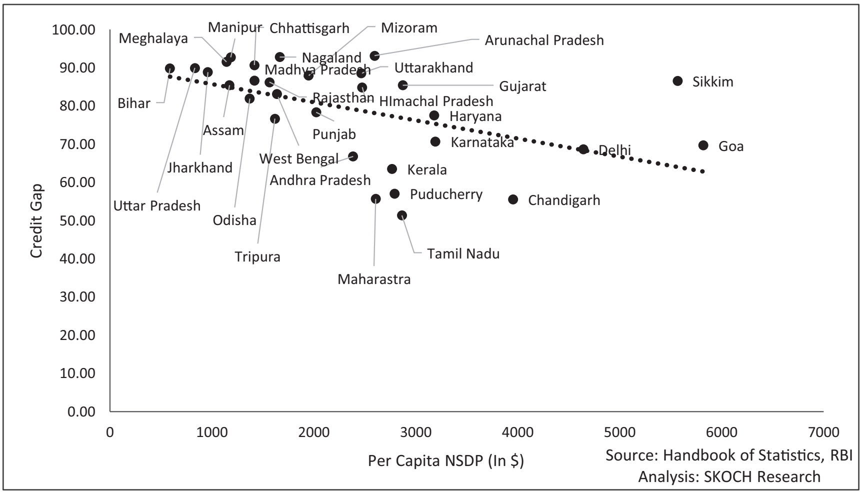


Credit Outreach Gaps and NSDP

The Financial Inclusion Task Force looked at the relation between economic growth and state-wise credit outreach gaps. To look at economic growth, each state's Net State Domestic Product (NSDP) was taken and then correlated to the state credit outreach gaps.

The findings showed a negative correlation between NSDP and credit outreach gaps; as the NSDP of a state tended to increase, the credit outreach gaps tended to decrease.

The Financial Inclusion Task Force established a relationship between a state's economic growth and credit outreach gaps.

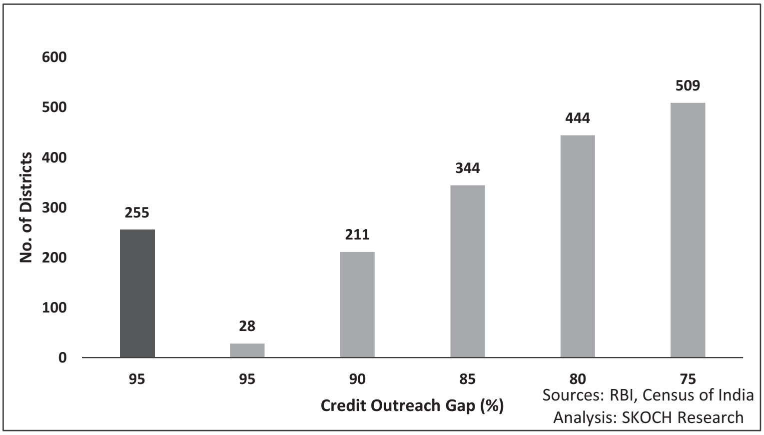


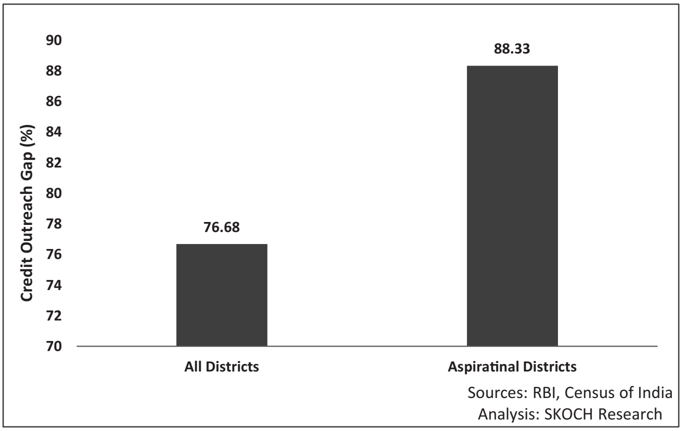
District-wise analysis

Data indicate a significant progress at the district level in narrowing the credit outreach gaps. As per the Rangarajan Committee Report, 255 districts faced a critical credit outreach gap of 95 per cent or more in 2005. The number of districts facing critical credit outreach gap of 95 per cent or more declined to 28 in 2022, The Financial Inclusion Task Force analysis showed.

However, nearly one-third of the districts in the country still face severe credit outreach gaps. As per The Financial Inclusion Task Force analysis, 211 districts face a severe credit outreach gap of 90 per cent or more in 2022.

Vast majority of the aspirational districts face severe credit outreach gap of 90 per cent or more. In 2022, the average credit outreach gap in aspiration districts stood at 88.33 per cent against the national average of 76.68 per cent.





In 444 districts the credit outreach gap was recorded at 80 per cent or more in the year 2022, while 344 districts it was 85 per cent or more.

No credit outreach gaps were reported in five districts in 2022. These are urban metro districts. In Mumbai City district the number of credit accounts were around six times more than the population. In Mumbai Suburban district it was one-and-a-half times more. Other districts where no credit outreach gap was reported are Ramanagara in Karnataka, Chennai in Tamil Nadu and Hyderabad in Telangana.

In 25 districts, the credit outreach gap was less than 50 per cent. These include Kancheepuram, Tiruchirapalli and Kanyakumari in Tamil Nadu; Gurugram in Haryana; Kolhapur and Wardha in Maharashtra; Jajpur in Odisha, Bengaluru in Karnataka; Thiruvananthapuram in Kerala and Gautam Buddha Nagar in Uttar Pradesh.

Credit Outreach Gaps and Microfinance

The Financial Inclusion Task Force also looked at credit outreach gaps and their relation with Microfinance. Microfinance is a category of financial services targeting individuals and small businesses who lack access to conventional banking and related services.

In the districts with the highest number of microfinance loans, the credit outreach gaps of those districts varied from district to district. No evidence shows that Microfinance Loans are prevalent in districts with acute credit outreach gaps. In fact, there was a negligible correlation between Microfinance loans and credit outreach gaps. While microfinance intends to target people who lack access to conventional financial services, microfinance loans are not going where they should be that is, districts with acute credit outreach gaps.

Top Ten Districts with the Highest Number of Microfinance Loans (Source: Sa-Dhan)

District	State	Credit Gap (%)	No. of Microfinance Loans
Murshidabad	West Bengal	88.92	279433
Muzaffarpur	Bihar	87.26	228808
Samastipur	Bihar	90.86	216507
Purbi Champaran	Bihar	90.94	214363
Mysore	Karnataka	61.99	187601
Madhubani	Bihar	94.26	179760
Jalpaiguri	West Bengal	71.12	176376
Darbhanga	Bihar	92.15	174797
Belgaum	Karnataka	80.84	159277
Begusarai	Bihar	87.94	156412

The Financial Inclusion Task Force found that microfinance loans were not prevalent in the ten districts with the most acute credit outreach gaps.

Microfinance loans have not been effective in reaching the most critical areas due to a ceiling on interest areas that hampered their ability to expand. However, with the removal of interest rates in March 2022, Microfinance institutions are now incentivised to expand in areas with critical credit outreach gaps.

Top Ten Districts with the Most Acute Credit Outreach Gaps (Source: Sa-Dhan)

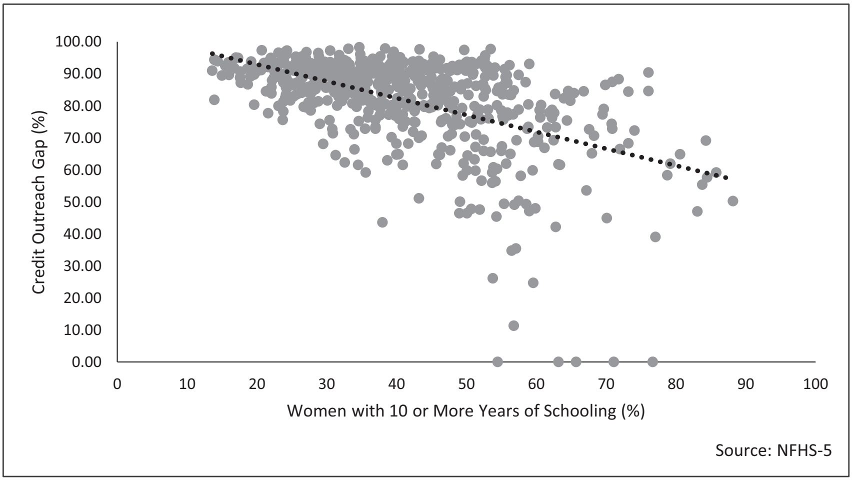
District	State	Credit Gap (%)	No. of Microfinance Loans
Kurung Kumey	Arunachal Pradesh	98.32	54
South Garo Hills	Meghalaya	97.94	1
Tamenglong	Manipur	97.81	7
Nicobar	Andaman And Nicobar Islands	97.72	4
Chandel	Manipur	97.64	35
Ukhrul	Manipur	97.46	4
Dangs	Gujarat	97.39	327
Mon	Nagaland	97.26	45
Changlang	Arunachal Pradesh	97.25	34
Bijapur	Chhattisgarh	97.09	4

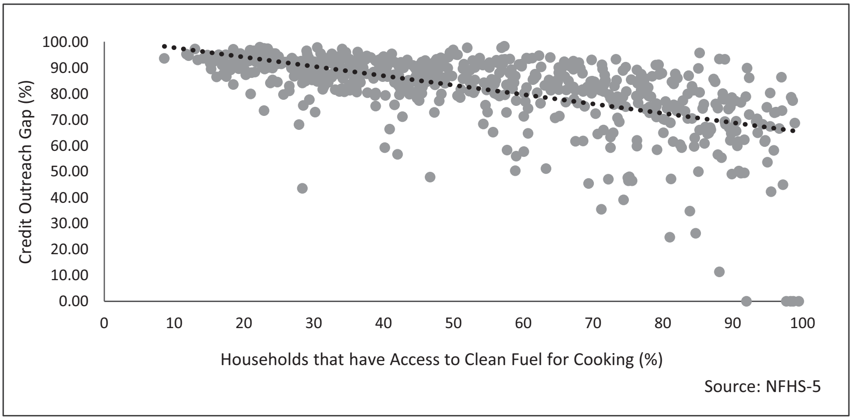
Credit Outreach Gaps and Socio-Economic Indicators

The Financial Inclusion Task Force analysed the correlation between credit outreach gaps and socio-economic indicators. The following socio-economic indicators were analysed and correlated with credit outreach gaps:

1. Percentage of Households Living with Electricity
2. Percentage of Households with Any Member Covered Under a Health Insurance Scheme
3. Fertility Rate
4. Percentage of Households with Access to Clean Fuel for Cooking
5. Maternal Mortality Rate
6. Immunisation Rates
7. Percentage of Women with ten or more years of schooling
8. Prevalence of Self-Help Groups

Out of the basket of socio-economic indicators analysed, the Financial Inclusion Task Force found that only two socio-economic indicators were correlated: The percentage of households with access to clean fuel for cooking and the percentage of women with ten or more years of schooling. Both of those socio-economic indicators were found to have a negative correlation with credit outreach gaps, and increase in access to clean fuel or women's education in a district tended to lower credit outreach gaps.





Credit Outreach Gaps and Multi-Dimensional Poverty

The Financial Inclusion Task Force looked at the relationship between Credit Outreach Gaps and the Multi-Dimensional Poverty. The Multi-Dimensional Poverty score ranges from 0 to 1, determining the severity and spread of poverty in each district in India.

The findings showed a positive correlation between credit outreach gaps and multi-dimensional poverty. As the Multi-Dimensional Poverty Score increased, the credit outreach gaps too tended to increase.

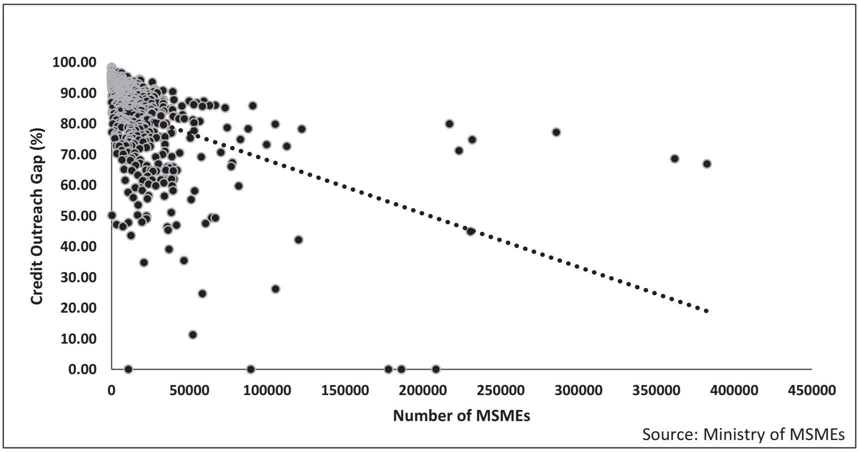
Source: National Multidimensional Poverty Index, NITI Aayog

Credit Outreach Gaps and MSMEs

The Financial Inclusion Task Force also analysed the relation between credit outreach gaps and the number of MSMEs in each district. In India, 96 per cent of the MSMEs belong in the Micro category, with 3 per cent in Small, and .3 per cent in Medium.

The analysis shows that MSMEs are negatively correlated to Credit Outreach Gaps. The degree of the correlation increases with the size of the enterprises (the more Medium and Small enterprises there are, the smaller the credit gaps tend to be). Medium enterprises had the strongest degree of correlation with the district credit gaps, followed by Small and Micro.

The difference in the degree of correlation indicates that while Medium and even Small enterprises might have access to credit, Micro enterprises do not and there is still a lot of progress to be made.



Source: Ministry of MSMEs

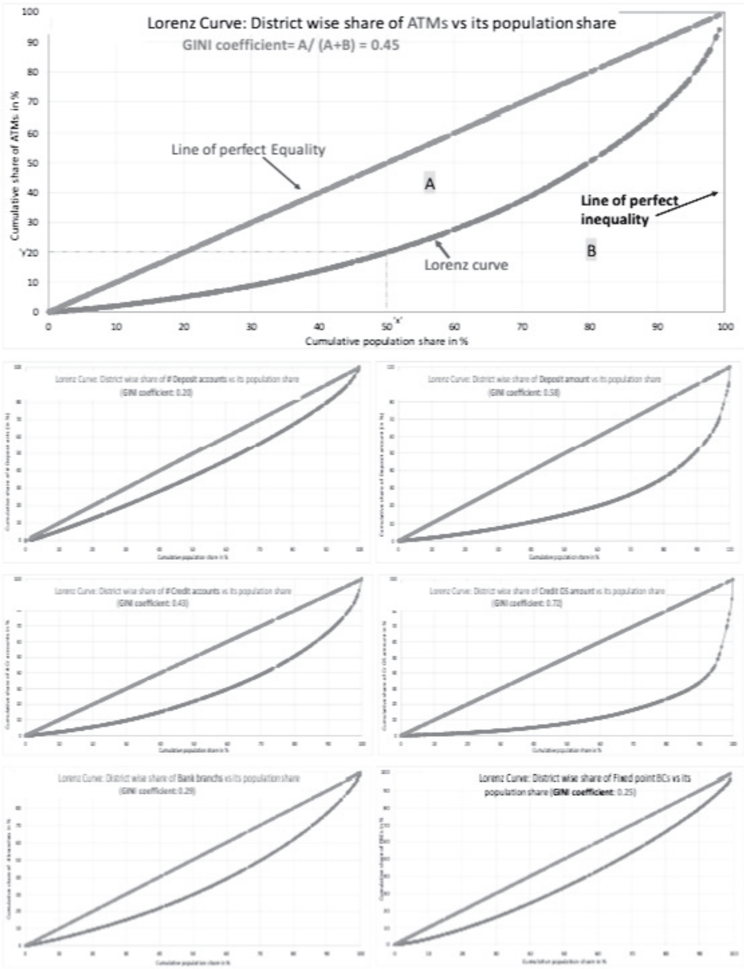
Findings Thus Far

- In 2005, the Rangarajan Committee Report had said that 255 districts faced a critical credit outreach gap of 95 per cent. In 2022, that number has gone down to 28 districts.
- After seeing marginal progress till 2015, the country has made considerable progress since, reducing the overall credit gap to 76.68 per cent.
- While a number of States and Union Territories have made commendable progress since 2004, the North Eastern states are still struggling to make progress.
- The correlation to multi-dimensional poverty outlines how increasing access to credit reduces poverty.
- The correlation to NSDP of states shows the positive impact of credit.
- Microfinance Institutions haven't been able to reach districts with acute credit outreach gaps. However, with the removal of interest rate ceilings, they are incentivised to reach hard-to-reach districts with acute credit outreach gaps.
- While the average outreach gap in 2022 is 76.68 per cent, the average of Aspirational Districts in 88.33 per cent.
- There is a negative correlation between women's education and access to clean fuel for cooking with the credit gap.
- There is still a lot of progress to be made in making credit more accessible in the country, with 211 districts still facing a credit gap of more than 90 per cent.

Annex I

Annex

Inequality measured for select indicators



Financial Inclusion and its Discontents, Unaddressed Issues and the Way Forward

Deepali Pant Joshi

'*Could Thou and I*
With fate conspire,
To change this Sorry scheme of things entire
Would we not shatter it to bits
To build it closer to the hearts desire'(Khayyam)

Why is Financial Inclusion not able to move beyond creating access? Why is access not translating to effective credit delivery and unleashing a virtuous cycle of economic growth and improved living standards? The well-being of Indian economy and polity depend on a vigorous and effective system of credit delivery. In the ultimate analysis, liquidity and flow of credit, mirrored in figures of the growth of credit is the life blood of any system, which is one of effective and real financial inclusion. Step into a bank, step out of poverty becomes a meaningless string of words till banks extend credit. Credit is the only means of effective economic empowerment which enables the poor to transcend their situation and Financial Inclusion thus becoming an anti-poverty intervention.

The present Committee has been appointed to look into and review the totality of the Financial Inclusion System and recommend strategies and approaches to take it further. Its findings and core suggestion remain the need to address impediments in effective credit delivery on the premise that credit remains the only valid means of poverty eradication and measure of the success of Financial Inclusion.

These are issues which the rural credit system has been grappling with for the last five decades or more and which led to the concept of the Priority Sector, Bank Nationalisation, the Lead Bank Scheme, the Service Area Approach, the growth of new institutions such as Non-Banking Financial Company (NBFCs), Regional Rural Banks (RRBs), Local Area Banks, Small Finance Banks and

Payment Banks and the Reserve Bank of India (RBI) mandates to banks as formal financial systems to lend to agriculture small scale industries and the weaker sections with the assignment of specific targets there against as also to a slew of sadly inefficient and largely ineffective Government sponsored schemes and anti-poverty programmes.

Directed Credit did not succeed, the formal financial system was directed to lend as per the mandate. This led to a steep and swift deterioration to targeting credit from the macro-national viewpoint. It was a costly failure.

Financial Inclusion which has successfully created access and is now at an inflection point must extend credit learning from the past, it needs to avoid the pitfalls of quantitative targeting at the same time credit with adequate post-disbursement supervision and in adequate measure, Timely and Adequate credit must flow. The RBI in several reports including the two Narasimhan Committee reports commented ruefully on the inadequacies of the extant system and its deleterious impact on credit culture due to the subvention, subsidy and write off culture it spawned. There is a salience to bringing this into sharp relief as these are pitfalls to be skirted in the system of accelerating credit which this Committee would like to recommend as integral to financial Inclusion. The impact of directed credit and the plethora of-government sponsored schemes, on the allocation of resources, remains uncertain. The evidence is startling that in several countries directed credit has been a failure. Thus, while the positive impact of such credit through government state and Centre sponsored schemes in particular, on production, or grounding small enterprises remains hypothetical. The negative impacts are more tangible.The objectives of Financial Inclusion with credit dispensation as an inalienable part of Financial Inclusion to combat Exclusion are not antithetical both objectives of financial Inclusion and B Credit flow to the excluded, are best subserved even if credit to directed segments and sectors were affected as a basis and bedrock of Financial Inclusion. 'Supervised' credit calibrated closely to the needs of the borrower that is emphasising the nexus between credit and production, and measuring outlays against tangible outcomes on the ground is real. Financial Inclusion with an emphasis on credit penetration needs to ensure that credit is made available to needy borrowers and results ideally in the creation of sustainable, scalable, income-generating projects. This process would lead to sustainable and regular credit flow, as it would generate adequate returns making possible orderly repayments which in turn would naturally, over some time, institute Credit Discipline.

I begin this article with extracts from the Annual Report of the RBI and intersperse these with brief comments and then move on to the unaddressed issues and suggestions on the way forward. I begin with the RBI report with the preparatory comment that the RBI has done commendable and extensive work in financial Inclusion over the last decade. It appears a 'Sisyphesian 'endeavour but we move always in a zig-zag manner to inevitable and incremental change, to that end the gaps that remain are highlighted, along with ways to address these. We owe this not only to ourselves but to the people we intend to serve -the need to ensure several laudable goals social justice, evidence-based policy making with transparency and above all economic growth with equity, without which economic growth has no meaning. Financial stability rests on Financial Inclusion and prosperity at the base of the pyramid linked with credit growth and consumer protection and financial literacy. There is a need to measure all outlays against actual outcomes. Extract from the RBI Annual Report.

To ensure a systematic approach towards increasing the level of financial inclusion in a sustainable manner, banks were advised to put in place Financial Inclusion Plans (FIPs). These FIPs capture banks achievements on parameters such as the number of banking outlets [branches and business correspondents (BCs)], basic savings bank deposit accounts (BSBDAs), overdraft (OD) facilities availed in these accounts, transactions in KCCs and general credit cards (GCCs) and transactions through the Business Correspondents - Information and Communication Technology (BC-ICT) channel. The progress made on these parameters as at the end of December 2021 is set out in Table IV.6.

Financial Inclusion Index (FI-Index)

To capture the extent of financial inclusion across the country, the Reserve Bank has constructed a composite FI-Index with three sub-indices, namely, FI-Access, FI-Usage and FI-Quality, incorporating details of banking, investments, insurance, postal as well as the pension sector in consultation with the government and respective sectoral regulators. The FI-Index computed for end-March 2021 stood at 53.9 as against 43.4 for end-March 2017, registering a compound annual growth rate (CAGR) of 5.5 per cent. Of the three sub-indices, the sub-index for Access has increased over the same period, from 61.7 to 73.3. Although, the sub-index for Usage and Quality have risen in value from 30.8 to 43.0 and from 48.5 to 50.7, respectively, these have remained below the overall FI-Index. The index values indicate the scope for improvement under usage and quality dimensions of financial inclusion.

Financial Literacy

Inclusion of Financial Education in the School Curriculum

Developing financial literacy content for school children is one of the strategic goals of NSFE: 2020–25. Though 19 States have adopted this others are expected to follow suit.

As at the end of December 2021, there were 1,495 financial literacy centres (FLCs)3 in the country. A total of 73,900 financial literacy activities were conducted by the FLCs during 2021-22 (up to 31 December 2021). With a view to ensuring continued dissemination of financial education across the country during the pandemic, regional offices of the Reserve Bank undertook financial education programmes through virtual mode and leveraged local cable TV and community radio to spread financial awareness messages.

End-line Survey of Pilot CFL Project

The end-line survey of the pilot CFL project across 80 blocks was conducted to assess its efficacy. The key findings were as follows:

- Households that were exposed to the programme showed a statistically significant higher score for financial literacy than those who were not exposed to the programme.
- Respondents who have had any exposure to the activities conducted under the CFL programme were more likely to use savings accounts in banks; this effect was stronger for individuals attending the CFL programme (that is having 'active' exposure).
- 'Households' need for training is primarily in aspects that can be regarded as 'first order' business – opening an account, filling forms, accessing bank services and government programmes and financial planning. By comparison, a very small number expressed a desire for training to use Automated Teller Machines (ATMs), online transactions, understanding investments, etc.

Expanding the Reach of CFL Project Across the Country

IV.27 Consequent to the implementation of the pilot CFL project in 100 blocks (including 20 CFLs in tribal blocks), steps were initiated during the year to expand the reach of CFLs to all blocks in the country in a phased manner.

Observing Financial Literacy Week 2022

The Financial Literacy Week (FLW) is an initiative of the Reserve Bank to promote awareness among the masses/various sections of the population on key topics through a focused campaign during the week every year. In 2021- 22, FLW was observed during February 14–18, 2022 on the theme of 'Go Digital, Go Secure', with focus on convenience of digital transactions, security of digital transactions and protection of customers. During this week, banks were advised to disseminate information and create awareness amongst their customers and the general public. Further, the Reserve Bank also undertook a centralised mass media campaign during February 2022 to disseminate essential financial awareness messages on the theme to the general public.

Expanding the Reach of Centre for Financial Literacy (CFL) Project Across the Country

The CFL pilot project on financial literacy was initiated by the Reserve Bank in 2017 in nine states across 80 blocks in collaboration with eight sponsor banks and six NGOs for three years, with funding support from the Financial Inclusion Fund (FIF) of National Bank for Agriculture and Rural Development (NABARD) and the respective sponsor banks. The objective was to adopt community-led innovative and participatory approaches to financial literacy. The project was subsequently extended to 20 tribal/economically backward blocks in three states in 2019 with funding from the Depositor Education and Awareness (DEA) Fund and sponsor banks.

Based on the experience gained from the pilot project, through feedback received from the stakeholders (banks and NGOs) and to promote financial literacy at the grassroot level in a sustainable and participative manner, in line with National Strategy for Financial Inclusion (NSFI 2019-24), the project is being scaled up across the country in a phased manner to cover the entire country by 2024 with each CFL covering three blocks. Under Phase-I of the scaled-up CFL project, 10 NGOs are associated with operationalisation with funding support from DEA Fund, FIF and 13 sponsor banks. As on 31 March 2022, a total of 1,107 CFLs were operationalised across the country.

Source, RBI: 'The broader questions which remain unanswered and need to be asked are, do these grandiose paper projects have any utility at all at the grassroots level? Are they auditable? Is any feedback obtained from the Panchayats from Civil Society activists working in those areas or will they continue to impart a roseate glow to the papers they are printed on and subserve little other purpose leading to the larger question which begs to be addressed do Official statistics whether emanating from RBI or Government reflect grassroots reality'.

3. Agenda for 2022-23

RBI will continue to flog the following goals it has set for itself and tom tommed in its Annual Report moving towards achieving greater financial inclusion and credit delivery:

- Implementation of milestones under NSFI: 2019-24 by leveraging on the developments in the FinTech space to encourage financial service providers to adopt innovative approaches for strengthening outreach (Utkarsh);
- Implementation of the milestones under NSFE: 2020-25 by undertaking capacity building of intermediaries involved in dissemination of financial education; and
- Scaling up of CFLs to cover the entire country (Utkarsh).

CONCLUSION

In sum, during the year, the Reserve Bank continued with its focus towards financial inclusion by scaling up the CFL project across the country and taking forward the NSFI goals by working in close coordination with the stakeholders concerned. The FI-Index was developed as a metric to measure progress on financial inclusion. Going ahead, the implementation of the various milestones under NSFI and NSFE would continue to be pursued to sustain the momentum of financial inclusion.

Table IV.6: *Financial Inclusion Plan: A Progress Report*

Particulars	Mar 2010	Dec 2020	Dec 2021$
1	2	3	4
Banking Outlets in Villages- Branches	33,378	55,073	53,249
Banking Outlets in Villages>2000*-BCs	8,390	8,49,955	15,18,496^
Banking Outlets in Villages<2000*-BCs	25,784	3,44,685	3,26,236
Total Banking Outlets in Villages – BCs	34,174	11,94,640	18,44,732^
Banking Outlets in Villages - Other Modes	142	3,464	2,542
Banking Outlets in Villages -Total	67,694	12,53,177	19,00,523
Urban Locations Covered Through BCs	447	3,24,507	14,12,529^
BSBDA - Through Branches (No. in lakh)	600	2,712	2,712
BSBDA - Through Branches (Amt. in crore)	4,400	1,21,219	1,18,625
BSBDA - Through BCs (No. in lakh)	130	3,672	3,919
BSBDA - Through BCs (Amt. in crore)	1,100	78,284	95,021
BSBDA - Total (No. in lakh)	735	6,384	6,631
BSBDA - Total (Amt. in crore)	5,500	1,99,503	2,13,646
OD Facility Availed in BSBDAs (No. in lakh)	2	59	64
OD Facility Availed in BSBDAs (Amt. in crore)	10	505	556
KCC - Total (No. in lakh)	240	490	473
KCC - Total (Amt. in crore)	1,24,000	6,79,064	6,93,596
GCC - Total (No. in lakh)	10	198	87
GCC - Total (Amt. in crore)	3,500	1,75,053	1,99,145

ICT-A/Cs-BC-Total Transactions (No. in lakh)#	270	23,289	21,095
ICT-A/Cs-BC-Total Transactions (Amt. in crore)#	700	6,14,987	6,62,211
*: Village population. #: Transactions during the year. $: Provisional data. ^: There is a significant increase in data reported by few private sector banks. Source: FIP returns submitted by public sector banks, private sector banks and regional rural banks.			

All data comes with a question mark, due to the difficulty of collection from up country and far-flung branches despite the centralised core banking solution, put in place at great expense and costs by the banks. Is the data accurate and verifiable if yes why is there a divergence in data for the same time series and period furnished by different agencies, having hazarded that remark to hedge the central argument that even based on the admissions of the RBI Annual Report while Financial Inclusion efforts have succeeded to the extent of improvement in access the lacunae in quality and usage remains glaring?

SCRIPT was a formulation of my own making the laddered graduation of the borrower through the process of Savings, Credit, Remittances, Insurance, Pensions and the penultimate test, the increase in remittances. This still needs to happen.

Why have we not moved beyond access, how can we do so what should we be focusing on:

(I) There are no Pan India solutions. In a country of subcontinental proportions India's large size, its geographic expanse and the large numbers of its people make it difficult to decide on a 'One size fits all ' solution.

(II) Poor infrastructure in many parts of the country largely inhibits the development process.

(III) The availability of financial products that cater to the needs of the poorer strata of society will help resolve the problem of under-penetration of credit, especially to the poorest segments of society and to tiny, micro-enterprises.

(IV) Credit alone is not enough and a tremendous amount of handholding support is also required especially for first time users of credit who are going beyond the pale of availing credit from their friends and relatives and community support structures availing credit from formal financial institutions they need support to build sustainable, scalable enterprises which will generate sufficient income to pay for themselves.

(V) The successfull delivery models and workable business models for Financial Inclusion need to be devised and grounded firmly in place. Inclusion metrics need to focus more on the number of transactions in the Pradhan Mantri Jan Dhan Yojana (PMJDY) accounts opened. Jan Dhan Yojana (JAM) / Direct Benefit Transfer (DBT) are natural enablers of this process. Graduated upscaling is necessary and is not happening. The FI Index needs a re-look on these simple parameters it does not need to be a jumble sale,which higgledy-piggledy includes everything from Kisan Credit Cards to General Credit Cards issued - a catch-all bag,(double counting be damned) which still manages to throw up the elephant in the room we have not moved beyond Access there is a governance deficit the need for effective governance implies that the underpinning of all processes through norms that define actions, allocate power and prescribe a matrix against which performance is calibrated. Lack of effective governance has been one of the major reasons for slow progress in implementation and upscaling on the ground at grassroots level.

Ownership and Accountability are the missing pieces of this puzzle. Why is the pace and progress of Inclusion slow as it is not happening even though the infrastructure is in place.

The formal financial system for the extension of institutional credit has still not developed an appropriate cost-effective model for Financial Inclusion, the extension of credit to the bottom of the pyramid is not perceived as a profitable business opportunity. It is a social/regulatory diktat to be obeyed. It is not perceived as a business opportunity with positive externalities. The inadequacy of the Management Information System creates further complications. The cost of setting up an intermediate brick-and-mortar structures and developing the business correspondent and Financial Literacy network has to be seen as a future investment,it cannot be revenue accretive instantly. Even so, the basic maths reflects that keeping the fixed and variable costs in view the BC model and the intermediate structures are much more cost effective and financially viable in the medium and long term. Governance ownership and accountability flowing from the top through the rank and file are the watch words for translating the dream of financial inclusion to reality at the ground level rather than the dinosaur brick and mortar models of yester year. The weakness in the earlier system of Priority Sector lending, Government Sponsored schemes, directed credit in sum arose from the breakdown in the nexus between the dispensation of credit and its application and the confusion between priority sectors and concessional write-off eventually.

What was needed then? And what is most needed now? Is the extension of credit based on an accurate assessment of the ability of the borrower to bear the amount of credit extended to be able to repay the same and to get a further loan? This is the crux of the matter which is the core of credit penetration the

'Credit Worthiness' of the borrower. The intermediation costs of administering credit will be arrested by the creation of demand for credit. The reasons for high intermediation costs in Public Sector Banks varied and diverse and widely discussed and accepted are largely a result of clumsy targeting efforts and unremunerative branches(despite the commercial transfer pricing of deposits from the concerned branches) due to high overheads, overmanning and arcane, slow, tedious and lugubrious methods of operation. These moulds have to be broken. For Financial Inclusion to be true Inclusion which goes beyond access, the existing paradigm has to be broken, quick credit extension is necessitated to be extended on an objective basis, at reasonable rates, in congruence with and sympathetic to the vagaries of nature, credit should be linked to a multiple of savings which the Financial Inclusion Index should more accurately measure. Credit growth should be linked to GDP even a 5 per cent incremental credit growth would have unimaginable positive externalities there needs to be in place as the first building block of credit-linked savings a friendly supporting system for encouraging savings and for mainstreaming the marginalised. For true Financial Inclusion the FI index should reflect the extent of a wide range of easy to access banking and payment services that are being availed at the grassroots. Exclusion from formal institutional finance translates to exclusion from the payment system and carries its own set of problems and hazards.

Financial exclusion of large sections of a wide swathe of the population particularly in rural areas and slums in urban areas is attributable to both supply and demand side factors.

From the supply-side perspective:

Large numbers of the poor who hold Jan Dhan accounts and are the recipients of DBT benefits (as the women who received Rs 500 in their accounts extended by the Government through direct benefit transfers in their accounts are still unbankable in the eyes of the formal Institutional System Managers, the bankers still have attitudinal blocks in credit extension to the bottom of the pyramid.

1. The deposits in the account are meagre few banks are extending overdrafts as the RBI FI index reveals.
2. The person may be considered bankable but the distances to be traversed are too long and support the account for loan servicing. Expanding the branch network in the interior villages is not feasible or viable.
3. The cost of administering credit through multiple small loans,is prohibitively expensive and transaction costs are very high.
4. Inability to maintain and evaluate cash flow cycles due to lack of basic data base and absence of credit history of those with uncertain incomes essentially people of small means unable to offer collateral security for small loans.

5. Lack of banking habit and culture.
6. Inadequacy of extension services, poor Infrastructures roads,communication. facilities ,adverse law and order security situation in certain parts of India

From the demand side exclusion of the rural and urban poor stems from:

1. High cost of transactions at the clients end, due to expenses as travel cost, wage loss, incidental expenses.
2. Lack of awareness and financial literacy.
3. High Volume, low value transactions not viewed with favour by the formal financial system and its Managers.
4. Difficulties and apprehensions surrounding the paperwork,documentation and procedures.
5. Gender Issues access to credit is limited for women who do not hold title to lend, have no collateral to offer they have to seek male guarantee to borrow. Bankers do not like to give even education loans to unmarried women who will marry and move away from their addresses as stated on the loan forms.
6. Age factor Financial Institutions target the middle of the economically active population, there are no products either for the old or the young customers at either end of the age spectrum they are shortchanges.
7. Legal Identity, is no longer the issue it used to be but Aadhar cards are essential and often the destitute and migrant labour do not have the necessary cards Ration Aadhar cards and are unable to access financial services.

   The Asian Development Bank and the World Bank also identify other factors.
8. Geography density of population for instance sparse population especially in the hilly area, mobility migrant population, and Banjara wandering tribes, impact financial inclusion as also low levels of financial literacy.

Eventually, these lead to self-exclusion.

Easy availability of doorstep services from money lenders, family, and informal sources of institutional finance relatives deepen the psychological and cultural barriers around entering a bank, cultural and in some Muslim communities even religious barriers lead to avoidance of banks leading to dependence on their own resources or informal finance at prohibitive costs.

All these barriers need to be addressed with immediacy. Banks must build the capability to evaluate loan proposals of small borrowers and extend credit to them. The four basic products; Overdraft in the savings accounts, credit, payment services and Insurance life, health, livestock must be designed and marketed to the last mile customer. Grievance redress must be robust to reinforce faith in the Banking System.

The Committee agrees that Credit is the missing piece and has four major recommendations.

1. Enactment of a law on credit access to extend the frontiers of formal finance and a set of regulations for the right to access to credit for low income borrowers.
2. Financial Inclusion to be measured by incremental growth in credit.
3. Incremental Growth in credit flow to the excluded to be measured as a percentage of GDP.
4. Beefing up existing Infrastructure, Innovating and customising bespoke products, reforms in the credit delivery mechanism meshing outlays with outcomes. Ultimately Financial Inclusion will increase opportunities and freedom of choice and the well-being of the entire nation securing exponential economic growth with the opportunity.

It is time to rise and thrive India and her people moment to rise and thrive is near we have to move relentlessly towards the goal. To listen to the hope of a new Dawn,

'Chaley Chalo ki voh Manzil
Abhi Nahin Aayi'.

Social Inclusion and Equitable Growth

How to Reduce Poverty and Inequality in India – Some Practical Tips

Naresh Chandra Saxena

Despite impressive economic growth in the last four decades India could not achieve many Millennium Development Goals (MDGs) set by the United Nations (UN), particularly in hunger, health, nutrition, gender, and sanitation. India's rank in the UN Human Development Report 2021–2022 fell to 132 out of 191 countries (it was 130 in 2018), much below when compared to Sri Lanka (73), China (79), Vietnam (116), and Bangladesh (129). India's Human Development Index (HDI) value for 2022 is 0.633, which puts the country 20 years behind China. Some decades back, one used to compare India with China and Sri Lanka, but these countries have left India far behind. On social indicators, India does worse than countries even poorer than India, like Bangladesh and Vietnam.

Though poverty declined in India during 1987–2012 from 47 to 21 per cent, the absolute number of poor declined only by 11 crore, from 38 to 27 crore, whereas during the same period, China reduced the number of poor by 54 crore, wiping out almost entire poverty from the country. The NITI Aayog released the Multidimensional Poverty Index (MPI) for India in November 2021, according to which 25 per cent people in India were still poor. Using the 2019–20 round of Periodic Labour Force Survey (PLFS) consumption data for India, Mehrotra and Parida (2021) found 25.9 per cent live below the poverty line.

India ranked 107 out of 121 countries in the Global Hunger Index 2022 with its child-wasting rate at 19.3 per cent, being the highest in the world, which places the country in the 'Serious' hunger category. The decline in the hunger index in the last thirty years is not as steep in India as in Bangladesh, Sri Lanka, and Nepal, as shown in Table 1.

Table 1: *Global Hunger Index*

Rank	Country	1990	2000	2022
17	China	25.1	15.9	4.9
48	Thailand	28.4	17.6	12.0
61	Vietnam	44.6	30.3	11.9
73	Nepal	44.5	36.9	19.1
64	Sri Lanka	31.3	27.0	13.6
75	Bangladesh	52.2	38.5	19.6
107	India	48.1	38.2	29.1

(IFPRI 2022)

According to the National Family Health Survey (NFHS-5), 35 per cent of children under five years are affected by stunting due to lack of nutrients, 67.1 per cent of children aged between 6–59 months are anaemic, 32.1 per cent of children are underweight, 35.5 per cent children are stunted, and 51 per cent of women of reproductive age suffer from anaemia.

Cereal intake of the bottom 20 per cent in rural India in 2011–12 was only 10 kg per month as against 12 kg for the top decile of the rural population, though the poor need more cereals as they do harder manual work and their access to more expensive fruits, vegetables, poultry, and milk is limited (Gupta 2012). From their meagre resources, the poor are forced to spend more on health, children's education, transport and fuel than before. Food is still needed but is not demanded by the market for lack of resources. In the process they get undernourished. Endemic hunger continues to afflict a large proportion of the Indian population. Extreme distress and rising capital intensity in agriculture are leading hundreds of farmers to commit suicide, a phenomenon that was unheard of even in periods of serious drought in the early 1970s.

The divergence between growth and development witnessed in India explodes the trickle-down theory that rapid growth by itself would take care of the underprivileged. Though India has done well where contractors are involved, such as in road transport and power supply, India does poorly in all programmes that require the active involvement of grassroots bureaucracy without contractors; whether it is the quality of education, immunisation, health care, supplementary nutrition through Anganwadi centres, correct identification of Below Poverty Line (BPL) families, and so on. Inclusive development must aim at economic growth with the elimination of poverty and improvement in social indicators, especially health and education as equally important goals.

INEQUALITY

While extreme poverty has somewhat declined in India over the last three decades, inequality has not. As a result, the rich are now growing richer at a much faster rate than the poor are reducing their poverty. According to a study by Chancel and Piketty (2017), the average per adult annual real income growth in India accelerated from 1.7 per cent during 1951–80 to 3.3 per cent during 1980–2015. However, for the bottom 50 per cent income group, it decelerated from 2.2 per cent to 1.9 per cent over the same period, despite acceleration from 1.2 per cent to 5.1 per cent for the top 10 per cent income group and from 0.2 per cent to 6.6 per cent for the top 1 per cent income group. In 2020, India's top 10 per cent held close to 45 per cent of the country's total national wealth. The richest 98 Indian billionaires had the same wealth (US$ 657 billion) as the poorest 555 million people in India, who also constitute the poorest 40 per cent. Of the 100 Indian billionaires on Forbes' list, only three were women. The life expectancy of a Dalit woman is approximately 15 years less than that of an upper-caste woman (OXFAM 2022).

There is sufficient evidence to show that India's economic growth has accentuated the already existing inter-state disparities (Dev 2016). India Today in its issue dated 4 August 2017 compared the changes in per capita income of major states in 1960 and 2014, which showed that in 1960, the richest state Maharashtra was only twice as rich as Bihar, but in 2014, Kerala was almost five times richer than Bihar, which continued to be the poorest.[1] The discretionary schemes of the central government, including subsidies on inputs like fertilisers, benefit richer states more than the poorer states.

High disparities also tend to retard growth. In an unequal society, the poor are deprived of opportunities. They are unable to borrow against future earnings to invest in production, lack funds to educate their children, and are unable to build up assets to reduce their vulnerability. Additionally, if the benefits of growth are not equitably distributed, poverty reduction is likely to be delayed. Finally, there is a strong likelihood of social tensions and political instability occurring in an unequal environment. High and rising inequality was a major factor in the recent violent uprising that Nepal experienced. Rumblings of discontent across the tribal region in India suggest that the Indian government cannot afford to ignore regional and ethnic grievances, both social and economic (Anand 2022).

Rising gender inequalities

Despite Constitutional guarantees, women's relative performance in India has worsened in many ways. In the 2021 Global Gender Gap Report, India fell 28

1. http://www.indialivetoday.com/bihar-described-bimar-squalor-states-india/185133.html

spots to the 140th rank, much behind Bangladesh's 65th rank. Women in India fare poorly on many indicators: child sex ratio, literacy rate, employment and ownership of property. The ratio of females to males for the age group zero to six declined from 983 in 1951 to 914 in 2011 to 899 in 2018, showing continuing strong male preference in Indian society. The literacy rate among females ages seven and above has certainly increased from 54 per cent in 2001 to 70 per cent in 2018, but it is still 15 points less than for men.

While women in India have always worked harder than men, what is even more alarming is the fact that the work participation rate (WPR) for rural females has been consistently declining, and has remained as low as 14 per cent for urban females. For rural areas, for women in the age group 15 to 60 WPR used to be around 45 per cent in the 1970s, but has fallen to less than 25 per cent in 2017–18. *Women bore the immediate impact of lockdowns, with 37.1 per cent losing jobs (versus 27.7 per cent men) in April 2020 and forming 73 per cent of job losses in April 2021. Employment recovery has been slower for women* (Nikore 2022).

The decline in the number of female workers is a matter of concern as it increases their dependency on men and thus strengthens patriarchal norms.

The second issue is about the low ownership of agricultural land by women. Ownership of land is concentrated mostly in male hands in our patriarchal society. It has been estimated by Bina Agarwal that in India, landownership in favour of women is not more than eight per cent. Lack of entitlement to land (and other assets such as a house, livestock, and so on) is a severe impediment to efficiency in agriculture for women cultivators because, in the absence of a title, women cannot get credit or be entitled to irrigation and other inputs, especially technology.

Economic liberalisation rewards those with better initial endowments such as resources, assets and skills that can be used in market exchange. It follows that poverty and inequality cannot be reduced effectively in an environment of laissez-faire, as interventionist policies and market coordination are needed. Public policy matters, market-driven policies aimed at economic freedom or economic growth may not help simply to reduce income or inequality. Successful policies aimed at correcting market failures, facilitating the accumulation of physical and human resources by the poor and backward groups, and the provision of safety net programmes to all vulnerable sections of the population are essential prerequisites for reducing poverty and inequality.

We suggest below a few policy options that would reduce poverty and inequality.

IMPROVE SOCIAL SPENDING

Of the two principal components of social welfare policy—basic public services and safety-net programmes—India has focused disproportionately on the latter in the last two decades, expanding existing social protection programmes such as Public Distribution System (PDS) and creating new ones like Mahatma Gandhi National Rural Employment Guarantee Act (MGNREGA). By contrast, the country's basic public services, such as primary education and public health have languished. Whereas expenditure as a ratio of Gross Domestic Product (GDP) on safety net programmes has jumped four times in the last three decades from half per cent to two per cent of GDP, expenditure on the social sector has stagnated at much below the desired levels. The International norm is to spend at least six per cent of the GDP on education and three per cent on public health. In India, we spend only three per cent of the GDP on education and around 1.4 per cent on health.

Table 2: *Trends in Social Service Sector Expenditure by Government (Combined Centre and States* as a percentage to GDP)

Item	**2014–15**	**2015–16**	**2016– 17**	**2017–18**	**2018–19**	**2019–20**
Expenditure on Social Services:	6.2	6.6	6.8	6.7	6.8	6.7
i) Education	2.8	2.8	2.8	2.8	2.8	2.8
ii) Health	1.2	1.3	1.4	1.4	1.4	1.3
iii) Others (mostly safety-net programmes)	2.1	2.5	2.6	2.4	2.6	2.5

(Economic Survey, 2021-22)

Poor tax revenue is the most important factor for low social sector expenditure. In India, it is around 17 per cent of GDP (out of which the States collect about one-third) now, compared to 50 per cent in Sweden, and more than 30 per cent in Russia, South Africa, and Brazil. Government should remove corporate loan waivers and tax exemptions, and introduce wealth and inheritance taxes. A 4 per cent wealth tax on the 98 richest families in India can take care of the Ministry of Health and Family Welfare for more than 2 years, the Mid-Day-Meal programme of the country for 17 years, or the Samagra Shiksha Abhiyan (SSA) for 6 years (OXFAM 2022).

IMPROVE THE DESIGN OF FLAGSHIP PROGRAMMES

If programmes such as MGNREGA, Integrated Child Development Scheme (ICDS), and urban housing are not doing well it is not only because of the weak capacity of the delivery machinery, especially in poorer states, but often the design of these schemes is flawed and needs to be amended if benefits are to reach the poor. The primary responsibility of initiating correction in the design of such faltering programmes is that of the central Government Ministries and NITI Aayog.

MGNREGA - To measure the impact of MGNREGA, I have considered how much is being spent on wages in each state per rural poor household per month. This figure in 2019–20 was only ₹ 321 for Bihar and ₹393 for UP, but was ₹ 5941 for Kerala and ₹ 4652 for Andhra Pradesh. As MGNREGA is meant to augment employment for the rural poor, ideally speaking one should have spent more money in poorer states such as Bihar, UP, Assam and Odisha. But one finds that per rural poor expenditure is higher in states such as Kerala, Andhra Pradesh and Himachal Pradesh, where poverty is very low. If one compares Bihar with Tamil Nadu one finds that the number of rural poor in Bihar is more than six times the number in Tamil Nadu, but the total expenditure in Tamil Nadu was almost four times that in Bihar.

The Government Of India needs to earmark MGNREGA funds for states, based on poverty, just as Pradhan Mantri Gramin Sadak Yojana (PMGSY) allocations are in proportion to state-wise shortage of rural roads. The 'Free-for-all' approach punishes poorer states as they are not able to compete with better-governed states in attracting funds from the Government Of India.

The design of MGNREGA is such that it does not monitor what happened to the asset that was created, say five years back, though the objective of MGNREGA is to employ programmes that lead to drought-proofing, and the creation of durable public and private assets. There are no such long-term benefits from MGNREGA, as the sustainability and productivity of assets created are never monitored with the result that the programme is reduced to creating short-term unproductive employment with no focus on asset creation or soil and water conservation. At present community upkeep of public assets is limited, possibly due to ambiguity over ownership and usage rights.

MGNREGA suffers from a high percentage of incomplete works, as in many cases the schemes are not completed in the same fiscal year and take longer time, even two to three years in some cases. This raises a serious concern, not only because these are not serving the purpose for which envisaged, but these cases negatively impact soil erosion as the soil gets exposed and is left loose without proper dressing and compaction.

ICDS- Similarly, has failed to reduce malnutrition because of three design flaws. Firstly, it ignores the most relevant age group, the first 1000 days, and concentrates on children above 3 years. Secondly, it provides them with factory-made supplementary nutrition, which leads to high-level corruption and is often fed to cattle as it is of bad quality. People have started calling it Pashu Aahar in place of Paushtik Aahar. ICDS should learn from the success of the hot freshly cooked mid-day meals programme that runs fairly well even in states not known for efficiency, whereas the supply of packaged food in ICDS even among the efficient states is not popular with the children, besides being irregular and discouraging local participation.

And thirdly, Aanganwadi centres grossly under-report malnutrition. The overall percentage of malnourished children, according to the data from the field, is only eight per cent, as against 36 per cent reported by National Family Health Survey (NFHS) and United Nations International Children's Emergency Fund (UNICEF) evaluation studies. This makes field staff unaccountable for results.

The focus of the ICDS programme should be on components that directly address the most important causes of under-nutrition in India, specifically improving mothers' feeding and caring behaviour, improving household water and sanitation, strengthening referrals to the health system and providing micronutrients. The basic nature of the programme should be changed from centre-based to outreach-based, as the child under three cannot walk to the centre and has to be reached at his/her home. Another advantage of visiting homes is that the entire family, not just the mothers, are sensitised and counselled.

Rural toilets – Whereas a large number of rural toilets have been constructed, the sustainability of their usage is doubtful as most toilets have only one single pit. Technically there should be two small pits, but unfortunately, adoption of the twin pit model is not being insisted upon in rural India, and often only one pit is constructed. Moreover, the size of the pit is almost ten times the recommended size to ensure that the pit never gets filled up in one's lifetime. The demand for very large pits and septic tanks drives up the cost of constructing a latrine considerably. States should monitor the size of the pit, and ensure that two underground small pits are constructed.

Promote rental housing and night shelters- 99 per cent of the urban housing shortage is from the economically weaker sections (EWS) and the low-income group (LIG) households. Though there is a negligible housing shortage for the HIG (high-income group) category, most new urban houses are meant for them, leading to a situation in which the rich own more than one house that remains unoccupied, thus leading to wastage of a scarce resource. At today's prices, even a modest tenement of 300 square feet would cost close to ₹ 10 to 30 lakh, well beyond the reach of poor residents. These are then allocated to ineligible households, or worse they stand vacant, and gradually fall into disuse, as monuments of official waste, because in the classic mode of bureaucratic failures, those for whom they are intended cannot afford them, and those who can afford them, do not wish to live there.

The public rental was the social solution to housing during inter-war and post-war periods in Europe and elsewhere, and very large housing estates were built in several countries. It is now increasingly targeted towards low-income earners and those with social problems. India too should shift the focus to promoting cheap rental housing. However, the present focus is unfortunately on owned housing, which is suitable for rural India but not the right model for the urban poor.

The poorest such as beggars, rag-pickers and unskilled wage earners cannot afford even houses on a rental basis. For them, the scheme of night shelters should be revived as a centrally sponsored scheme. Such shelters should be built close to the place of employment so that the poorest who cannot afford to travel by even public transport can walk or cycle up to the place of employment.

IMPROVE THE FLOW OF FUNDS

Many state governments, especially the poor ones, are neither able to draw their entitled funds from the Government of India, nor can release these to the districts/villages in time, with the result that the Government of India is often constrained to divert the unclaimed funds to better-performing states. The reason for poor performance by Bihar, Orissa, Uttar Pradesh (UP), and Assam is often due to the widespread shortage of staff at all levels that adversely affects the implementation and supervision of programmes. Empirical studies are needed to suggest what changes are needed in financial procedures at the state level so that utilisation of funds improves, timely payments are made to the staff, and utilisation reports are sent to Government of India in time without delay. Government of India's studies show that even electronic transfer takes months with the result that in Mid Day Meals programme ground staff such as cooks and helpers are not paid for months, FCI withholds supply of grain, and mid-day meals are served only for 60–70 per cent working days in the poorer states. Similar delays take place in supply of text books to schools, filling up of vacancies, especially in the remote and tribal areas, and providing funds for maintenance capital works, etc.

The budget cycle is too short for full utilisation of funds for capital works. The expenditure budget should be valid for two to five years so that capital expenditure can be completed without surrender of funds. Similarly, for centrally sponsored schemes, approval of the State legislature should not be necessary every year for using central funds that are transferred to the State consolidated fund for continuing schemes. In Singapore, the expenditure budget is valid for five years, and departments are free to exceed or delay their annual allocation without any reference to Parliament. The need to reform financial procedures is more urgent now because of the changes in the pattern of fund flow from Government of India since March 2014, as central funds are no longer passed on to state societies and agencies such as District Rural Development Agency (DRDAs) as before.

Revamp agriculture

Government policies of encouraging intensive agriculture through the mining of groundwater have made agriculture riskier and capital-intensive which makes agriculturists less attractive to banks and insurance companies. As there is no effective control over the digging of tube-wells in water-scarce regions, farmers are borrowing money from moneylenders at high-interest rates to dig tubewells, but many such borings fail to lead to indebtedness and even suicides.

We need to build efficient irrigation systems and water conservation strategies in rainfed regions, through conjunctive use of surface and groundwater. The main thrust of the programmes to combat the impact of climate change in rainfed areas should be on activities relating to rainwater harvesting, soil conservation, land shaping, pasture development, vegetative bunding, and water resources conservation on the basis of the entire compact micro-watershed which would include both cultivated and uncultivated lands. Agriculture in semi-arid regions has to move away from traditional crop-centric farming to agri-pastoral-farm forestry systems (fruit trees, shrubs, perennial grasses and small ruminants).

If rain is captured with peoples' participation, drought can be banished from India in ten years maximum. Unfortunately, the slogan of 'more crop per drop' has so far remained an empty rhetoric, 'an ideology without a methodology'.

Promote value chain in agriculture - As fruits and vegetables give 4–10 times more returns than from other crops, India needs better mechanisms to increase the communication and direct linkage between smallholders producing fruits and vegetables and large buyers. Mechanisms to reduce transaction costs, more efficient procurement markets, quality standards and electronic exchanges enforcing compulsory delivery can address this need. Further, the government should take fruits and vegetables out of the Mandi Committee Acts and make their sale and purchase completely free. This will also encourage the private sector to go for contract farming and have an assured supply of suitable material for processing. Producer Companies, Krishi Vigyan Kendras (KVK) and Self Help Groups (SHGs) can function as aggregators, who would be involved in supplying packaging material; weighing, loading and unloading freight; depositing goods at accredited warehouses; and crediting farmers for their produce. As farmers cannot perform these functions, there is a great opportunity for aggregators and private companies to develop a good business model around performing these functions, and thus bridge the gap between supply and demand for fruits and vegetables.

Empower women - Despite women's vital contribution to agriculture and allied sectors in India, they lack control over productive assets (land, livestock, fisheries, technologies, credit, finance, markets, etc.), face biases due to socio-cultural practices, experience gender differentials in agricultural wages and decisions concerning crop management and marketing.

Not more than two per cent of land is exclusively in women's names. Although Hindu Succession Act has been amended in 2005 giving equal rights to women in inheritance, none of the state governments has taken the new law seriously. Neither the Department of Land Resources in Government of India nor the Ministry of Women and Child Development (MWCD) has issued a single circular asking states to implement the law. The result is that anti-women laws and practices merrily continue in the states. For instance, Section 46(1) of the Rajasthan Tenancy Act places women at par with lunatics and idiots. In UP, inheritance laws still do not entitle married daughters to inherit agricultural land from their fathers.

The Department of Land Resources in the Ministry of Rural Development should launch a campaign to correct revenue records and ensure that women's land ownership rights are properly recorded by the states with intimation to women. Monitorable targets should be set for the district collectors to ensure the timely implementation of the law. A new centrally sponsored scheme should provide legal services to those women who wish to get rights over ancestral property.

Simplify procedures to promote non-farm enterprises - The maze of laws, organisations, and practices that confront the ordinary citizen in his or her dealings with the government encourage corruption and harassment. De-regulation has made almost no impact on small entrepreneurs. One can set up an industry worth billions in India without any license today, but a farmer can neither set up a brick kiln unit, nor a rice shelling plant, and not even cut a tree standing on his own private field without bribing several officials. A simple operation of converting Prosopis (a wild shrub occurring mostly on wastelands, the more you cut it the more it grows) into charcoal in Tamil Nadu, which can give employment to thousands of people, requires permission from the Forest Department. Women were prosecuted in Orissa in 1995 for keeping brooms in their homes. It is a sad commentary on our laws that the informal sector which provides maximum employment is mostly declared illegal and subject to the whims of law enforcement agencies.

For boosting women's employment in Central India we should encourage trees that produce non-timber forest products (NTFPs) and other gathering material that women could collect, as against trees that yield only timber to the contractors. Poor employment for forest dwellers is also attributed to policy distortions arising out of state monopolies, which means only the agencies designated by the state have the right to market, process, and store NTFPs. Monopoly reduces the number of legal buyers, chokes the free flow of goods, delays payment to the gatherers, and reduces gatherers' collection and incomes. It is suggested that for marketing NTFPs Government should not have a monopoly, so as to encourage healthy competition. At the same time, the government should provide a minimum support price to forest gatherers for all important NTFPs just as it is done for farmers of wheat and paddy. Encouraging the setting up of processing units within the tribal areas is also recommended.

There are 10 million street vendors in India, but a low license ceiling in most cities means more vendors hawk their goods illegally, which also makes them prone to bribery and extortion culture under local police and municipal authorities. Although Government of India passed a Street Vendors Act in 2014 that clearly recognises that street vendors form a very important segment of the unorganised sector, little action has been taken by the states to implement the law.

RE-STRUCTURE SKILLING PROGRAMMES

According to the 2018 Periodic Labour Force Survey (PLFS), the unemployment rate among the urban 15–29-year-olds was 23.7 per cent. One may hypothesise that this pervasive joblessness was due to the poor training of the youth as only seven per cent of the people surveyed in the framework of the PLFS declared any formal or informal training. India has just 2 per cent trained workforce as compared to Germany (75 per cent), the United Kingdom (UK) (68 per cent), and South Korea (96 per cent).

A majority of workers in the unorganised sector have lower levels of literacy since they leave school at various stages of education. The National Skill Development Corporation (NSDC), the nodal agency for promoting and funding skilling programmes, conceded that out of four million students who got training under the Pradhan Mantri Kaushal Vikas Yojana (PMKVY), only 15 per cent bagged jobs since the launch of the scheme on 15 July 2015.

There are about 6900 state government-owned Industrial Training Institutions (ITIs) and privately run Industrial Training Centres (ITCs) where about 9.5 lakh students are enrolled. However, their employability is limited because of poor quality of training, curricula of training not aligned with industry needs, and lack of general academic skills such as numeracy, problem-solving, presentation skills, entrepreneurship, etc. (Rajan 2022).

Lastly, trained manpower can be absorbed only if Medium and Small Enterprises are encouraged to flourish. However, these sectors, though having immense potential to generate new jobs with relatively low direct investments, suffer from many constraints. Their expansion depends upon a number of factors, which are influenced by government policies – directly or indirectly. Unfortunately, the de-regulation introduced after 1991 has not touched the rural or the small informal sector and has largely been confined to the modern large manufacturing sector.

Governance Issues

Many of the problems of bureaucracy in India are quite old and well-known: obsession with rules rather than concern for outcomes, promotions based on seniority rather than merit, delays, short tenure, and mediocrity at all levels are some of the factors that inhibit government efficiency. Many citizens find India's bureaucracy too slow, extremely rigid, and mechanical, and consequently not flexible or adaptive enough to cope with change. Some doable reforms are suggested below:

- Re-structure bureaucracy - There are too many government servants in the support positions, such as clerks, orderlies, and drivers, who are now not needed in this era of advanced technology, and very few people in the line positions, such as teachers, nurses, and policemen, who are meant to deliver public services.
- Key public services such as education, healthcare, police and the judiciary are starved of regular employees, whereas many wings are overstaffed with Group C and D support staff that has become mostly irrelevant in view of computerisation and changing techniques of information management.
- Efforts should therefore be made to identify surplus support staff, set up an effective re-deployment plan and devise a liberal system for the exit. There should be incentives for clerks and class IV staff to become teachers and constables.

It is instructive to look at the inter-state availability of regular government employees. Table 3 compares the number of state government employees (including state PSUs and local bodies) in Bihar with Tamil Nadu.

Table 3: *Number of state government employees*

	Tamil Nadu	Bihar
Population 2011 (in crore)	7.2	10.4
Total number of state Govt. servants (in lakh)	10.41	2.53
No of govt servants per 1000 population	14.4	2.4

(Saxena 2019)

Thus, as compared to the global average of more than 30, Bihar has only 2.4 employees per thousand population. No wonder all schemes are in disarray there!

Check inflated and incredible reporting

Unfortunately, state governments do not discourage reporting inflated figures from the districts, which renders monitoring ineffective. As data are often not verified or collected through independent sources, no action is taken against officers indulging in bogus reporting. Similarly, there are no indicators for assessing the quality of programme outcomes. For instance, one would like to know how many newly constructed toilets are being used, and what impact has it had on people's health and hygiene. Results from a late 2018 survey (Gupta et al. 2019) in four states: Bihar, Madhya Pradesh, Rajasthan, and Uttar Pradesh show that although rural latrine ownership increased considerably during 2014–18, open defecation remains very common; approximately 40 to 50 per cent of rural people in these states defecated in the open in late 2018. *Pratham*, a voluntary organisation, has evolved a simple test in education at a low cost which judges the extent of learning in primary schools. Their findings show that the actual learning levels of students are abysmally low. However, the States do not accept *Pratham's* findings or take remedial action.

It is not enough that the Central Government departments and the state governments use professional and academic organisations to undertake impact studies from time to time. Their findings must be publicised and discussed with key stakeholders so that design and delivery can be improved at the earliest. Governments should also put on their websites the findings of the impact studies, and distribute these in workshops they organise. Dissemination of results is critical for use.

NITI Aayog should evaluate all flagship programmes periodically through independent and competent professional organisations. Today Ministries, such as Tribal Affairs, Food and Public Distribution, and Women and Child Development are content with the release of funds or foodgrain with little knowledge of its impact on the poor.

When good but critical reports are generated, Ministries need to address them seriously. A recent evaluation of ICDS in Gorakhpur, Uttar Pradesh, by the National Human Rights Commission showed that more than 60 per cent of food and funds were misappropriated. In place of cooked food (as directed by the Supreme Court), manufactured ready-to-eat food with about 100 calories was given to children, as against the norm of 500 calories. The food was unpalatable, half of it ended as cattle feed. Anganwadi workers then shared the spoils with their supervisors. Unfortunately, little action was taken on the report (Saxena 2019).

CONTROL ABSENTEEISM

All ministries/departments should collect quantitative data on absenteeism of both service providers and service receivers (students in classrooms, or women turning up for institutional deliveries) as it throws a great deal of light on the quality of service. Through a carefully designed methodology backed by technology, it is quite possible to measure the performance of all service-providing agencies, such as police stations, health and Anganwadi centres, panchayats, etc, and to what extent they are responsive, efficient and participative.

A World Bank study (2012) showed that the bulk of expenditures in education and health typically flow to the salaries of teachers and health workers, yet rampant absenteeism and shirking by these service providers means that no services are effectively provided in many cases. That is, governments use these resources to provide (targetable) jobs rather than (less targetable) high-quality services. The system exists for the service providers but not for service provision. Field investigations in rural areas of Indian states, particularly in the north, reveal that teacher absenteeism is endemic, with almost two-thirds of the teachers employed in the sample schools absent or not teaching at the time of the investigators' unannounced visits. A study (World Bank 2008) found that the average rate of teacher attendance was 65 per cent in UP but the average rate of teacher activity (namely, active engagement in teaching-related activities) was only 27 per cent. The proportion of India's children attending a government school has now declined to 45 per cent; this number is 85 per cent in the USA, 90 per cent in England, and 95 per cent in Japan (Sahasranaman 2022). Privatisation is, in fact, a key driver of economic inequality.

Similarly, rural health care in most states is marked by the absenteeism of doctors/health providers, inadequate supervision/monitoring and callous attitudes. A study by the Planning Commission in 2009 found that the physical availability of doctors at the Community Health Centres (CHCs) at the sub-district or block level was less than 30 per cent in Bihar and Rajasthan. Technology should be used to monitor not only attendance but the performance of field staff.

Why ranking of Aspirational Districts is not enough?

The present government's Aspirational Districts Programme supervised by the NITI Aayog focuses on education, health and nutrition on a real-time basis. 117 districts in 28 States, which have shown relatively slower progress in socio-economic indicators have been identified as 'Aspirational Districts.' The focus of the programme is to improve India's rank on the Human Development Index, raising the living standards of citizens and ensuring inclusive growth for all. The programme is being implemented in the spirit of cooperative federalism in full partnership with states.

The present methodology of ranking districts does not however inform the districts why outcomes are poor. Unless the process indicators are also studied the districts would never know where exactly they have to take action. Secondly, it is presumed that action is needed only at the district level. It is likely that reforms are needed at the Government of India level (as centrally sponsored schemes are designed and funded from here), or at the state level. Outcomes at the district level are modest because of many factors: the necessary infrastructure for fast agricultural growth is missing; skilling programmes need revamping; manufacturing which will push employment should be facilitated by removing legal and procedural constraints; many welfare and safety-net programmes are not well-designed; acute shortage of staff; and lastly, short tenure of District Magistrates (DMs), which results in poor accountability. On all such issues the districts cannot take action, the Government of India and states have to own the responsibility.

CONCLUSION

To sum up, as discussed in the 2022 Economic Survey, it is critical at this juncture to focus on public investments in human capital and strengthen the delivery mechanisms of government interventions to ensure transparency and accountability. With India having the demographic advantage, improving educational standards, skilling the youth, enhancing job opportunities, reducing disease burden and empowering women will help in realising the potential of a buoyant economy in the future.

Extreme inequality is not detrimental merely to poverty reduction, but also to economic growth. Inequality harms social cohesion and the quality of institutions. Given that in the long run, efficiency and greater equity are complementary, governments should take appropriate measures to ensure that the reduction in inequality and disparities in life chances are accorded greater prominence in the design of development policies and strategies. Dealing with inequality while encouraging productivity growth and wealth creation, is now probably one of the biggest policy challenges facing the developing world.

Besides, growth has not helped the most marginalised groups, such as tribals and women. Inclusive development, on the other hand, must aim at economic growth with the elimination of poverty, improvement in social indicators, and reduction in inequality as equally important goals, while ensuring at the same time that there is no damage to the environment. However, translating these macro-policies into action would need good governance and accountable administration, without which even the best policies and laws remain on paper only, or result in leakages. Unfortunately, governance in India at the state and district levels is quite weak, manifesting itself in poor service delivery, uncaring administration, corruption, and uncoordinated and wasteful public expenditure.

These are the key factors impinging on development and social indicators that need to be reckoned with.

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Health: The Centennial Challenge for India

Rama. V. Baru

Prime Minister Narendra Modi has declared the quarter century leading up to the centenary of Indian Independence in 2047 as 'Amrit Kaal' – a period of good beginnings. There can be a no better measure of how good this beginning has been than the health status of close to 1.3 billion people that will inhabit this sub-continent during this period. In approaching the hundredth year of independence, it is an opportune moment to take stock of our achievements and challenges for improvement in the health sector, which is an important measure of human development.

The health sector includes medical care and health services. Going beyond these are the social determinants of health that encompass food security, housing, safe water supply, sanitation, and physical and social environment. This article will assess the trends in health improvement over the last seventy-five years and the persisting challenges that we will face prospectively. It will also draw attention to India's engagement with recent global concerns like One Health (by World Health Organisation); Climate Change and Health (by United Nations); Trade related issues regarding Intellectual Property Rights protection by the World Trade Organisation focusing on health technology, pharmaceuticals and vaccines.

The 1980's marked the beginning of India's liberalisation project which was furthered in 1991 by then Prime Minister PV Narasimha Rao and Finance Minister, Dr Manmohan Singh. The focus through the quarter century beginning with 1991 and up to 2015 was on India emerging as a global economic powerhouse based on a sustained annual growth rate of 7.0 to 8.0 per cent. India's rapid rise between 2000 and 2010, with close to 8.0 per cent growth, gave global visibility to India's rise. It was viewed as a major Asian democracy catching up with the already rising China. During this period government policies eased the entry of domestic and foreign investment in the economy and social sectors. Success in economic policies had a spill over effect on India's relationship with the world. The growth of the Indian economy did not however translate into improvements in human development indices, as measured both by educational and health indicators. **It could be argued that human development, which is critical for sustained economic development, has been the Achilles Heel of India's growth process.**

At a policy level, health did not receive the attention that was required to enhance human capabilities, address socio-economic inequalities, poverty, literacy, and education of the Indian population. Given the trickle-down theory, which was in currency during the period of economic liberalisation, it was assumed that the social benefits of economic growth would somehow trickle-down to the poor. On the other hand, public investment in health declined and the government's dependence on soft loans from the World Bank and other donors increased. The access to such funding came with the baggage of their thinking on health sector reform which has not been particularly helpful for health outcomes. What all such policy interventions succeeded in achieving is the greater commercialisation of health services provisioning.

The rise of the for-profit corporate healthcare system has been so pervasive that their voice has often come to be viewed as the voice of the health sector as a whole. Be it on government committees or NITI Aayog panels or across the media, representatives of corporate health care have come to be held up as the ultimate source of knowledge and policy thinking on health. Consequently, the space for public sector medical professionals, academics and civil society activists engaged in health care and thinking on health policy has shrunk. This distortion in the sources of our thinking on health care and provisioning is a major factor behind warped policies that have contributed to India's underachievement in the health sector.

By the early 2000s data from various rounds of the National Sample Survey (NSS) showed growing inequities in access to health services and a rise in what are called out-of-pocket expenditures of households for both out-patient and in-patient care (Baru et al 2010). There was considerable concern in public health circles and pressure on the government for course correction. When the United Progressive Alliance (UPA) government came to power in 2004, improvement in healthcare services was placed on its agenda as an important component of the National Common Minimum Programme. The need to strengthen primary-level institutions like sub-centres, primary health centres and community health centres was in the government's focus. Several studies led by multilateral institutions, non-government organisations (NGOs) and academia highlighted the neglect of public provisioning at the primary level and the unregulated growth of the private sector that created inequities in access to preventive and curative services. The poor coverage and outcome of National health programmes were a cause of concern in the public health community, especially in rural areas across the less developed states.

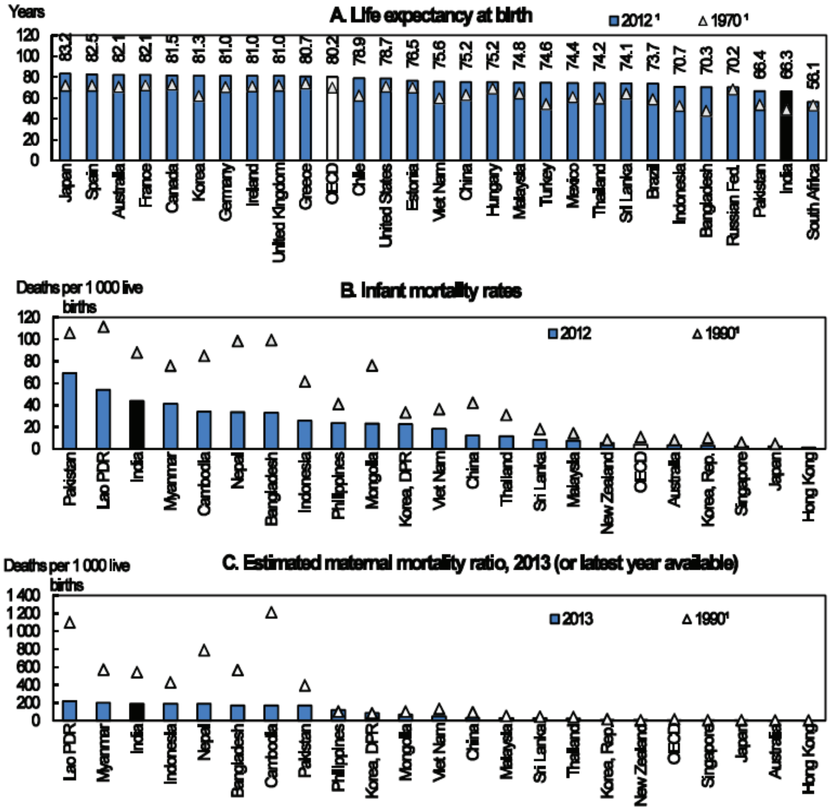
The National Rural Health Mission (NHRM) was launched in 2005 across 18 states that had particularly poor public health indicators. While NRHM had a rural focus there was also a recognition that primary-level care in urban areas also required strengthening. So, the National Urban Health Mission was integrated with the National Rural Health Mission and thus launched the National Health Mission (NHM) of 2005. The NHM focused attention on strengthening primary health services. With time some improvement was seen in health indicators across states in varying degrees. Several initiatives for democratising health services at the local and state levels were undertaken and this was an important contribution of the NHM. During the UPA regime, there were several other initiatives to strengthen the social determinants of health that included the Mahatma Gandhi National Rural Employment Guarantee Scheme, improved access to public distribution schemes for food security, Integrated Child Development Scheme to name a few.

Trends in improvement in health status over the last three decades

Analysis of data shows an improvement in Life Expectancy at birth (LEB) from 49.1 years in the 1970s to 66.3 in 2012. Similarly, Infant Mortality Rates (IMR) has halved since the 1990s. The Maternal Mortality Ratio is also showing a reduction over the last three decades. When we examine malnutrition among women and children there is a clear socio-economic gradient observed with a disproportionate burden of stunted and wasted children in the lower income quintiles and castes and tribes. These national averages of course mask gender, caste, income and regional inequalities and inequities. So, the improvement in health status is not in sync with the aspirations of a country that hopes to join the ranks of middle-income economies.

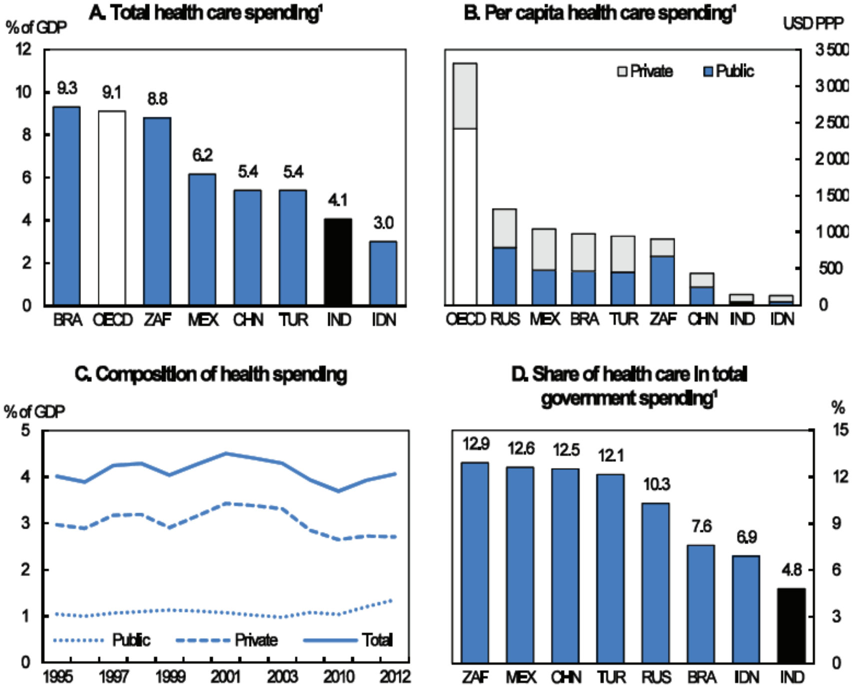
Moreover, when compared to the performance of other middle-income countries, especially in Asia, India remains a laggard on all these human development indicators. Figure 1 captures the variation in Life Expectancy at birth; Infant Mortality Rates and Maternal Mortality Ratio across high, middle and low-income countries. India's health status has improved but relative to emerging economies it remains behind. In the first decade after its Independence, in the 1950s, India was a leader among Asian nations in human development. India's public investments in medical education and public sector health care were the cynosure of most of the developing world. However, in subsequent decades India began to lag behind her East and Southeast Asian neighbours. Indeed, even some of her South Asian neighbours like Sri Lanka recorded better health outcomes.

Figure 1: *The population health status has improved but remains behind most other emering economies*



1. Or nearest available year.

Source: OECD (2014), Heath Database; World Bank, World Development Indicators Database; UN Inter-agency Group for Child Mortality Estimation (IGME) Childinfo, UN Demographic Yearbooks; Statistics and Census Service, Macao, China, 2014 and WHO.



1. Data refer to 2012 or latest available year.

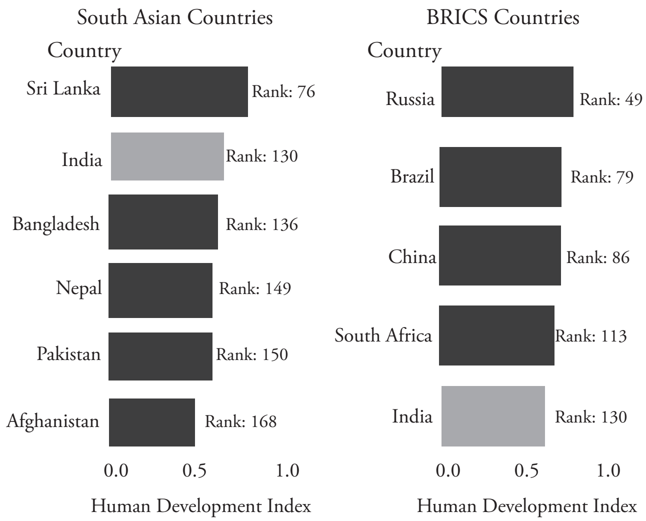
Source: OECD (2014), Health Database, WHO (2014) Health Systems Database.

Cited in Joumard I and Ankit Kumar (2015) Improving health outcomes and health care in India. OECD, Economics Department Working Papers No. 1184. https://econpapers.repec.org/paper/oececoaaa/1184-en.htm accessed on January 10th 2023

India's ranking in the Human Development Index

Given these trends, it is not surprising that India lags behind most Asian nations and emerging economies on the Human Development Index (HDI), computed by the United Nations Development Programme (UNDP). India performs poorly even when compared to most of its south Asian neighbours. The Indian national averages of course are a sum of marked regional variations and persisting and widening socio-economic inequalities. These inequalities have emerged as an impediment to economic growth. India ranked 130 out of 189 countries on the 2018 HDI index with a score of 0.640 which places it in the 'medium' category of development. It fared worse than Sri Lanka (HDI 0.77, rank 76) and China (0.75, 86) but better than Pakistan (0.56 and 150), Nepal (0.57, 149) and Bangladesh (0.68, 136).

Human Development Index (HDI)
BRICS and South Asia, 2017



Source: 2018 Statistical Update, Human Development Indices and Indicators

Cited in https://www.livemint.com/news/india/in-charts-india-slips-in-human-index-development-report-11662729643388.html accessed on January 10th 2023

According to India Spend, India lost out 26.8 points on the index due to inequalities while the south Asian average for this factor is 26.1 points. Subsequently, India's HDI rank slipped from 130 to 132 in 2022. Since the Human Development Index is driven by health, education and income, India would have to focus on excelling on these fronts to progress economically and reduce inequalities.

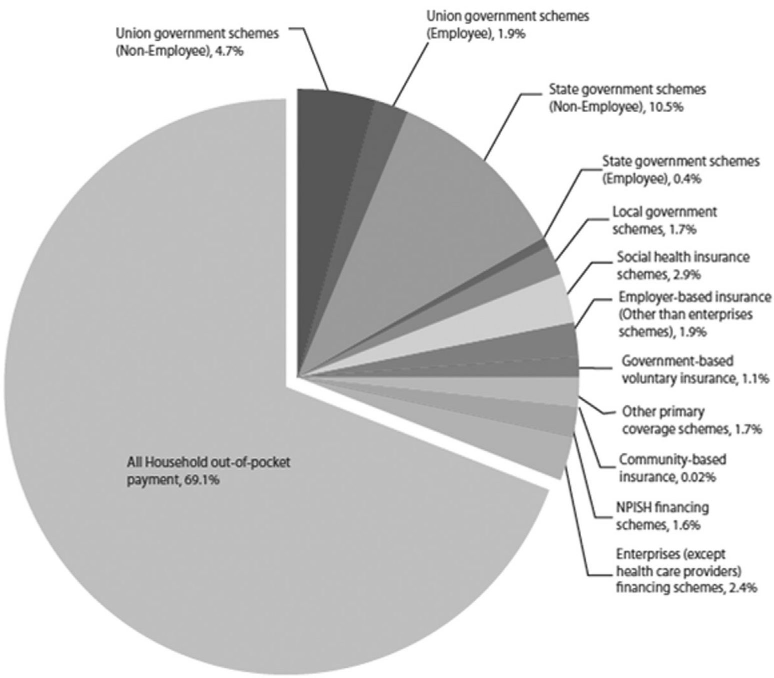
Conceptualising the Health Service system

The health service system in India is best described as a mixed economy with a dominant private sector in its various sub-systems. The major sub-systems of the health service system include financing, provisioning, medical and paramedical education, drugs, technology and research. In each of these sub-systems one finds a mix of public-private partnerships between the two. The governance of the health service system is primarily the responsibility of the State with the Central government playing an important role in national health programmes, and disaster and regulatory mechanisms both legal and institutional. In the following section, we have examined the nature and extent of the public-private mix in each of the sub-systems. The purpose of this is to highlight the importance of taking a systemic view to rationalise the role of the state and market to provide cost-effective and quality services that will reduce inequities in access.

Financing:

The public financing of health services is essentially a state subject. The following figure shows the distribution of public and private financing for health. A large proportion of current expenditure is from out-of-pocket payments. Hence, in future, this will be an important policy challenge. Targeted insurance schemes like the Pradhan Mantri Jan Arogya Yojana (PMJAY) and state-level initiatives largely cover only those who are Below Poverty Line. A large percentage in the unorganised sector and the services sector are largely not covered by insurance and hence have to pay for care both for out-patient and in-patient services. The growing fiscal constraint imposed by the diversion of public funding to various non-merit subsidies has meant that public investment in health care has declined. Successive governments have allowed the private sector to step in and occupy the space vacated by the public sector. Even this private sector has been able to make inroads at public expense given the various subsidies that the government has been giving to it to encourage greater private investment in health. The growing share of health expenditure in private household expenditure is a consequence of this commercialisation of health services and the shrinking role of public provisioning of health care.

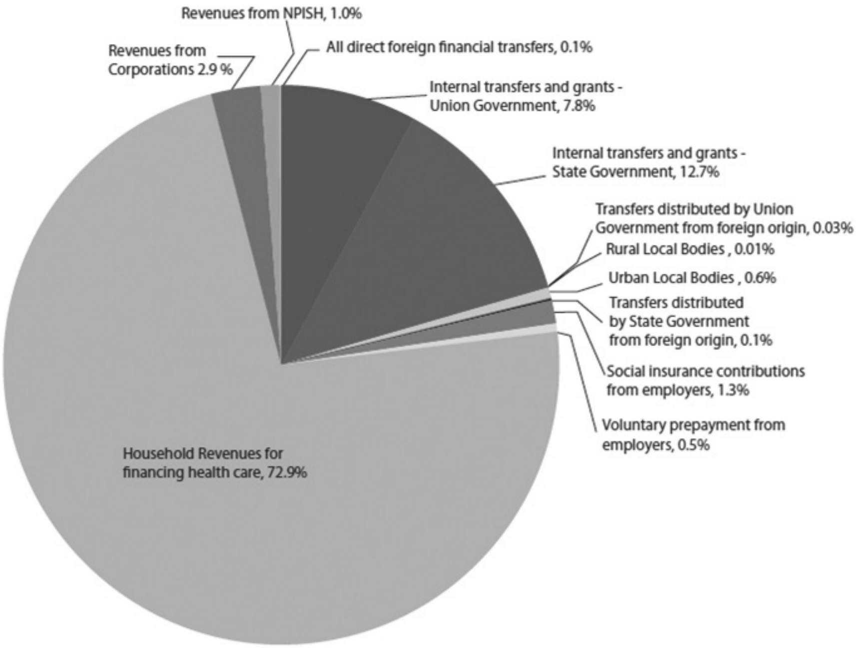
Figure 2: *Distribution of Current Health Expenditures according to Financing Schemes*



Source: NHA Accounts https://nhsrcindia.org/sites/default/files/2021-06/NATIONAL%20HEALTH%20ACCOUNTS-%20Estimates%20for%20India-2013-14.pdf accessed on January 5th 2023

The responsibility for the weak provisioning of public financing for health care also lies with state governments because they have the principal responsibility for health and medical services at the state level. There has been a decline in both state-level financing and fiscal transfers from the Union government that are specified from time to time by the Finance Commission. The revenues devolved to Municipal corporations both by the Centre and the States remain limited, which accounts for poorly financed urban health services across the country (Figure 3).

Figure 3: *Distribution of Current Health Expenditures according to Revenues of Healthcare Financing Schemes (sources of financing)*



Source: *National Health Accounts https://nhsrcindia.org/sites/default/files/2021-06/NATIONAL%20HEALTH%20ACCOUNTS-%20Estimates%20for%20India-2013-14.pdf accessed on January 5th 2023*

Provisioning

The overwhelming reliance on out-of-pocket expenditure reflects the structures of provisioning of health services. A large presence of a highly differentiated private sector dominates the health service landscape with an underfunded public sector. The private sector consists of a large percentage of trained and untrained practitioners at the primary level of care. The real challenge here is that there is much variation in the skill levels, cost and quality of services. The secondary level in the private sector includes small and medium-sized nursing homes that are mostly in urban, semi-urban and some states even in rural areas. The tertiary level of the private sector consisting of specialist and super-specialist hospitals has expanded with public subsidies in the form of concessional land, electricity, water supply and reduced import duties on high technology medical equipment during the 1980s. Additionally, the government's initiative to grant the status of industry to the hospital sector facilitated it to access various forms of external financing including private equity and venture capital. The corporate and trust hospitals in the tertiary sector were under the Commerce Ministry and hence out of the purview of the Health Ministry in terms of governance and regulation.

Given the multiple actors with varied levels of institutional forms, there is a fragmentation of roles and functions. The regulatory framework is very meagre and there is a lack of a comprehensive and unified effort to address all the actors involved. Over the years there have been many efforts to introduce regulations for standards, cost and skilled human resources in the private sector. However, these were mostly piecemeal and its uptake at the state level met with resistance from professional bodies.

Drugs and Technology

India has emerged as a pharmaceutical hub globally with production mostly in the private sector. According to the Annual report of the Government of India on Pharmaceuticals, the Indian pharmaceutical industry is the world's 3rd largest by volume and fourteenth largest in terms of value. The total Annual Turnover of Pharmaceuticals was ₹ 2,89,998 crores for the year 2019–2020. Total pharmaceutical exports and imports were to the tune of ₹ 1,46,260 crore and ₹ 42,943 crores respectively in the year 2019–20. The Indian Pharma sector currently contributes to around 1.72 per cent of the country's GDP.[1]

It is estimated that the medical device industry in India has the potential to reach US$50 billion by 2025. India is the fourth largest Asian medical devices market after Japan, China, and South Korea and also ranks among the top twenty global medical device markets in the world. Currently, India is exporting ventilators, PPEs, diagnostic kits, sanitisers and surgical gloves (2/3 ply) in the ongoing COVID-19 pandemic. The following table clearly shows our dependence on imports that are mostly high-end devices like CAT Scan, MRIs and Ultrasound. The domestic production of devices is a recent phenomenon and the kind of investment required to build self-reliance is quite large. It's only large public sector investment in Research and Development that can build the potential for India to become self-sufficient. There is no indication of government policy for investing in building indigenous capacity for the

1. (https://pharmaceuticals.gov.in/sites/default/files/english%20Annual%20Report%20 2020-21.pdf).

production of medical devices. The Chinese example of investing in scientific and technological capacities to strengthen private enterprises for the production of a range of medical devices to meet domestic needs may be worth examining for India.

(India Medical Devices Trade) (Values in USD million)

Imports		Exports	
2018–19	2019–20	2018–19	2019–20
5700.44	5845.41	2138.14	2292.87

Source Engineering Export Promotion Coouncil of India (EEPC)

Medical and Paramedical Education

Health services are a labour-intensive services that require a skill mix of personnel and team effort for quality care. Allopathic medical education has seen the growth of private medical colleges as has AYUSH (an acronym for **Ayurveda, Yoga and Naturopathy, Unani, Siddha and Homeopathy**). The private sector dominates paramedical education and there is much variability in the quality of these institutions. The real challenge for this sector is planning for human resources and rationalising the role of public and private institutions across states. There is a dire need for regulating including standardising curriculum that allows for adequate theory and practice during the training. Some form of standard assessment and accreditation of these private institutions may help to weed out several that do not have the required infrastructure, human resources in terms of teacher educators and resources for practical clinical training. The respective professional councils both at the Centre and State need an audit of their functioning since they have been compromised due to corruption (Baru and Diwate 2023).

Challenges for 2047

As India aspires to become a global player it needs to pay greater attention to improving the health and education of its people. A major impediment to the improvement of human development indicators especially health status and access to health services are socio-economic inequalities. The wealth gap has increased over the past three decades and the Covid pandemic has exacerbated it further. Progressive taxation is required to close the wealth gap and also improve state finances.

Many contradictions become apparent in the health sector due to the co-existence of the public and private sectors. The values that are embodied in the idea of the 'public' conflict with the profit-making incentive of the private sector. The social determinants now include the idea of One Health of the WHO wherein the degradation of the environment resulting in climate change has given rise to epidemics and pandemics. The One Health approach of the WHO as the SDGs to which India is a signatory demands the moral responsibility of the government to respond comprehensively. Globally and in India, one sees how corporate interests have not been challenged to speak to several important concerns. It is well acknowledged globally that there is an unresolvable tension between the values underlying profits and welfare. Several developed and developing countries have tried various measures to reconcile this through policy interventions like universal health coverage. However, these measures are unable to reconcile the two effectively. Moral philosophers have argued that welfare services require full public funding and provisioning that is universal and comprehensive that money cannot buy (Sandel 2012). From a rational public health perspective, it is well acknowledged that the private sector is focused on curative services where the potential for profits is possible. The split between preventive services as a public good and curative service as a private good produces a health service system that is neither comprehensive nor cohesive. It further leads to the separation between a hospital and a primary care approach to health service and health planning. The extent of for-profit interest in pharma and devices distorts need-based planning that is informed by the prevalence of diseases, the rational use of drugs and technology in health services. There is ample evidence of the power of both the pharmaceutical and devices industries in influencing the clinical decisions of practitioners and the perceptions of patients. The regulatory structures within the country are weak and in a globalised world pharmaceutical industry tends to seek approval from the *United States Food and Drug Administration (USFDA)* or marketing its drugs and vaccines.

Over the last several decades financing of the health, the sector has been a major source of concern. Since health is a state subject the revenues are inadequate to cope with the ever-increasing demand. The rise in ageing populations who suffer from chronic diseases that require sustained, long-term care is stressing health services. This is not the case only in India but seen all over the world. Democratic politics has now found a convenient handle in promoting populist programmes in the social sector that are seen to be vote winners. Populist programmes do not challenge or rationalise market interests in the social sectors. To what extent will populist programming translate into improved human development? If we take the East Asian case, the building of human capital was an essential base for their economic growth. There is much to reflect on and learn from the East Asian experience.

The government needs to play a direct role in driving access to healthcare through long-range initiatives. Moreover, it needs to ensure that the industry maintains its confidence and is not affected by extraneous shocks. In particular, we believe that the government needs to fulfil four roles:

1. As is widely discussed, India needs to raise healthcare spending to at least the stated 3 per cent of GDP. There needs to be a serious rethink on how this money will be spent with convergence and comprehensiveness as a goal. I would argue that even 3 per cent is meagre for a country that aspires to be a global player in future. The gap between this achievement and the stated aspiration will have a material impact on the trajectory of the healthcare sector in general, and the pharmaceuticals sector in particular.
2. There is a need to focus on building healthcare infrastructure, particularly in Tier-II cities and rural areas where the government plans to focus during the next decade. A majority of this spending will have to go towards upgrading infrastructure in primary and secondary care centres, i.e., district hospitals, **Primary Health Centers** (PHCs) and **Community Health Centers** (CHCs). It also needs to spell out the role of the private sector and ensure that it is effectively regulated.
3. Training, skilling and certification of human resources in health are critical aspects. There is a need to undertake an audit of the quality of medical and paramedical education, revisit the curriculum and pedagogy in keeping with changing health needs, and the idea of One Health and Climate Change.

Conclusion

This essay has highlighted the importance of human development for economic growth and development. Given India's relatively poor performance, this is a very critical area that requires attention. India's recent experience in dealing with COVID-19 pandemic has created a distorted impression of India's capability and capacity in healthcare provisioning. It is correct to state that India was successful in developing vaccinations and offering medical assistance to pandemic victims. However, this ability to deal with episodic challenges in health, be it plague or SARS or various epidemics should not divert our attention away from the serious shortcomings of public health and primary and secondary level care. Equally importantly, the lack of attention to related policy areas like education, civic sense, provisioning of safe drinking water and sanitation and so on are equally challenging policy issues that require attention for India to achieve improved health outcomes by 2047.

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Rural Livelihood

Women's Collectives as a pathway to Well-Being

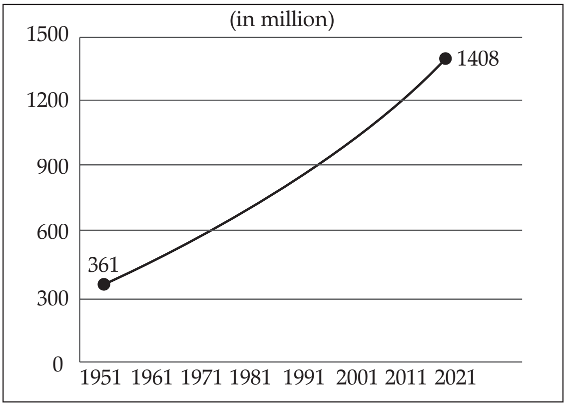
Amarjeet Sinha

1. The spectre of the Bengal Famine of 1943 haunted independent India's first generation of idealist Council of Ministers.[1] Food security received primacy and the Intensive Agriculture Development Programme (IADP) was launched for the assured irrigation districts. While it did secure food grains for our people, the rain-fed areas, especially the Central Indian tribal pocket, remained fragile as far as livelihood is concerned. Poverty reigned supreme and women had no or little role in public discourse, in our nascent democracy, at the grassroots level.[2] Rural livelihoods suffered as a consequence and the persistence of poverty was reflected throughout the earlier decades. Primary education and primary health were neglected,[3] especially in the northern half of India. The devastation of colonial rule was total.
2. Colonial rule had left us in deprivation of an unprecedented order. At India@75 it surely is a psychological victory to have got the better of the colonial masters as per the size of the economy. On Gross Domestic Product (GDP), India is now the fifth largest economy.[4] Given our young population and size, the gains have to reflect in per capita terms as well. On income, employment, human development, gender and social equality, quality of life and overall well-being, we have a long way to go. As the data below will show, our condition in 1947 was dismal on most parameters of growth and development. Thanks to the freedom fighters, first independent government and its thrust through planned development, India could develop resilient and independent institutions, heavy industry capacity, and a few outstanding centres of learning like the Indian Institutes of Technology (IIT). Growth

1. See Jean Dreze and Amartya Kumar Sen: India- The Uncertain Glory.
2. While there were women nationalist leaders, rural women at grassroots level were voiceless.
3. See Census of India Data, NSSO 42nd Round 1986-87.
4. September 2022 assessment; published and discussed in leading dailies.

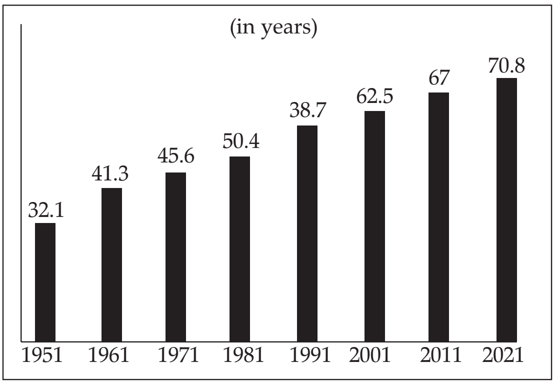
improved but the failure of primary education and primary health during this phase perhaps limited our capacity to follow the East Asian miracle trail in the 1960s and 1970s.[5] While growth started improving in the late eighties, it was only through the 1991 reforms and thereafter, that India moved on at a faster rate of economic growth. As far as poverty reduction, human development and other social indicators are concerned, the gains are more improved post-2005–06. There is still a very long way to go, especially in rural areas. The data below will bring out the Livelihood situation:

Population of India



3. Population growth has been significant, even though fertility rates are now reaching replacement levels.[6] Bihar and Uttar Pradesh need more concerted action on population. Participation of adolescent girls in secondary and higher education has a strong linkage to a decline in fertility. Family Welfare services and higher community awareness have also helped.

Life Expectancy

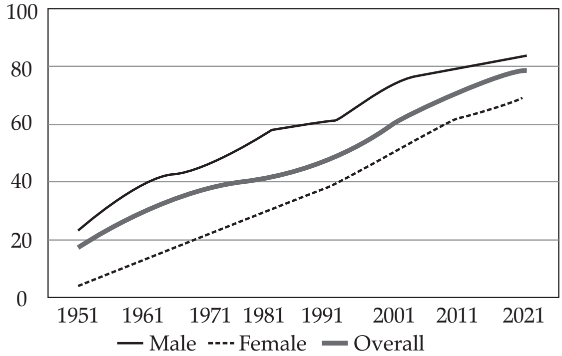


4. With a faster decline in Death Rates, Infant Mortality Rates (IMR), and

5. East Asian Miracle: The World Bank 1990.
6. National Family Health Survey-5: (2019-2021)

under-5 Birth Rates, Life Expectancy has improved significantly. There is still a long way to go to match the developed nations.[7]

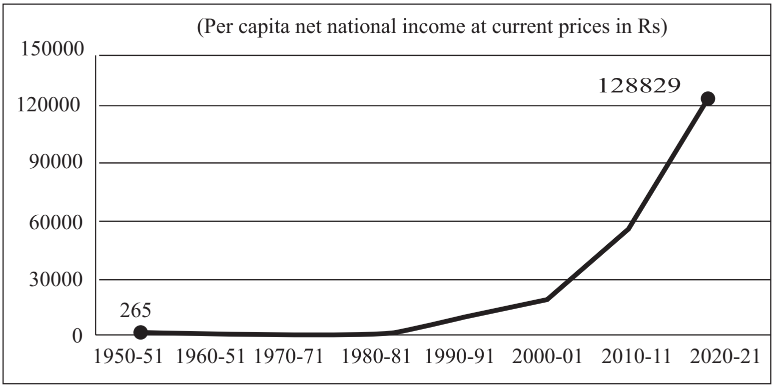
Literacy Rate
(in %)



Source: Registrar General General; NSO India

5. While the literacy rate has improved considerably since independence, women's literacy continues to be lower. Even in the 2011 Socio-Economic and Caste Census (SECC-2011), over 4 crore households did not have a single 25+ age literate.

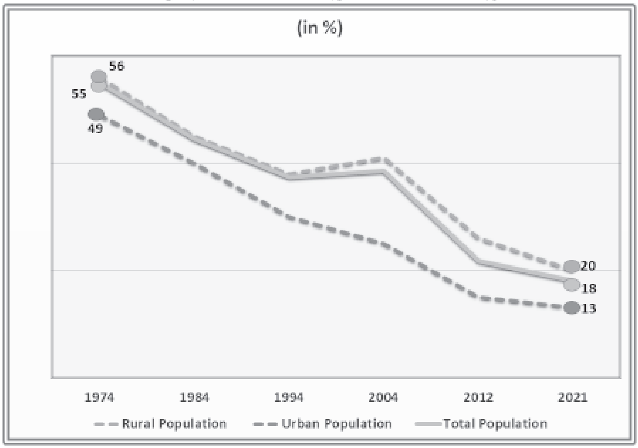
Income



6. Per capita net national income at current prices has grown but is nowhere near the developed world. There is a long way to go in improving the incomes of deprived households. Only 10 per cent of the population earning more than ₹ 25000 per month is a reflection of inequality.[8]

7. Sample Registration System; Census of India 2022.
8. Study on Inequality by Institute of Competitiveness; for the Prime Minister's Economic Advisory Council; 2022

POVERTY ESTIMATES

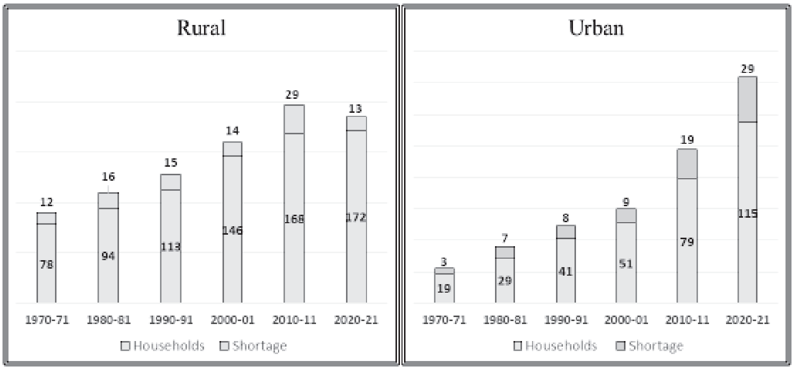


Source: Planning Commission, RBI Handbook, Bibek Debroy et al for 2021

7. Decline in poverty has speeded up since 2005–06, even when we look at Multi-Dimensional Poverty. Social development indicators and asset deficits of the poor are seen in terms of housing, toilets, electricity, roads, Bank accounts, immunisation, cooking on LPG,[9] membership of Self Help Groups (SHGs) in Livelihood Mission, etc.

HOUSING

(No. of houses in millions)



Source: ADBI Working Paper-Tiwari and Rao

8. With the efforts under the Pradhan Mantri Gramin Awaas Yojana (PMAY(G)), the shortage of rural homes came down from 29 per cent in 2010-11 to 13 per cent in 2020–21. The coverage has improved even further thereafter.

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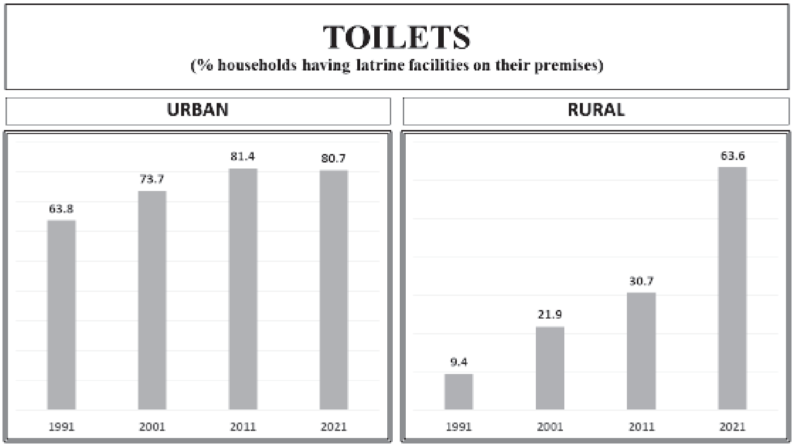
9 National Family Health Survey – 5; International Institute for Population Sciences (IIPS), Mumbai; 2022.



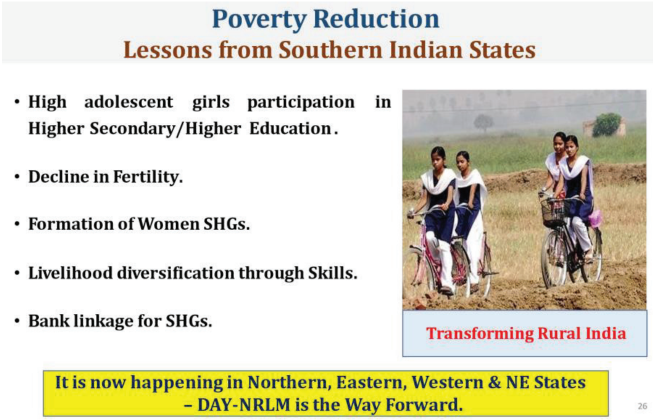
Source: Census of India/Jal Jeevan Mission/NHFS

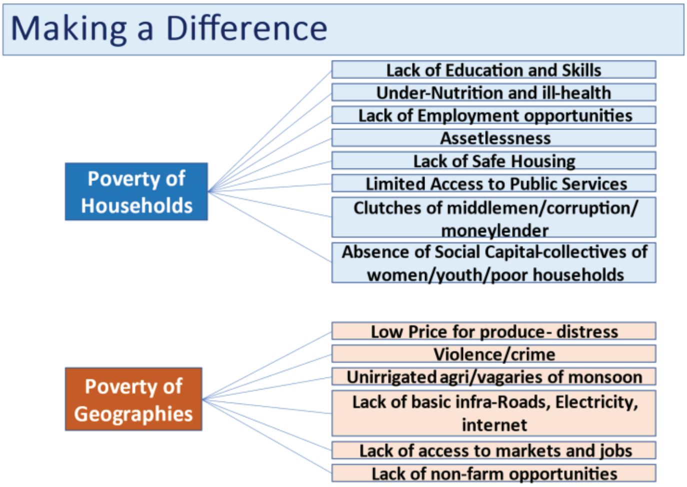
9. The Swachcha Bharat Mission has made a difference, even though the 100 per cent coverage in rural areas is not borne out by the National Family and Health Survey–5 (2019–21)
10. Analysis brings out the success of the Southern Indian States in the decline of poverty. Besides economic growth, the factors listed above also seem to have ensured a more gender-inclusive poverty reduction possible.

SECC 2011
Focused efforts on most deprived sections

Particular	Deprived Households	Interventions Required
Only zero room or one room with kucha walls and kucha roof (D1)	2,37,31,674	PMAY Gramin DAY-NRLM MGNREGS DDUGKY/RSETI NSAP Livelihoods Education/Skills Animal Resources Non-Farm option Markets/Value Social Capital Bank Linkage Enterprise Professionals Horticulture Organic Health Nutrition SBM
No adult member between 16 to 59 (D2)	65,15,205	
Female headed households with no adult male member between age 16 to 59 (D3)	68,96,014	
Disabled member and no able bodied adult member (D4)	7,16,045	
SC/ST households (D5)	3,85,82,225	
No literate adult above 25 years (D6)	4,21,47,568	
Landless households as manual casual labour (D7)	5,37,01,383	
TRANSFORMING LIVES AND LIVELIHOODS MEASURING OUTCOMES		

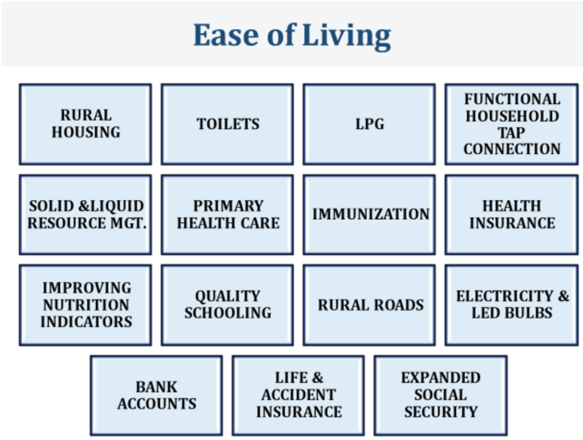
11. The numbers bring out the challenge of deprivation even with easily verifiable indicators. Over 89 million households reported some or the other deprivation and that has been the thrust under Ease of Living and efforts at improving the asset base of deprived households.

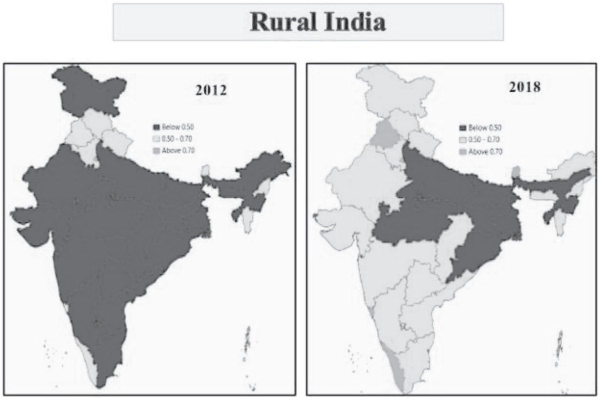




12. Studies on poverty bring out the importance of both factors, Poverty of Households and Poverty of Regions. Given the multidimensionality of poverty, it becomes imperative to adopt decentralised governance, convergence and community connect. Local Governments must have responsibility for the 29 sectors assigned to them by the Eleventh Schedule.
13. The two figures above bring out the focus on Ease of Living, more systematically since 2014. The sixty-ninth Round National Sample Survey Office (NSSO) in 2011–12 gave the state of condition on 26 parameters like drinking water, sanitation, housing, pucca drains, and so on. The same 26 parameters were assessed in the seventy-sixth Round NSSO survey in October 2018. Clearly, there was an improvement. It is this process that needs to move towards saturation so that no one is left behind. The following illustrations provide the State-wise data on Multi-Dimensional Poverty on NITI Aayog's index using the 2015–16 National Family Health

Survey (NFHS) data. With 2019–21 NFHS-5, the improvement will surely be significant given the thrust on pro-poor public welfare over the last eight years.

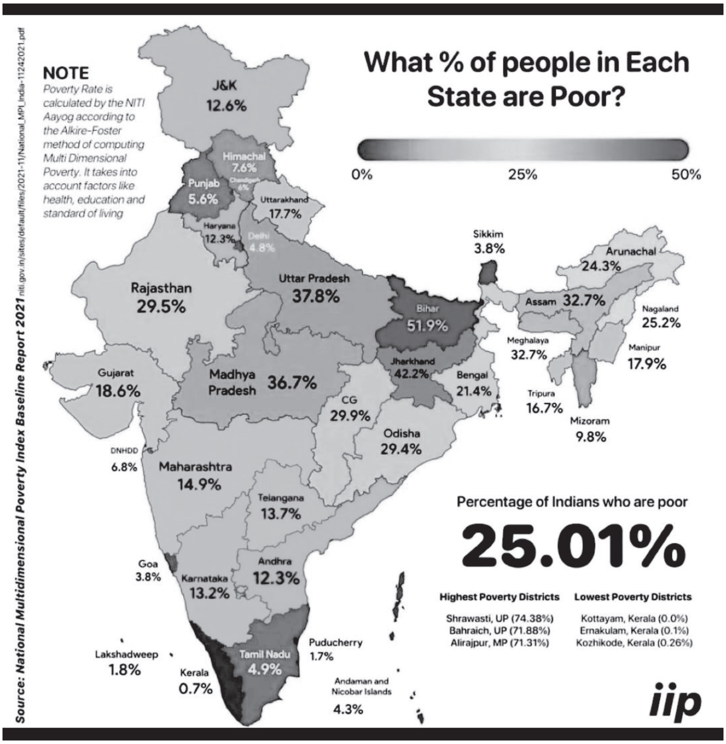


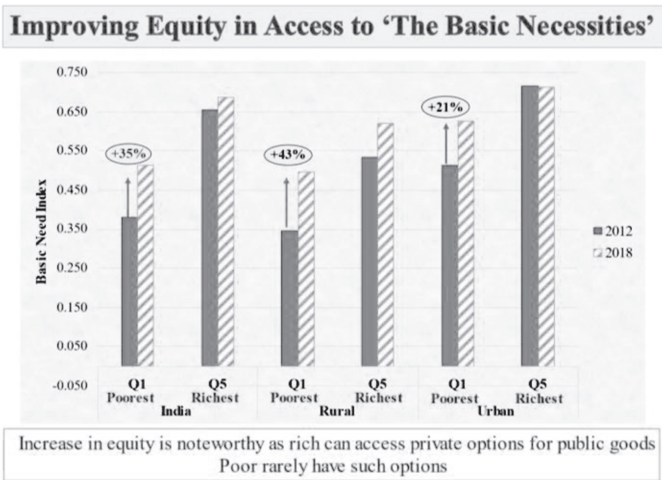


14. The Global Multi-Dimensional Poverty Index 2018 brought out by the Oxford Poverty & Human Development Index (OPHI) 2018 mentions India making momentous progress in reducing multi-dimensional poverty. It says, 'India's scale of multi-dimensional poverty reduction over the decade from 2005-06 to 2015-16 – from 765 million poor persons to 364 million – brings to mind the speedy pace of China's poverty reduction, which occurred over more than 20 years'.[10]
15. Similarly, the Brookings Institution published a note on a new poverty narrative which stated that poverty in India had fallen sharply and at the end of May 2018 'trajectories suggest that Nigeria had about 87 million people in extreme poverty, compared with India's 73 million'. The United Nations Inter-Agency Group for Child Mortality Estimation 2018 similarly brought

10 Sabina Ikere; OPHI; 2019.

out the fact that India had managed to reduce Under-Five Mortality Rate from 126 in 1990 to 39 in 2017. Likewise, the infant mortality rate had fallen from 89 in 1990 to 28 in 2020.





16. The World Bank Report (2022) states that extreme poverty in India in 2019 was 12.3 percentage points lower than in 2011 (falling from 22.5 per

cent in 2011 to 10.2 per cent in 2019).[11] Poverty reduction was higher in rural (Declining from 26.3 per cent to 11.6 per cent between 2011 and 2019). The study also found that farmers with small landholding sizes have experienced higher income growth. The rate of poverty decline between 2015 and 2019 was faster than in 2011–2015. I had written a piece for The Indian Express in November 2019 titled 'A Greater Ease of Living' where I made the argument of significant poverty reduction because of the Hon'ble Prime Minister's thrust on improving ease of living in the form of Ujjwala Gas connection, electricity connection, PM Awas Yojana, Swachh Bharat Mission, Mission Indradhanush, Jandhan Bank accounts, Deendayal Antodaya Yojana-National Rural Livelihood Mission, improved coverage under National Food Security Act across all States/UTs, and so on.

17. While debates will rage pertaining to the methodology (on which the detailed World Bank Report itself provides a detailed explanation), it is important to understand what reduced poverty in rural areas at a much faster pace. I had the good fortune to lead Rural Development and Panchayati Raj from 2015 to 2019, and thereafter, till July 2021 in the PM's office. While it was a whole of government, whole of society and Jan-Bhagidari based thrust on pro-poor public welfare where every Department played a major role, it will be useful to understand some key factors that contributed to the success. These were-

18. Firstly, the identification of the deprived households based on the Socio-Economic and Caste Census (SECC) 2011 across programmes like Housing, Gas connection, Free Electricity connection, Ayushmaan Bharat, etc. helped in creating a constituency for the pro-poor public welfare of the deprived irrespective of caste, creed or religion. Completing and releasing a much-delayed SECC 2011 data was one of the first tasks we accomplished in July 2015. It was an ideal partner in promoting Sabka Saath, and Sabka Vikas. Deprivation being the basis, Schedule Castes (SCs) and Schedule Tribes (STs) got higher coverage and similarly erstwhile backward regions of the country like Bihar, Madhya Pradesh, Rajasthan, Uttar Pradesh, Jharkhand, Odisha, Chattisgarh, Assam, Rajasthan, rural Maharashtra, and so on got a larger share of the benefits as more poor, deprived households are in these areas. This surely was a game-changer for social and regional balanced development. Validation by Gram Sabha and the addition of social groups to cover the poor uncovered was also done on the principle of no one should be left behind.

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11. Working Paper of The World Bank, using the CMIE household data, duly adjusted. Also see Dr. Surajit Bhalla's paper in The Indian Express; 2022, using the free foodgrain cost to assess on the 1.90 dollar per caita.

19. Secondly, the coverage of women under the Deendayal Antodaya Yojana (DAY) and Self Help Groups (SHG) moved up from 2.5 crores in 2014 to over 8 crores women, with more than 75 lakh SHGs[12] working very closely with over 31 lakh elected Panchayati Raj representatives, of whom more than 40 per cent are women. It provided for a robust framework of the community connect and social capital that helped every programme, from the Rani Mistris for Swaccha Bharat to community mobilisation for effective implementation and accountability. The Panchayati Raj Institution (PRI)-SHG partnership framework provided an opportunity for speedier poverty reduction and accountability, particularly the use of IT/Direct Benefit Transfer (DBT)/Aadhar in all payments. Using Aadhar cleaned up the system of corruption at all levels and ensured that the funds reached those for whom it was meant. Likewise, the use of technology in geo-tagging house under construction and following up on Panchayat Infrastructure, cleaned up delivery mechanisms in many places.
20. Thirdly, the Finance Commission transfers were large and directly to Gram Panchayats, leading to the creation of basic infrastructure like pucca village roads and drains at a much faster scale in rural areas.[13] The very high speed of road construction under Pradhan Mantri Gram Sadak Yojana (PMGSY) created even greater opportunities for employment in nearby larger villages/ census towns/kasbas by improving connectivity for mobility. PMGSY reduces poverty by opening opportunities.
21. Fourthly, with the social capital of SHGs, the availability of credit, both directly through banks and also through micro-finance institutions, Micro Units Development & Refinance Agency (MUDRA) loans, etc., increased considerably. Deendayal Antyodaya Yojna-National Rural Livelihoods Mission (DAY-NRLM) prioritised livelihood diversification and carried out detailed micro-credit plans for greater credit disbursement. This explains the increase in real incomes of small farmers. New businesses, both farm and non-farm livelihood have been taken up by women's collectives on a very large scale with appropriate skill augmentation and handholding by Community Resource Persons.
22. Fifthly, the Gram Swaraj Abhiyan in 2018, in two phases, where 63974 purposively selected villages with a very high population of SCs and STs were saturated with 07 benefits, namely, gas connection, electricity connection, LED bulbs, accident insurance, life insurance, bank account and immunisation. Elaborate monitoring arrangements made a fundamental transformation possible in the poorest of villages where a very large number of deprived households were located. The performance of line Departments

12. DAYNRLM – MIS – Real Time. www.MoRD.nic.in
13. Recommendations of the Fourteenth Finance Commission;

went up manifold due to a community-led action. The gains in gas connection, Bank accounts, electricity connection and immunisation can be seen in the findings of the National Family Health Survey – V, 2019–2021.

23. Sixthly, the thrust on universal coverage for individual household latrines, LPG gas connections, homes for those in kaccha homes, electricity connections etc. ensured that no one is left behind. It further reinforces the constituency of the poor and created what is often referred to as Labarthi Varg. The social justice platform was well established.
24. Seventhly, this was also a period which recorded the far higher transfer of public funds to rural areas, including the State's share and in some programmes through extra-budgetary resources as well.[14]
25. Eighthly, the thrust on a people's plan campaign, 'Sabki Yojana Sabka Vikas' for preparing Gram Panchayat Development Plans and for ranking villages and Panchayats on human development, economic activity and infrastructure from 2017–18 laid the foundation for very robust community participation and accountability involving Panchayats and SHGs effectively. This and the assessment of gaps in every village and Gram Panchayat helped to focus on where the thrust was required, leading to a Mission Antyoaya Plan of making a Panchayat poverty free.
26. Ninthly, through processes like social audit, concurrent audit etc. efforts were made to ensure that resources are fully utilised. Many changes were brought about in programmes like Mahatma Gandhi National Rural Employment Guarantee Scheme (MGNREGS) to create durable and productive assets. A very large number of individual beneficiary schemes for livelihood for marginal and small farmers were taken up like farm ponds, irrigation wells, vermicomposting, soak pit construction, 90 days work for house construction, and so on. This helped marginal and small farmers in improving their incomes and diversifying their livelihoods.
27. Tenthly, the thrust and competition amongst States for better performance on rural development helped. Irrespective of the party in power, nearly all States and UTs focussed on improving livelihood diversification in rural areas and on improving infrastructure significantly. The adoption of technology and principles of improved financial management was mandated in the programme itself. Capacity building at every level in the States was a priority to ensure the adoption of reforms and technology.
28. All these factors have contributed to improved ease of living of the deprived households and in improving their asset base. This has led to the decline in poverty. A lot has been achieved, a lot remains to be done, especially with the adverse consequences of COVID on children's learning and adults

14 Analysis of Budget Documents.

employment and wage-earning opportunities. COVID and the Ukraine crisis pose challenges to the gains made in poverty reduction up to 2019.

29. As all of us are aware, the Southern Indian States like Kerala, Tamil Nadu, Karnataka, Andhra Pradesh, and Telangana have fared much better in poverty reduction and economic well-being. If one tries to understand the factors that have contributed to these changes, especially in Kerala and Tamil Nadu, six key interventions stand out as most significant:-
    (i) High rates of adolescent girls participation in secondary and higher education on account of better educational provisioning.
    (ii) A functional public system of health care (especially in Tamil Nadu and Kerala) alongside a private sector in health care for universal health coverage of reasonable quality. A functional public system has had consequences for the cost and quality of care in the private sector health care in these States.
    (iii) The very fast decline in fertility rates on account of higher participation in secondary and higher education and a functional publicly funded primary health care system.
    (iv) The act of very high secondary, and higher secondary school participation by adolescent girls contributed to a group identity and the formation of women Self Help Groups (SHGs) on a large scale.
    (v) Women Self Help Groups and growing social capital through thrift and savings generate an environment for livelihood diversification through skills on a large scale.
    (vi) Access to Bank loans through women Self Help Groups on account of enabling Reserve Bank of India (RBI) circular issued 26 years ago at the time of Dr C Rangarajan's Governorship and reiterated each year through an Annual Master Circular.
30. The six key interventions mentioned above contribute to the most rapid decline of multi-dimensional poverty. Social development is not only good social justice; it is also good economics. Trends similar to Southern Indian States have started under the Deendayal Antyodaya Yojana-National Rural Livelihoods Mission (DAY-NRLM) in a large number of Northern, Eastern, and North Eastern Indian States. The participation of adolescent girls in secondary and higher education in these States has also seen significant expansion despitethe quality of public education unsatisfactory. The mere participation in school education even with limited learning creates the identity of collectives of adolescent girls who then form women Self Help Groups and move on to diversified livelihoods. Clearly, an even faster rate of decline in poverty is possible through these approaches.

31. Through convergent planning under Mission Antayodaya[15] starting 2 October 2015 2015 in 2569 backward Blocks, the Department of Rural Development was able to significantly improve the participation of women in Gram Sabhas and in ensuring that poor households were given the opportunity for livelihood diversification through the programme funds.
32. Deendayal Antyodaya Yojana-National Rural Livelihood Mission (DAY-NRLM) now touches the lives of over 8.38 crore women organised into 76.94 lakh Women Self Help Groups. A large number of these women have credit linkage and together they have leveraged ₹5.27 lakh crore loans from Banks during the last eight years. In spite of a nearly 30 per cent growth year on year for the last eight years, DAYNRLM SHGs have managed to bring down the Non-Performing Assets (NPA) from over 7 per cent in 2012–13 to a little over 2 per cent now[15]. At a time when the corporate borrower tales of woes and deception hit the headlines often, these poor women have not only borrowed but used it effectively to improve their lives and livelihoods and return it as well. The lending happened based on a detailed micro credit plan for each household, prepared after ascertaining the asset base and resources through a participatory process. It is for this reason that NPAs have been low and gained large.
33. It is no longer a story of just the five Southern Indian States whose SHGs accounted for over 84 per cent of the total lending till as recently as 2013–14. An exponential increase in lending to DAY-NRLM SHGs in States like Bihar and West Bengal indicates growing confidence of Banks in lending directly to Community Institutions of the poor rather than through Micro Finance Institutions (MFIs) alone. Loans through MFI are often good for consumption but not for economic activity as it reaches the borrower with anywhere between 20–30 per cent interest rate. A diverse range of economic activities, from setting up 10,471 Custom Hiring Centres, and 760 public transport systems in remote regions, to retail shops, restaurants, and nano production units of farm and non-farm products, are all being undertaken by women's collectives. What explains this transformation of lives and livelihoods on an unprecedented scale through the DAYNRLM over the last 8 years? How has the movement from social capital to economic activity happening? What is the further pathway to a more shared and equitable inclusive economic growth opportunity?
34. **Firstly**, the intensive processes of developing social capital under DAYNRLM have stood the test of time. They have emerged as vibrant community institutions of the poor. They have expanded their mandate from following only the Panchasutra of good savings and borrowing to

15 Mission Antyodaya – Framework for Implementation; Ministry of Rural Development (MoRD).

'Dasasutra' that encompasses access to public services, education, health and well-being of poor households. The Rani Mistris of Simdega in Jharkhand reflects the confidence in these women collectives to break new ground in economic activity and skills. Vibrant community institutions of the poor are ideal economic activity opportunities as well if pursued through relentless capacity building and hand-holding.

35. **Secondly**, the biggest resource in this movement has been the Community Resource Persons (CRPs). These are women who were poor and have won the battle against poverty through hard work and toil. Over 3.5 lakh such women CRPs go around the country setting up women's collectives and making them vibrant. These foot soldiers of the Livelihood movement are the best example of national integration. Women from Kerala, AP and Bihar have spent months with women in remote corners of the North Eastern States and Jammu and Kashmir.

36. **Thirdly**, a conscious effort has been made to promote the convergence of institutions and resources. The framework for the partnership of elected Panchayati Raj Leaders with women Self Help Groups (SHGs) was developed and incorporated under the new governance improvement programme of Panchayats called Rashtriya Gram Swaraj Abhiyan (RGSA). Women SHGs and Panchayat Leaders are to be trained together to find more meaningful solutions to the challenges of development. The women SHGs were involved in Gram Sabha meetings and in developing Gram Panchayat Development Plan (GPDP) under the Sabki Yojana Sabka Vikas effort.

37. **Fourthly**, financial resources from all ongoing programmes in rural areas were focused on villages with the social capital of DAY-NRLM women SHGs as a priority. Individual Beneficiary Schemes under Mahatma Gandhi National Rural Employment Guarantee Scheme (MGNREGS) for housing, animal sheds, farm ponds & wells, soak pits, and vermicompost, were all provided on a priority wherever social capital was available. Likewise, priority in implementation was given under the Pradhan Mantri Awaas Yojana-Gramin (PMAY-G) Housing Programme for such villages.

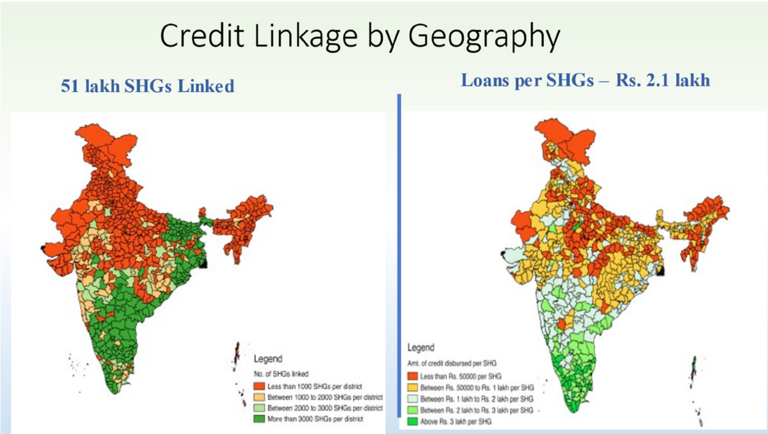
38. **Fifthly**, opportunities for skilling and diversification of livelihoods were provided on scale through Skills programmes of the Ministry of Rural Development (Deen Dayal Upadhyaya Grameen Kaushalya Yojana (DDU-GKY), Rural Self Employment Training Institutes (RSETIs)) as also Community Training Institutions, Krishi Vigyan Kendras (KVKs), etc., directly under DAYNRLM. Both farm and non-farm livelihoods are encouraged to enable a more diverse livelihood framework.

39. **Sixthly**, credit linkage for these women SHGs was given priority and a series of confidence-building measures were undertaken to give Banks the comfort that these women will not only borrow but also return on time. The setting

up of the Community Based Recovery Mechanism (CBRM), positioning Community Resource Persons (CRPs) called Bank Sakhis to act as a bridge between the community and the Bank and Bank Mitras from women SHGs as Banking Correspondents agents helped in generating confidence for the DAY-NRLM system. The training of Bank Managers and efforts at financial literacy, and skills also helped. After settling debt and meeting consumption spending, many SHG women now borrow for economic activity, education and health needs. The Start-Up Village Entrepreneurship Programme (SVEP) in 100 plus selected Intensive DAY NRLM Blocks with higher-order lending to families of SHG, including youth and men, has also facilitated higher-order economic activity. The unique cadre of Community Resource Persons for Enterprise, developed by the Entrepreneurship Development Institute of India (EDII) Ahmedabad and the Kudumbsree, Kerala, along with support for market intelligence and feasibility study of enterprises, ensures a very high success rate in the over one lakh such SVEP cases already financed.

40. **Seventhly**, the pro-poor public welfare programmes for improving the ease of living of poor households required the active involvement of women SHGs and Panchayati Raj Institutions (PRIs). This improved the asset base of many women SHGs on account of support for rural housing, toilets, gas connection, electricity connection, Bank account, health insurance, accident & life insurance etc. The DAY-NRLM women played a very important role in building a movement for better public services at the local level. This was seen most remarkably during the Gram Swaraj Abhiyan in 65000 villages to guarantee seven very basic services for the deprived.

41. **Eighthly**, the efforts at promoting innovative interventions in farm and non-farm livelihoods broke new ground in leveraging the social capital of SHGs for sustained economic activity. The setting up of 10,471 Custom Hiring Centres and 760 rural transport managed by SHGs is an indication of the diversity of livelihood development and opportunities. Many groups make money through organic manure, managing restaurants, better marketing for products through Saras Melas and e-marketing opportunities, etc.



42. The poor women have come out of extreme chronic poverty and are now poised for higher-order credit support to improve the thrust for enterprise and sustainable economic activity. Nano enterprises of SHG women have to be formalised to develop them into micro and small enterprises with proper value chain development and leveraging markets for them. Holistic credit guarantee systems for an even higher level of credit where social capital exists are required to translate the potential of social capital into sustained rates of higher economic activity. Credit for those who have come out of poverty to move faster and further up the well-being ladder is the biggest challenge of development today. It holds the key to more shared and inclusive growth with less inequality. Deendayal Antyodaya Yojna-National Rural Livelihoods Mission (DAY-NRLM) and its women have the social capital and the ability to make transformational changes in lives and livelihoods. Social capital is not only good for social justice; it is also the best foundation for shared sustained economic progress.

43. There are many challenges in developing the credit linkage for higher-order economic activities. When women borrow from the SHG account, the mapping of the SHG account to the beneficiary account is often not there. As a consequence, the credit history of the individual does not get created and Credit Information Bureau (India) Limited (CIBIL) scores are low. This reduces creditworthiness and the confidence of Banks to lend higher amounts. Painstaking work to get every Members Bank account Adhaar linked with mapping with the SHG account has been done in most of the States. This is improving the CIBIL score of women wanting to come out of deprivation and poverty.

44. The second challenge is about the working capital, as many larger production arrangements need the purchase of raw materials as per season and over a short time. Without formalisation through an Income Tax Registration, the MSME Adhaar Registration, and the mapping of the individual to the SHG

account, Banks cannot extend working capital. This too is being resolved.

45. The third challenge is that housing and dwelling units in many States do not have revenue records and agricultural land cannot be offered as collateral or mortgage, limiting the options for mobilising formal Bank credit. The Swamitva initiative for giving revenue cards for dwelling and housing units of the Ministry of Panchayati Raj with the use of drone-based survey, Panchayat-based resolution of disputes through the Gram Sabha, and the issue of revenue cards is facilitating access to formal Bank credit that requires collaterals.

46. The fourth challenge is that without collateral lending to an SHG was limited to Rupees Ten lakhs only by the Reserve Bank of India. In 2020, it has been enhanced to Rupees twenty lakhs by providing a credit guarantee fund on the lines of the MSME loans for SHGs.

47. The fifth challenge in going to scale is not subsidies but human resources. Scaling up of businesses, and setting up of Producer Companies, require quality professional technical and finance Managers. The biggest scarcity in rural areas is the difficulty in getting good professional Managers to work with women collectives to develop a sound system of production and marketing. On an experimental basis, we extended support to Milk Producer Companies that we set up in a few districts of Madhya Pradesh and Bihar, through the National Dairy Development Board Services (NDDB Services) on a clear understanding with the Producer Company that HR support from the Livelihood Mission will be for three to five years by which time, the scale of operations of the Producer Company should be such that the salaries of the Professional Managers can come from the incomes of the Producer Company. A few have already broken even and will not need further support from the Mission. It is easier to do this in dairy which lends itself to easier collectivisation and a discipline of daily milk pouring and payments. The Farmer Producer Organisations supported by the Agriculture Ministry have also provided professional support for a few years. It is important to understand that it is not subsidies but professional support and market linkages that make the difference.

48. The sixth challenge is of marketing after processing. The Food Processing Ministry decided to work with NRLM SHG collectives with good social capital Under the Prime Minister's Formalisation of Micro Enterprises. Efforts to onboard production units on the Government e Marketplace (GeM) portal on a large scale as also other e-marketing portals like Amazon, Flipkart, Big Basket, etc. have also facilitated the linkages. Under the Start-Up Village Enterprises Programme of NRLM, over lakh units have already been extended higher concessional loans from the Cluster Level Funds and Bank linkage. They also provide for Community Resource Persons

of Enterprise (CRP – Enterprise) who is a local, with business practices, costing, marketing, pricing and supply chain professionalism. They have been intensively trained by the Entrepreneurship Development Institute of India (EDII) Gandhinagar and Kudumbsree Kerala across the country. The first Evaluation of SVEP indicates the success of the initiative in promoting local-level enterprise for Businesses.

49. Many of these challenges find a place in the Case Studies in Sourav Mukherji's Study on Inclusive Business Models–Transforming Lives and Creating Livelihoods. The Dungarpur Solar Light production Unit and the assembly units of Solar Lamps in a large number of States by SHG women show how prime movers like Professor Chetan Solanki, with the support of MNRE, and the social capital of SHGs, could take the Solar Lamp provision to scale. More power to such prime movers. Mukherji's case studies bring out the challenges of leadership and professional management to take these enterprises to scale.

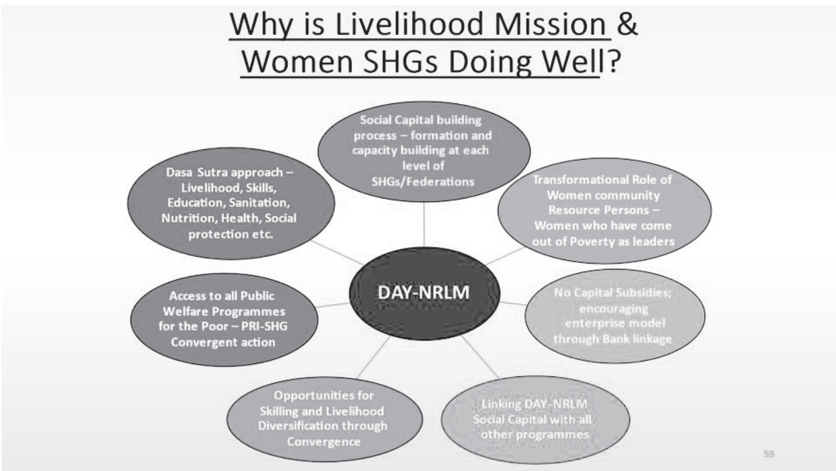
50. It is clear from the challenges listed above, none of them is insurmountable. Enterprises need careful scientific planning, assessment of resources and market potential. FPOs too have challenges in scaling up for similar reasons. State intervention in buying products is not a solution. Far from it, public subsidies are not the way forward. Professional support for well-trained Technical, Finance and Marketing Managers is the critical missing piece, especially with the compliance requirements for Producer Companies being very high in the Companies Act. Demystifying governance and audit processes and facilitating the credit linkages will unleash the power of women's collectives. The challenge of improving Female Work Participation Rates hinges on our ability to quickly scale up opportunities for livelihood diversification for the 83.6 million members in rural areas and over 6 million in the Urban Livelihood Mission. Social capital is waiting to be harnessed for multiple livelihoods as the pathway to higher incomes.

51. While it is true that collectives of women take 3–5 years to mature, it is also true that a large number of collectives are waiting to leverage the credit from formal institutions to diversify livelihoods on a scale. With Non-Performing Assets of barely two and a half per cent, we have to move from distrust to trust. Bank Sakhis and Banking Correspondents from the SHGs are building a relationship with formal financial institutions. Through processes like the Community Based Recovery Mechanism (CBRM), Branch Managers in West Bengal and Bihar have significantly scaled up lending directly to SHGs instead of lending through Micro Finance Institutions (MFIs). While MFIs meet an important consumption loan need of poor households, the rate at which that credit is accessed is not good for economic activity. It is difficult to compete in the market with MFI credit at anywhere between

20-30 per cent if other units are accessing credit at 11–14 per cent Banks find it convenient and safe to lend through MFIs as monitoring returns at the last mile becomes easier. However, for businesses to grow, we need direct funding.

52. It is interesting to look at Streenidhi in erstwhile Andhra Pradesh, playing the role of an on-lending institution, registered as a Cooperative institution of the SHG State Apex Body. Banks have trust in lending as recoveries are timely with little over dues. With the use of technology and digitisation, StreeNidhi can sanction consumption loans in 24 hours, an important factor behind its success. Efforts to replicate the on-lending institution are being attempted in other States as well. The Girish Chaturvedi Committee that examined the issue, recommended an on-lending institution under the Cooperative Act. Odisha has a memorandum of understanding (MoU) with the State Bank of India with a State Guarantee to accept the State Rural Livelihood Mission as an on-lending institution. In Tamil Nadu, Banks are comfortable lending directly to Cluster Level SHG Federations. In Kerala a large number of Joint Liability Groups (JLGs) have been formed of Kudumbshree women as SHG is not a legal entity for formal credit lending by Banks; JLGs are.

53. The women's collective movement under the Livelihood Mission is an opportunity that will determine the trajectory, speed and quality of inclusive growth in India. Women's Work Participation Rates are the greatest challenge before the country today in growing faster. The lesson from across the developed world and the journey of the East Asian Nations and China indicate the positive consequences of higher Women's Work Participation Rates on the growth of GDP. The five trillion dollar dream will be fulfilled through the facilitation of such an inclusive pathway to progress.



Learning from Women Farmers

54. There was a time when women's work in agriculture and animal husbandry was rarely counted. As per the 2015–16 Agriculture Census, 11.72 per cent of the total operated area in the country was operated by female operational holders. Civil society assessments suggest three-fourths of the full-time workers on farms are women as men move to cities for higher wages. Yet, there was little attention to empowering women in agriculture. The Rural Livelihood Mission initiated a Mahila Kisan Sashaktikaran Pariyojana (MKSP) in 2010-11 to '*meet the specific needs of women farmers*'.
55. Over the last decade, 1.74 Crore women have joined the Livelihood Mission's work through a Community Managed Sustainable Agriculture (CMSA), a Value Chain Development thrust, Organic Cluster Promotion and a Climate Resilient agriculture intervention under the Rural Livelihood Mission. The efforts focused on the small and marginal women producers with a household-centric approach. Accepting the need for diversified livelihoods, the thrust was on agroecological practices, Non-Timber Forest Produce (NTFPs), Livestock, Skill Based Enterprise and Value Chain activities. The thrust was on the small and marginal farmers, mostly in rain-fed areas, for risk mitigation, income increase, cost reduction and sustainability.
56. Over 60,000 Krishi and Pashu Sakhis, women Community Resource Persons (CRPs), who had themselves come out of poverty, have been developed as agents of change through their intensive capacity building in partnership with National and State Resource Persons and Institutions like Krishi Vigyan Kendras. Farmers Field Schools (Krishi and Pashu Pathshalas) were set up in partnership with the women's collectives. Seed preservation through own farm seeds, seed rotation, and seed treatment by brine solution, cow urine, beejamrut (cow dung, cow urine and lime), and Trichoderma (bio fungicide) was tried.
57. For improving the soil, promotion of soil moisture, conservation and soil nutrient management practices like NADEP, vermicompost, Jeevamrut (cow dung, urine and mud), Ghanajeevamrut, and Azola were attempted. Ridge and furrow, ridge to valley, trenches, corner pits, and farm ponds for in situ moisture conservation and crop protection through trap crop, yellow sticky trap, Border crop, Brahmastra, Agneyastra, and Neemastra were encouraged. Women farmers were trained through practice in each of the Farmer Schools. Agri Nutrition Gardens were promoted at the household level with multi-layer cropping, trees like Moringa, papaya, creepers, leafy vegetables, trellis, poultry, duckery, goats, use of kitchen household wastewater, kitchen garden kits through convergence and awareness generation.

58. 2014–15 onwards, concerted efforts were made at convergence with the Mahatma Gandhi National Rural Employment Guarantee Scheme(MGNREGS) under which over 60 per cent was spent on agriculture and allied activities and thrust was given on individual productive assets like farms ponds, animal sheds, dug wells, vermi and NADEP pits, water and soil conservation, soak pits, solid resource management, plantations, etc. Ashok Pankaj's study (2017) highlighted how individual beneficiary schemes went up from a fifth of the works taken up in 2012–14 to two-thirds (67.71 per cent in 2019–20. While suggesting how Mahatma Gandhi National Rural Employment Guarantee Act, 2005 (MGNREGA) can be re-engineered for doubling farmers incomes, the study in six districts of Uttar Pradesh, Rajasthan and Tamil Nadu confirmed the major gains in incomes of these households as a consequence of this thrust. Landless with household nutrition gardens could also take up animal sheds and 90 days of wage work for Pradhan Mantri Awaas Yojana Gramin house construction. Therefore, the landless were also not left out.

59. This led to a meteoric increase in income-generating durable assets as compared to the MGREGS of 2005–2014. Between 2014 to July 2022, 35.76 lakh farm ponds, 307.16 lakh Natural Resource Management Works, 21.01 lakh horticulture works, 67.03 lakh plantations, 11.38 lakh of check dams, 10.87 lakh dug wells, 11.90 lakh Cattle sheds, 16.62 lakh NADEP Vermicompost pits, 49.99 lakh water conservation structures, 24.95 lakh Soak Pits, and a total of 377.08 lakh individual beneficiary works came up. This number was only 26.58 lakh for 2005–2014. Sikkim's organic story, Madhya Pradesh's agricultural improvements, Jharkhand's vegetables, fruits and animal resources thrust, Odisha's innovative NTFP and mangoes-related initiatives, Rajasthan's water management, Andhra Pradesh's natural farming, Gujarat's and Himachal Pradesh's efforts at Prakritik Kheti, have all gained from such social capital, convergence and credit. It is not like 2014-2022 did not have rainfall-efficient districts; it is just that rain-fed areas are better prepared than before. From river rejuvenation efforts in Uttar Pradesh's Banda to the revival of tanks in Udham Singh Nagar in Uttarakhand, a very silent revolution on water management has been possible, even though the challenge is herculean in many parts of the country even now. Documentation of such efforts by IITs in three volumes of successes under MGNREGS and its contribution to rain-fed agriculture, confirms the gains. Institute of Economic Growth (IEG) Study quantified the gains in terms of productivity, incomes, fodder availability and improvement in the water table. Community-led Social audit exposures in MGNREGS only indicate the efforts to further ensure accountability. Down to Earth tracked the water conservation successes of fifteen first years villages of MGNREGS in its twentieth year.

60. The thrust on convergence reflects in 24520 Custom Hiring Centres for agricultural operations, managed by Women's Collectives, 84550 Banking Correspondent Sakhis as CRPs, Rupees 5.20 lakh crore Bank Linkage with a little over 2 per cent NPA, 2.08 lakh Start-Up Village Enterprises, 1811 Women managed public transport and so on. Mapping of SHG accounts to individual accounts, formalisation of SHG groups for financial purposes, and creating credit histories, will enable higher-order loan eligibility, especially for working capital for such groups.

61. The entire initiatives have been independently evaluated by the University of Stanford (2019), the Institute of Rural Management Anand (2018), the Institute of Economic Growth (under Dr Manoj Panda 2017), A.C. Nielsen (2019) and others, clearly establishing gains in incomes due to diversified livelihoods of women farmers. Case Studies by Tata Institute of Social Sciences (TISS) Mumbai on Mahila Kisan Sashaktikaran Pariyojana (MKSP) farmers in Chotaudepur in Gujarat with the Shroff Foundation, Professional Assistance for Development Action (PRADAN's) work in village Bhadubeda in Keonjhar Odisha, work of Krishi Sakhi like Champa Singh in Anuppur Madhya Pradesh, Urmila Linda in Namkum Block of Ranchi, Jharkhand, Ranjana Tai in Koli village of Yeotmal in Maharashtra, and thousands of others in thousands of villages, confirm the role of hand-holding by CRPs for income gains. The 6595 households, 173 SHGs, 162 Community Resource Persons and 306 village based study across 8 States (Rajasthan, Chhatisgarh, Madhya Pradesh, West Bengal, Jharkhand, Karnataka, Assam) provide the following findings-

    1. Households (HHs) with women receiving training have a higher average annual income from agriculture, animal husbandry and non-timber forest products (NTFP) than in HHs in control.
    2. HHs with women farmers trained report 1.3 times more income from agriculture than control HHs.
    3. Dietary diversity was better in intervention villages.
    4. Adoption of Agro-Ecological Practices like land preparation, soil and plant nutrition management and plant protection were more in treatment villages (59 per cent).
    5. Three major veterinary services received for the livestock (through Pashu Sakhi) were medicines, vaccination and deworming.
    6. In treatment, income from livestock was more than control. (2.5 times).
    7. In the majority of households, livestock is a secondary activity, but in treatment, in the majority of the households, there are multiple sources of livelihood.

62. The lessons on natural farming and climate resilience based on all the studies are as follows –

    1. Sustainable agricultural practices are possible through an intensive hand-holding in a community (women's collective) led the movement for transformation.
    2. Convergence with the social capital of women collectives substantially increases incomes. It takes some years for a group to mature for livelihood diversification.
    3. Animal resources are a source of very major income gains but require new practices and implementation.
    4. Multiple livelihoods are the way landless, poor marginal and small farmers can improve their incomes. A single-crop system is not the way out. Diverse Farm and non-farm livelihoods need to be simultaneously developed.
    5. The cost of agriculture and the use of chemical fertilizers comes down with the extensive use of Biofertilizers and Biopesticides. However, productivity gains from agriculture only remain modest, though sustainable.
    6. Credit availability and linkage of women's collectives with initiatives of all concerned Departments (Agriculture, Horticulture, Animal Resources, Forests, MSMEs, Fisheries, Food Processing, Rural Development, etc.) facilitates effective use of public resources and returns therefrom.
    7. We cannot be purists on natural farming like Palekarjee as there are distinct effective sustainable agricultural practices that hold the key to improved soil health. Let a thousand flowers bloom rather than preach only one set of purist practices. Improved soil health and climate resilience require a multi-sectoral diversified livelihoods thrust.
    8. Evidence-based thrust is the way forward, besides community connect, technology as a means, hand-holding by CRPs, and assessing last mile challenges.

63. The Covid pandemic and the Ukraine crisis have made the gains in poverty reduction from 2011–2019, fragile. As the Inequality Report points out if you earn ₹25000 a month, you are in the top 10 per cent of earners. High inflation hits the poor the worst. The Reserve Bank of India is already in action but that may take some time to have an impact. The government has stepped in with a series of measures like a cut in Excise duties on Petrol and diesel and several other consumer protecting interventions in duties and exports. Employment and livelihood opportunities are increasing but not fast enough to meet the needs of those looking for stable livelihoods. While agriculture has been steady and a source of large employment in COVID

times, there are a large number of youth displaced out of agriculture, who are looking for non-farm livelihoods, whose aspirations are in manufacturing and services sectors.

64. The IT sector has expanded but there are skill set issues that need to be addressed. The rising cost of living, the huge increase in the price of LPG, has also meant tough times for poor households on the margin. With India's public debt already 90 per cent of its GDP, there is barely any fiscal space to expand expenditure to enlarge demand. In a scenario of limited jobs, women suffer more than men, given the fragility of the engagement. Everyone is hoping that the infrastructure pipeline, and PLIs will also usher in new opportunities for growth and employment. While a lot is being done to push infrastructure rollout, logistics improvement, digitalisation and gains are also showing, there is still some way to go for India to turn a challenge into an opportunity. While India has done better than most countries both on growth and inflation, the fragility of those on the margins of slipping into poverty makes the challenge formidable and more immediate.

65. Business as usual will not deliver the kind of inclusive growth and well-being that is needed to sustain the gains of poverty reduction. While continuance of the free ration scheme may have helped households in food grain security, it by itself, is not enough to keep households in a state of well–being. We need to address inequalities also more directly. Here are some specific suggestions for sustaining the gains.

66. Firstly, schools and skill programmes have to relate to every village/urban cluster on a priority. Local governments, SHGs, Cooperatives, and other community formations have to be actively engaged in the management of these programmes. There is no going away from community connect and the use of technology as a means. Hybrid learning support through interpersonal as also digital needs to be universally operationalised immediately. Gainful engagement of youth in education and skills with support for IT-based hybrid learning is the need of the hour to remove learning poverty that has been the biggest consequence of the pandemic. Much more physical classes in summer vacation and remedial learning support provision in physical classrooms need to be maximised. Panchayats and Local Governments must be made responsible partners in effectively improving schools and skills. For poor households, improved schools and skills save and create opportunities. It is not a time for top-down reforms. The crisis is now and the transformation should show in every school. Local government grants could focus on education, health and nutrition with immediate effect. It can be a perfect partnership of the Central, State and Local governments with community ownership.

67. Secondly, the infrastructure pipeline needs community-led partnership for roll out at speed. Localisation of work opportunities in Highways, roads and other construction needs to be explored. Are there tasks that can be assigned to local women Self Help Groups, Cooperatives, Panchayats? Many infrastructure programmes do not internalise the whole of-government and the whole of society approach and there is a lot of apprehension and misunderstanding at the local level. Community connect and local communication is not given as much attention as it deserves. This often leads to delays and work stoppages. A community-led approach is good for getting the infrastructure pipeline going. The question to be asked is how did infrastructure thrust create opportunities for locals? The Corporate Social Responsibility of Companies should end up in the holistic development of local communities in Project areas. There is a case for examining the costing as well of mega Projects as they do often have very high padding. Gati Shakti initiatives and internet connectivity thrust can also be speeded up with community connect and local engagement.
68. Thirdly, it will be useful to focus on some local infrastructure in economic growth points in Tier two and three cities and Census towns. Identify the key missing infrastructure coming the way of one District one product or other high-quality production centres/clusters. The linkages of infrastructure and increased economic activity is a good way forward for the infrastructure pipeline to transform lives and livelihoods.
69. Fourthly, the Finance Commission has already argued for Panchayat-led primary health care in rural and urban areas. It is time we gave a localised thrust to its implementation with an equally strong thrust on human resources for health. Any amount of teleconsultation is not going to reduce the need for caregivers. Investment in developing an HR continuum for ASHAs becoming Nurses and Auxiliary Nurse Midwife (ANMs), is also a good idea at a time when public health capacity needs to be built. Urban primary health care needs immediate augmentation and human resource thrust, uninterrupted drugs and diagnostics, and linking every household to a local nearby primary health facility will go a long way in reducing the cost to a poor household. Drugs, diagnostics and doctors are more expensive for many poor households out of pocket expenditure than even secondary or tertiary care. Education and Health protection of the poor in a real practical way will make a difference in the quality of well–being. Campaigns like the Gram Swaraj Abhiyan for ensuring pro-poor public welfare reaches the urban poor are needed to mitigate despair and create hope. Reforms in the elected representatives of Bastis institutionally under Urban Wards/Local Government will further improve the community connect.

70. Fifthly, it is time that serious thought is given to the growing inequality of which there is growing evidence, especially in covid times. In our quest to build Indian businesses and markets, we should not forget the social responsibility of the State to ensure financial resources are put to equitable and optimal use. There is a strong case for higher taxes on the very rich bracket as there is no other way of raising public finances for essential poverty reduction and well-being work.
71. Sixthly, in keeping with the federal principle, Projects have to be State led and for this greater efforts at ownership of States and Local Governments for new initiatives are needed. Unless the States own the initiative, the growth and development will not reach the pace anticipated. NITI Aayog needs to play its very important federal role not just by naming and shaming but by actively engaging with States for faster implementation of priority infrastructure Projects.
72. Seventhly, let us not wish away the challenge of inflation, unemployment, and poverty. A village or an urban Basti or ward as a unit for monitoring the impact of all interventions needs to be developed. One has to monitor the change that a Project brings in an area. Community-led action and monitoring with Local Governments will make a difference in the pace of execution and in making infrastructure connected with the local area development.
73. Eighthly, the flow of credit to women in SHGs and all community institutions whose bad loans are very low, has to be ensured as a priority for livelihood diversification. Joint Liability Group financing where social capital exists will facilitate more diversification with scale for local products. Financing Street vendors needs to be deepened. Community monitoring and social audit have to be institutionalised in all State expenditures to enable value for money in Projects.
74. Ninthly, it is time workfare programs are designed as local infrastructure programmes in rural and urban areas, with the use of machines and semi-skilled labour for efficient use of public resources. Creation of water bodies, Aanganwadi buildings, Schools, health facilities, local marketplaces, go-downs, local-level infrastructure for economic activity can all be part of local workfare programmes with a thrust on infrastructure. There is yet no going away from an efficient and income-generating asset building under workfare programmes.
75. Tenthly, a review of PLIs to ensure that no subsidies create a disincentive for innovation and cost reduction in the name of atma nirbharta, as that is not the intent of the programme. Scarce public resources must secure value for money, growth and well-being. The solar sector is particularly susceptible to this. In case of some savings, enhancement of Pension for the deprived

old, widows and divyang and a larger workfare for local infrastructure programme in rural and urban areas, need to be supported for maximum social protection and value for money.

76. Extraordinary times need extraordinary measures. This is our opportunity to mainstream an inclusive development agenda through community action. An India for All needs a whole government, whole society and a community-led action with local-level monitoring of performance. Gandhiji's talisman of the last man in the line and what our interventions do for her were never more relevant than during these extraordinary times. Our quest for scaling up in Ease of Doing Business should simultaneously have an equal thrust of being in the top 50 on Human Development by 2047 as human development alone paves the way for sustainable higher-order economic progress and incomes. This is the lesson from across the world. Providing the opportunity for all in developing their fullest human potential is the only pathway to the sustainable well-being of all and an inclusive India for all.

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1 *Amarjeet is a retire civil servant. The views are personal.

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Federaliam and Inclusive Growth

Local Governments in India: Vision for 2047

V N Alok

In the *Amrit Kaal* (golden period) of independent India, the 'citizen first' approach guides public governance by deepening the outreach of service delivery mechanisms so that international standards could be achieved by 2047. The goal can only be achieved by all-inclusive governance involving stronger and more effective local governments both panchayats and municipalities. Thirty years ago, with the passage of the seventy-third and the seventy-fourth Constitutional Amendments, Part IX and IX A were inserted in the Constitution for rural and urban local governments, respectively. Since then, various commissions and committees have reviewed the working of the twin amendments and made suggestions. Notable among them is the sixth Report on Local Governance by the Second Administrative Reforms Commission (Second ARC).[1] The Commission looked for easy political acceptance, but worked within the parameters of the seventy-third/seventy-fourth Constitutional Amendment Acts which can be described as 'conventional wisdom'.

This paper attempts to: a) present an assessment of the conventional wisdom presented by various committees and commissions, particularly the Second ARC, b) touch upon the fundamental issues, and c) suggest unique solutions for effective local governance.

I. INTRODUCTION

Within the Indian federal architecture, local governments – both panchayats and municipalities – are closest to the notion of direct democracy distinct from a representative democracy of the Union and States, due to their proximity to the community they serve. Local governments have faith in democracy in which a common man in the local area has a huge capacity to have a good living for himself and the community under the healthy environment that the State creates. If a common man appears to be indifferent to the high economic growth, it is because he is devoid of mainstream national development and has not been provided equal opportunity to take part in activities for his betterment. The objectives of a local government, either a panchayat or a municipality, include organising ordinary people in developing themselves through their efforts continuingly, at the

1. India, Government of (2007).

same time enhancing their capacity and self-reliance. This begins with 'citizen participation' in political processes and 'service delivery' of local public goods, for example potable drinking water, general sanitation, primary health, elementary education, maintenance of public properties, etc. Hence, the key objectives of the twin constitutional amendments arguably envision citizen participation in service delivery (Alok 2013, p 1).

The paper discusses some issues relating to rural and urban local governance on which suggestions were made in the past on various issues including a political executive in local governments, municipal staffing, local governments' representation in the states' second chamber, tiering of municipal elections, district planning committee to be transformed as district government, integrated district-based local government, state-municipal relations, and energising the Gram Sabha.

II. THE LEGAL FRAMEWORK NEEDS CORRECTION

Both the amendments namely the seventy-third and seventy-fourth were drawn in identical words following the failed Rajiv Gandhi bills which contained the dual structure with similar wordings, differences in the two functional schedules, the duty of the Union Finance Commission (UFC) to recommend measures to augment the state finances for both panchayats and municipalities 'based on the recommendations' of the state finance commissions (SFCs), and, creation of district and metropolitan planning committees (DPCs and MPCs) in the municipalities' bill. In many cases, provisions for the panchayats have been applied to the municipalities where these were not relevant. All these happened due to the limited objectives of these bills; for example: (i) holding regular elections, (ii) limiting the period of supersessions, (iii) devolution of powers and functions, and (iv) representation of weaker sections and women. Earlier, the National Commission to Review the Working of the Constitution (NCRWC) suggested that *'serious consideration should also be given on whether these two Parts can be integrated by omitting the provisions which are a duplication of each other and rationalising the arrangement of the other provisions' (India 2001, p.66)*. The Second ARC chose not to unify Parts IX (panchayats) and IXA (municipalities) of the Constitution. Perhaps the Commission consciously decided to avoid making recommendations that would involve constitutional revision- a task on which the national political parties are divided. Ideally, bold and politically neutral steps are needed in *Amrit Kaal* to integrate these two separate amendments which authoritatively divide India into two parts.

Mandatory provisions

The mandatory provisions of the amendments, with a parallel expansion of the Union Finance Commission (UFC) to cover the local governments,[2] were limited to five areas: (a) structural uniformity of three levels of panchayats[3] (except in states with less than two million population) and municipalities, (b) five-yearly election of local governments and appointment of a state election commission (SEC), with restricted supersession of the local governments, (c) reservation of seats and chairpersons for weaker sections and women, (d) constitution of SFCs, and (e) constitution of District Planning Committees (DPCs) and Metropolitan Planning Committees (MPCs).

'Conventional wisdom' contained in the Second ARC and other reports could not sense why a three-level structure of the local governments is necessary when a two-level structure could be more efficient considering the viability of each entity in terms of population and area. Similarly, the Commission attempted to impose structural uniformity between the panchayats and the municipalities without realising that the existing asymmetry was the result of their different institutional role and that structural uniformity is possible when their roles become uniform. On election, supersession and reservation issues, the Second ARC's job was mainly operational. On the contrary, the NCRWC pointed out antiquities in Articles 243D and 243T, which contain provisions related to the reservation of seats in panchayats and municipalities for scheduled caste/scheduled tribes and women. It is suggested that state governments may provide guidelines for the process of the reservation to ensure transparency and opportunities to elicit voter response.

As for the SFC, however, the Commission faltered; it recognised that the SFC's weakness lay in its membership composition, but did not notice that this was solved for the UFCs through a central law- Finance Commission (Miscellaneous Provisions) Act, 1951. It identified a lack of congruence between the UFCs and SFCs regarding the methodology and duration of the appointment of SFCs. This was a blind endorsement by the Second ARC of the eleventh and twelfth UFCs' position that wanted to lay down rules for the SFCs- a task not contemplated by the Constitution. Later, the thirteenth UFC went a step ahead and proposed a template for the SFC report and the fourteenth UFC

2. This was done on the recommendations of the Joint Parliamentary Committee headed by K.P. Singh Deo (Lok Sabha 1992), by expanding the duties of the UFC through the 74th Amendment Act. Late on, identical provision was incorporated in the 73rd Amendment Act.
3. It is interesting to note that tiering of panchayats was not mandated in the 73rd amendment, perhaps as recognition that it has not been successful so far. In other words, the use of the term 'tier' now does not a hierarchical relation among different units of panchayats as envisaged earlier

recommended granting only to 'Gram Panchayats' in rural areas violating Article 243B of the Constitution, soon after, the fifteenth UFC corrected the anomaly. Briefly, the situation is: (a) both the UFC and the SFC are parallel constitutional bodies without the latter's subordination to the former, (b) the method followed by the UFCs of fiscal transfers through *ad hoc* lump sum grants is open to question, (c) it is not possible to aggregate the fiscal gaps of multiple SFCs under diverse assumptions to calculate fiscal gaps of local governments, and (d) the time matching of the SFCs with the UFC is not possible due to the delay in issuing the states' action taken reports (ATRs)- a constitutional requirement that the UFCs are to recommend measures for local governments 'based on recommendations' of the SFCs. Ideally, the UFC can make a normative assessment of the fiscal requirements of the local governments and recommend devolution as a share of the union-divisible pool. For this purpose, a detailed assessment of the cost of local public goods is necessary for different geographical terrains across states in India (Alok 2021).

Similarly, on the DPC-MPC issues, the Second ARC did not come to grips with the realities of the working of the local governments. The Constitution provided under Part IX A that local planning is the preserve of the local governments themselves and the DPC-MPC task is to consolidate the local plans and undertake planning for 'matters of common interest'. Since the local governments cannot plan or think that this is a wasteful task; the DPCs have been envisaged to plan for the residual common task with the help of state planning outfits; and the Kolkata MPC.[4]

Though, the Second ARC made some recommendations on the election, reservations and SFC, but did not touch upon the crucial institutions of local planning namely, DPC-MPC issues. Whereas, NCRWC suggested far-reaching changes to redefine 'district' and 'panchayat area' and restructure DPC and MPC to make these units functional. In the *Amrit Kaal*, there is a need to constitute State NITI Aayog which can take their inputs from the DPCs and MPCs as envisaged in the Gandhian Constitution, 1946.

Discretionary provisions

The discretionary provisions of the amendments included devolution of powers and functions, the term 'self-government' was not preceded by the term 'local', nor was it defined to allow the restrictive decision-making sphere of the local governments to continue. What remained to be clarified were: (i) their domain of functions and taxes, decision-making power, creation of political executive, accountability to residents, fiscal responsibility etc., and (ii) declaring local governments as units of '*local* self-government'.

4. Except for Kolkata, no state has made MPCs operational, although it is mandatory under article 243ZE. However, in some states, legal provisions do exist to set up MPCs.

The Second ARC did not suggest any amendment of the Constitution, including that of the seventh schedule to improve the status of local governments; instead, it floated the idea of a 'Framework Law', under Article 252 for the states to adopt, on the lines of the South African Act.[5] The Law should be based on the following:

- Principle of subsidiarity
- Democratic decentralisation
- Delineation of functions
- Devolution in real terms
- Convergence
- Citizen centricity

At the same time, the Second ARC took shelter behind the earlier recommendation of the NCRWC to amend the Constitution (Article 243G) by replacing the word 'may' with 'shall' to compel the state legislatures to endow the panchayats with 'all functions which can be performed at the local level'.[6] In the Amrit Kaal, a parallel provision (article 243W) on the municipalities may also be made.

Both the amendments covered the functional domain of the local governments in terms of their objectives as (a) preparing plans for economic development and social justice, and (b) implementation of schemes in relation to the matters listed in the two schedules (eleventh for the panchayats and twelfth for the municipalities). This effusive attempt to define local government and their functions lies at the heart of the decentralisation dilemma of the panchayats,[7] but not the municipalities as their functions were defined in the respective state acts since pre-independence days (the genesis of the differences in subjects covered in the two schedules lies here). It may be noted that these two schedules contain matters on which local governments may be assigned roles in vertical schemes. The Constitution does not envisage these two schedules to enumerate functions which should be devolved to local governments by the state.

5. In South Africa, a new constitution was adopted in 1996 after extensive discussion with the stakeholders and inviting suggestions from international experts; this was followed by issuing a white paper on local government, and the framework law was passed afterwards. This was reviewed to devolve more taxes to the provinces and to install a two-tier metro-government. In contrast, the Indian Constitution literally lifted more than half of the 1935 colonial constitution (see, M, Brecher, 1969), including the contents of the 7th schedule that have been amended a number of times since independence for increased centralisation.
6. India, Government of (2001)
7. Veerappa Moily, the chairman of the Second ARC admitted that: *'In most parts of the world the role of the local government remains confined to the delivery of civic services. The post amendment panchayats are functioning, like before, within the framework of what may be called 'permissive functional domain''* (India 2007, p.350).

Decentralisation 'focuses on the structure and processes of decision making and resource and responsibility allocation among different levels of government'.[8] The second ARC's definition of decentralisation also means 'the transfer of decision-making power and assignment of accountability and responsibility for results'.[9] It is clear from all available evidence that functional devolution has not gone beyond the implementation responsibility of the schemes/projects of the state or union government.[10] What is intriguing is the blind acceptance by the Second ARC of the strategy of decentralisation, called the 'functions, finances, functionaries' (FFF) advocated by the Union Ministry of Panchayati Raj (MoPR) in the beginning.[11] The purported idea of FFF was to transfer plan schemes with related expenditures, and transfer unwilling state employees to the panchayats in the decentralisation process.

Instead of defining the own functional domain of the panchayats, the Commission wrongly suggested that the plan schemes of the panchayats could be taken as their legitimate functional domain. In the next few years within the Amrit Kaal, the eleventh and the twelfth schedules need to be integrated and make mandatory at par, in status, with the lists on the Seventh Schedule of the Constitution.

III. OTHER ASPECTS

In this section, we review the other aspects of the 'conventional wisdom' by which basic issues were inadequately addressed. These include: (a) fundamental issues relating to local governments, (b) district government, and (c) local autonomy and accountability.

Fundamental issues relating to Local Governments

Seventh schedule and the local governments

One of the most glaring anomalies of the Indian Constitution after the insertion of Parts IX and IXA is their disconnect with the seventh schedule à la 1935 vintage[12] which is probably the sole claim to India's quest for federalism.[13] The seventh schedule defined local government (List II, item 5) in terms of its colonial form:

8. Smith (2001)
9. India, Government of (2009)
10. India, Government of (2001)
11. Later on, two more dimensions i.e., 'capacity building', and 'accountability' were added in the MoPR thinking while ranking states on various indicates of devolution (see Alok, 2013 and 2014).
12. India, Government of (1937).
13. The other label is the term 'union' to mean central. Indian federation is a political reality, but is a constitutional imagination so long as it is based primarily on the list of functions and taxes in the 7th schedule.

> 'Local government that is to say, the constitution and powers of *municipal corporations*, improvement trusts, *district boards*, mining settlement authorities and *other local authorities* for the purpose of local self-government or village administration.' [Italics indicate elected bodies, although not all local authorities are elected.]

This convoluted definition was not changed to 'Panchayats and Municipalities' in both amendments or by the 'conventional wisdom' of various commissions, with the result that even industrial townships, water boards, or other local *parastatals* can claim to be local governments with given powers to collect non-tax revenue it not tax revenue. In the Amrit Kaal, there is a need not only to correct the illustrative part of the entry but also to mention its characteristics, which is *elective nature, multi-purpose local authority, right to tax, pass delegated legislation, autonomy under the doctrine of* ultra vires*, control of its own staff and accountability to residents*. The 'conventional wisdom' ignored this vital aspect of local governance as it regarded the seventh schedule as sacrosanct.

In the Amrit Kaal, the role of local government in India@2047 will be clarified with autonomous local government, similar to provincial autonomy under British India.

Tiers at the local level:

The Second ARC's suggestion for strengthening the municipal 'wards'[14] committees is not based on an assessment of their effective functioning or a reconciliation with the existing executive system. Dual membership of the elected 'wards' committee and the municipal council assumes a conflict of interest between the two. It can be argued that the interest of the council or town hall is larger than the aggregate interests of the wards. If the 'wards' committees are viewed as deconcentrated entities of the municipal administration then their existing advisory role seems to be in line with the unitary structure of municipal government. The municipal ward or zonal officer represents the council and is not accountable to the ward councillor, like the collector is not accountable to the elected legislatures in the district.

However, if the municipal council is indirectly elected from the 'wards' committees then municipal government becomes a tiered electoral institution attempted under the Balvantray Mehta Committee[15] pattern of panchayats and is now abandoned. This arrangement also implies a move away from direct to indirect election of the municipal council with possibilities of conflict with the ward committees dominated by the political opposition in the municipal

14. For inexplicable reasons the term 'wards' committee was used in the 74th amendment to denote a single ward or a group of wards or a zone; see, Sivaramakrishnan (2000).
15. India, Government of (1957).

council. At the metropolitan level (with a population above 10 million), the success of a two-tier system depends on the adequacy of the revenue base that can support the upper tier from the lower tier taxes, unless it is primarily grant-aided. The conclusion is that the Second ARC did not consider the implications of its suggestion for municipal tiering.

It is noticed that with few exceptions, Gram Panchayats (GPs) and Nagar Panchayats (NPs) are in deficit. Municipalisation is primarily based on the census test of an urban area, population, density and non-agricultural activities, and the non-urban areas are treated as rural. Out of 28 states, the majority of States had GPs below the 7,000 population range (Alok, 2019) and only, Assam, Bihar, Kerala, and West Bengal, have large GPs (with more than 10,000 population). While Kerala GPs are viable, Assam, Bihar and West Bengal GPs are not considered so. It is due to the creation of GPs and NPs mainly on census criteria that could be a proxy of fiscal needs, but the proxy of income potential is property tax valuation. Most states created GPs for reasons other than their viability. The general thinking, including that of the Second ARC, is that an increased GP size would improve their viability. The future of GPs and NPs lies in making these expenditure and tax authorities in the Amrit Kaal.

Nature of political executive

The Second ARC has supported the idea of a political executive in the form of a directly elected executive mayor/chairperson with a fixed term and a cabinet from the elected councillors, mainly for consideration of political stability. On the other hand, the West Bengal system of a cabinet-type mayor/chairperson introduced first in Kolkata and then extended to other local governments has been functioning well despite several local governments with a party in opposition to the ruling party in the state. Under both systems, the legislative and executive roles are separate. The real test of political uncertainty would be when there is a fractured council and a coalition cabinet, as in the case of the union (in the past) and the states in the country. Therefore, a single pattern of the local political executive may not be desirable and the states might be given the choice to opt for either form.

In the Amrit Kaal, there is a need for a political executive in the reform of local government where the municipalities and the panchayats have an official executive.

Staffing:

The Second ARC suggested seven municipal staffing groups: (a) conservancy and waste management, (b) public health, (c) engineering, (d) revenue, (e) financial management, (f) audit, and (g) education and culture. There is scope to rationalise the groups further. For example- groups (a) and (b) could be merged and sanitation might be added; a new group on basic health care could be created; the engineering group could be renamed as road and works; the revenue group might be renamed as taxation and revenue; financial management and audit groups could be combined as an internal audit is only an aid to management; and education and culture group could be renamed as primary education and culture, in all there could be six groups, namely

1. Public health and sanitation, conservancy, and waste management.
2. Basic health care services.
3. Roads and works.
4. Taxation and Revenue.
5. Financial management and internal audit.
6. Primary education and culture.

While these groups might be a useful guide for municipal corporations and councils, the NPs might have only three groups: sanitation (under a sanitary inspector), works (under an overseer), and revenue and finance (under an accountant). The model for the NPs would apply to the GPs as well. This also gives an indication of a minimum survival budget for the NPs and GPs and their viability tested.

The Second ARC suggested that staff appointments are made by the municipalities themselves within statutory procedures and conditions, and the existing state directorates of municipal administration created to control municipal staff should be abolished- all in line with local government autonomy. The missing part is the staffing of the panchayats on which the Second ARC was silent. In Amrit Kaal, the State Public Service Commission should be involved in the recruitment of staff for the local governments.

Local governments' representation in the State's second chamber

The Second ARC has recommended the revival of the legislative council in each state, with members drawn from the local governments on the pattern of the Rajya Sabha. It would comprise members elected by the local governments to strengthen the voice of local governments in the states' second chamber. At the same time, it recommended the removal of MPs and MLAs from membership of local councils. This is similar to NCRWC's proposal, although some would argue that the Rajya Sabha-type election would be made by political parties on a complex system of proportional representation; a better option might be, in the Amrit Kaal, to introduce an indirect election by the local governments themselves where local government interest would predominate.

District Government

District planning to district governance:

The second ARC made a bold proposal to introduce District Government (DG) in India[16] that was influenced by a similar devolution in Pakistan promulgated through Ordinance 2001.[17] The significant reform of district administration in Pakistan was the abolition of the Deputy Commissioner[18] and distribution of his powers to the District Police Officer (DPO; earlier, superintendent of police), District Coordination Officer (DCO), District Revenue Officer and the Judiciary. Provincial field administrations at the divisions and sub-divisions (taluks), above and below the district, have also been abolished. DPO and the DCO were made accountable, under the ordinance, to the elected Zila Nazim (district mayor), although the actual working of this relationship was not encouraging.

The range of such reforms has lessons for India where a DG has been advocated with the collector also acting as its secretary.[19] However, such a move would violate the autonomy of the DG and a clear separation of the state and local sectors of governance is necessary.[20] Second ARC thought it proper to keep the District Collector to act in a dual capacity as the CEO of the DG and heading the state's district administration at the same time. The position of the district Superintendent of Police (SP) is not clear, although the Second ARC suggested crime prevention, local intelligence and traffic policing in large cities be transferred to the local governments.

Second ARC approached the proposal by transforming the DPC into the DG for all rural districts. The operational details were:[21]

- These would represent both urban and rural areas.
- It would be a representative body for both rural and urban population.
- DPC would be redundant with the formation of DG.

As for the MPC, the Second ARC kept the issue open. In Pakistan, urban districts have a single-tier government for large cities. In India, future development might follow the Pakistan route, except for the mega-cities, where a two-tier structure for the mega-cities might be relevant. These operational details have

16. A plea for district government in India was earlier made by late Nirmal Mukarji; see, Mukarji, Nirmal (1986).
17. Pakistan, Government of (2007).
18. In British India the District Officer was known as Deputy Commissioner in the non-regulated provinces (Punjab and Assam), while in the regulated provinces (e.g., in Bombay, Madras and Bengal) he was known as Collector or District Magistrate
19. Mukarji (1989) and Bandyopadhyay (2006).
20. Datta (1989)
21. As explained by Veerappa Moily, the Chairman of the Second ARC; (see, India 2007, p.355).

not been examined in India, but the Second ARC's suggestion has been received with cautious optimism within government circles and among civil society.

Integration of panchayats and municipalities:

Although the Second ARC implied integration of panchayats and municipalities in its district government proposal, it shied away from suggesting a unified local government system bound by: common objectives, a single list of functions and taxes, enjoying similar autonomy in decision-making and primary accountability to the voters. This aspect was glossed over under Pakistan's Plan, 2001 where the municipalities are placed at the intermediate level in rural districts, small municipalities are at the *taluks* and large municipalities or corporations are placed at the *tehsils*- overseen by the district government. In the urban districts (mainly provincial capitals) the rural local government ends at the *taluks* and the urban district governments coordinate the rural-urban provision of local services. The lowest formation of local government at the union level with a population of around 20,000 includes both rural and urban areas.

The Second ARC recommended a Pakistan-style institutional integration only in the rural districts, leaving the urban districts and mega cities realising the difficulties of cohabitation by 'attached' local administration (panchayats) with a 'detached' local government system (municipalities).[22] These difficulties include: (i) direct municipal access to the state and panchayats' access to the state only through the collector, (ii) limited autonomy of the panchayats compared to the municipalities, (iii) absence of clarity of panchayat functions, (iv) inadequate panchayat revenues to provide a minimum level of civic services, and (v) tiering of the panchayats. In other words, the proposal can be considered, in the Amrit Kaal, as the first step to integrate the panchayats and municipalities in its proposed district government in a systemic sense.

Local Autonomy and Accountability

State control over municipalities:

The range of state control over municipalities, as listed by the Second ARC, includes the following forms:

- Seeking state approval for major municipal projects.
- Power of a state to ask for documents.
- Power of a state to inspect municipal offices and works.
- Power of a state to issue directions to the municipalities.
- Power of a state to suspend or cancel municipal resolutions.
- Power of a state to dissolve or supersede the municipalities.

22. See, Datta (1994).

Except for the last, other powers are exercised through the collector or even by the commissioner of a municipal corporation. The Second ARC recommended that:

(a) Municipalities should have full autonomy over their delegated functions and activities, and

(b) Any punitive state action against any municipality or its elected member must be approved by a municipal ombudsman.

These decisions were long overdue, but except for the power of dissolution or supersession, for which there are now constitutional restrictions by the seventy-fourth amendment, other powers have been sparingly used partly because of judicial oversight and partly because of adverse public opinion with adverse political consequences. The states also have extensive power of sanctioning municipal financial and other activities, for example contracts, budgets, imposition of a new tax, expenditure above a limit, staff appointments, etc. The Second ARC's views have not covered these operational aspects.

Secondly, although the Commission has detailed similar restrictive powers over the panchayats, [23] it did not make any recommendations on their continuation.

Accountability to Residents:

Presently local governments are legally accountable to the state as their single parent; the situation has changed with their right to exist under the seventy-third/seventy-fourth amendments with the position of the state as a nurse. The accountability to residents includes: (a) periodic reporting of local government's activities and accounts of the previous year, and their budget and an action plan for the coming year, (b) inviting suggestions for action to solve major problems facing the community, (c) redressal of citizens' grievances, (d) seeking constituency approval of market borrowing, project location, and other major choices of the local government, if necessary through a referendum, and (e) arranging direct interactions with the citizens at different locations as in the gram sabha meetings. Major restructuring of state-local relations is involved here, in the Amrit Kaal, requiring a thorough overhaul of the existing state laws on local government.

This puts the role of the Gram Sabha in perspective as a part of the accountability syndrome, but not an end in itself as both the amendments suggest and the Second ARC insists. The record of the Gram Sabha experiment has not been a success due to poor attendance partly because of the Panchayats' inability to provide a minimum level of civic services, and the high opportunity cost of attendance by the poor. The way to make the Gram Sabha work, in the

23. See, India, Government of (2007).

Amrit Kaal, is to improve local services, rather than to act as the page boy of states' field administration.

CONCLUSION

The conclusions are that despite some commendable recommendations in the past by commissions the major failure of 'conventional wisdom' lies in taking the seventy-third/seventy-fourth amendments as its guide, which led it to take the function-finance and state-local relations issues in a permissive context. Instead, it should have been realised that the objective of the Rajiv Gandhi's bills was limited to *ensuring the regularity of local* governments*' elections*, in the belief that the newly elected local councillors would generate enough political pressure to empower local governments in terms of devolution of functions, finances and functionaries. This may happen in the long run 'when we are all dead', as Lord Keynes once quipped.

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Decentralisation: An Internal Growth Engine

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Between 2003 and 2012, the Indian economy grew rapidly, millions were lifted out of poverty, and, despite the Global Financial Crisis, optimism reigned. Investment rates peaked at 38 per cent in 2007–08, merchandise trade as a share of Gross Domestic Product (GDP) peaked at 43 per cent in 2008 and 2012, and trade in services peaked at 13.6 per cent of GDP. Foreign capital flows were unprecedented, about 10 per cent of GDP. However, that boom did not last. A combination of global factors and domestic problems, including a national outcry over corruption allegations that slowed decision-making, heralded the end of the boom years. Given current uncertain global economic conditions, the impact of the COVID-19 crisis, and other domestic factors, it is unlikely that India will return to the growth trajectory of those boom years.

As a result of the COVID-19 pandemic, the Indian economy contracted by 6.6 per cent in 2020. Since then, the economy grew 8.7 per cent in 2021 and is projected to grow by 7.4 per cent in 2022 and 6.1 per cent in 2023.[1] That means the average growth of the four years since the pandemic will be below the 4 per cent per annum achieved in 2019, a time when the economy was already slowing. While India is currently among the fastest-growing large economies, it is cold comfort when one considers both the low base effect partly responsible for today's high growth rate and the country's low per capita GDP (US$2270), placing it in the vicinity of Bangladesh and Nigeria. Worse, the International Monetary Fund (IMF) paints a gloomy picture of the global economy's prospects, which contracted in the second quarter of 2022 on account of downturns in China and Russia, lower-than-expected consumer spending in the United States, and high inflation across the world.

This is on top of the already challenging international trade scenario. Global merchandise trade peaked at 51 per cent of GDP in 2008 and is now languishing at 43 per cent in 2021. A report by the IMF in 2017 concluded that '…for the world as a whole, over 80 per cent of the decline in trade growth since 2012 relative to 2003–07 can

1. World Economic Outlook Update. International Monetary Fund. July 16, 2022.

be predicted by weaker economic activity, most notably subdued investment growth.'[2] Since the publication of that report, the global trade scenario has arguably worsened. Pertinently, India's best growth years relied on a heavy dose of trade and investment. These drivers of growth do not appear to be readily available now.

What then can India do to navigate a fraught short- to medium-term future? The short answer is that like any other country, India could focus on what development economists call 'no regret' investments. School education, nutrition, health systems, etc., are some of the areas that Indian policymakers must focus on, regardless of the state of the economy. The returns on such 'human capital' investments are usually high. There is also a need to focus on climate change and technology, both areas of great importance in the 21st century. However, no matter what area India focuses on, no matter what investments are made, state capacity will matter for the implementation of projects and delivery of services. In this context, India must decentralise its governance systems because the country is too large, too diverse, and too complex to be managed effectively by the Central government in New Delhi.

Given the headwinds facing the economy, scaling up development impact will be critical for India's future. Decentralisation offers a path to scale up the impact of development activities and potentially mitigate the impact of post-COVID challenges. And what is decentralisation in the context of economic development? The World Bank describes decentralisation as 'the transfer of authority and responsibility for public functions from the central government to intermediate and local governments or quasi-independent government organisations and/or the private sector.'[3] This article presents the historical context for efforts to decentralise governance in India, the political and economic aspects of Indian federalism, the prevailing trends in Indian federalism, and opportunities to promote progressive federalism in the country.

DECENTRALISATION: A HISTORICAL CONTEXT

While decentralisation can have positive developmental impacts, it is deeply political and intertwined with India's democratic experiment. India's federal structure is not an abstract concept that should only interest students of the law and those more politically aware. It has a deep impact on how the country

2. Aslam, Aqib, E. Boz, E. Cerutti, M. Poplawski-Ribeiro, and P. Topalova. The Slowdown in Global Trade: A Symptom of a Weak Recovery. IMF Working Paper. Research Department. November 15, 2022. https://www.imf.org/en/Publications/WP/Issues/2017/11/15/The-Slowdown-in-Global-Trade-A-Symptom-of-A-Weak-Recovery-45352
3. Decentralisation & Subnational Regional Economics. World Bank. http://www1.worldbank.org/publicsector/decentralisation/what.htm

functions, how governments at various levels interact with citizens, and how the economy creates opportunities for individual citizens. To explore this in today's context, we will first travel back in history, then review contemporary political economy, and make educated guesses about India's future trajectory.

While the evolution of India's federal structure precedes independence, Article 1 of the Constitution of India formalised it. It stipulates that 'India, that is Bharat, shall be a Union of States.'[4] It further stipulates that 'The States and the territories thereof shall be as specified in the First Schedule, and that 'The territory of India shall comprise — (a) the territories of the States; (b) the Union territories specified in the First Schedule; and (c) such other territories as may be acquired.' As noted in a recent paper by Gautam Bhatia, a 'significant part of the Constitution is concerned with the division of powers between the Union and the states: legislative power, executive power, administrative power, and financial power.'[5]

Bhatia focuses on what he calls a 'centralising drift' in the evolution of India's federal structure. This is what many of us intuitively register – an increasingly strong Central Government whose powers appear to have grown at the cost of the states, aided in part by the courts. This 'centralising drift' is not new but almost a feature from the Constitution's inception. Bhatia examines the claim that Indian Constitution is 'quasi-federal' with a 'central bias'. Supreme Court judgments appear to side with this interpretation repeatedly although not exclusively.

Unlike in some other federations, Indian states do not have separate flags or constitutions (J and K had both until recently and Nagaland is seeking its own). However, that should not be taken to mean that Indian states don't have distinctive characteristics. It is that instinct that probably led to the reorganisation of states along linguistic lines in 1956. Other movements for separate states within the Union are also a result of a yearning that emanates from the distinctness of India's various communities.[6] Yet it is also clear that the Centre remains a dominant presence, which likely makes it harder for socioeconomic development to take place at the rate that India needs now and in the future. It is also going to be problematic politically in the not-so-distant future. With the unfreezing of the size of the Lok Sabha in 2026, the census of 1971 will give way to a newer census to determine the number of seats from each state. The share of poorer but more populous states is set to go up. The share of more prosperous but less populated states is set to decrease. Left unaddressed, this will throw up a

4. Constitution of India as on September 9, 2020. http://legislative.gov.in/sites/default/files/COI.pdf
5. Bhatia, Gautam. A Federal Framework and a Centralising Drift: Re-assessing Federalism Under the Indian Constitution.
6. Narayan, Rahul and Gautam Bhatia. The upcoming crisis in Indian federalism. The Hindu. July 24, 2021.

significant challenge for India's federal structure and polity.[7]

DE-DECENTRALISATION – FISCAL AND POLITICAL

There have been attempts in the past at devolving power to state and local administrative units. The seventy-third and seventy-fourth constitutional amendments created an additional layer of government beyond the level of states. However, the centralisation that afflicts Centre-state relations also affects this newer layer of government. Local bodies remain in search of more financial and administrative powers, even though some progress in these areas is visible. More concerning, Bhatia's centralising drift may have picked up pace in recent years and it will be harder to reverse in the run-up to the realignment of the Lok Sabha in 2026.

Two examples will help make this point – the introduction of a Goods And Services Tax (GST) and the abrogation of Article 370 and the subsequent dismemberment of Jammu and Kashmir state. For many years, there has been a growing political consensus around the need to do away with myriad state-level taxes imposed on goods and services. Different types of taxes and tax structures made for an inefficient system, complicating inter-state trade and enabling corruption through a network of checkpoints.[8] Over time, this efficiency argument gained ground and studies showed that the economic growth could be up to 2–3 percentage points higher should a GST be enacted, and state-level taxes eliminated. As Praveen Chakravarty lucidly points out, 'All these efficiency gains were to be achieved by getting states to surrender their independent sovereign taxation rights. In the cost-benefit toolkit of economists, the benefits of GST could be tangibly measured through GDP growth and the health of the corporate sector but its costs of weakened fiscal federalism were intangible, immeasurable and nebulous.'

As I wrote in my book '*Unshackling India*' (co-authored with Ajay Chhibber), the GST suffered 'a botched start and major design issues whose resolution is still a work in progress, that promise will not be realised for some time to come.' GST revenues fell sharply in 2020 and the Centre reneged on its promise to increase state GST revenue share by 14 per cent every year. Instead, the states were provided with an option to borrow on their behalf the shortfall in revenue. We believe this has soured Centre–state relations and put the entire spirit of 'cooperative federalism' in jeopardy.

7. Ibid.
8. Chakravarty, Praveen. GST has muddied the entire lake of India's federalism. SC ruling only put a stamp on it. The Print. May 28, 2022. https://theprint.in/opinion/gst-has-muddied-the-entire-lake-of-indias-federalism-sc-ruling-only-put-a-stamp-on-it/974107/

After the Supreme Court ruled that the decisions of the GST Council, a body comprising representatives of the Union and state governments, are not binding on the states, the spotlight has shifted to the GST's impact on fiscal federalism.[9] The Supreme Court's observations go to the heart of India's federal structure. The court noted that Indian federalism is 'a dialogue in which the states and the Centre constantly engage in conversations.' It acknowledged that the Constitution grants 'the Union with a higher share of power in certain situations to prevent chaos and provide security.' However, according to the court, the states 'can still resist the mandates of the Union by using different forms of political contestation.' Further that, 'It is not imperative that one of the federal units (Centre or states) must always possess a higher share of power over the other units.'[10] The three-judge bench of the Supreme Court was drawing a line in the sand to uphold the Constitution's federal character and to perhaps push back, even if sporadically against India's centralising drift.

The other example is India's political federalism. Article 370 was part of a historic compromise that led to Jammu and Kashmir (J and K) becoming part of India. Many other princely states became part of India and the Indian Constitution in some ways sought to address the diverse aspirations of all the people who had become a part of that unique democratic experiment. At the outset, however, there were proponents of a strong Central government. Prime Minister Jawaharlal Nehru was of the view that 'it would be injurious to the interests of the country to provide for a weak central authority which would be incapable of ensuring peace, of coordinating vital matters of common concern and of speaking effectively for the whole country in the international sphere.' However, it was also not the case that the founders wanted states to be subservient to the centre.

There were plenty of accommodations made that enabled states with distinctive characteristics to enjoy autonomy without impeding the Centre's role as a unifying force. Besides J and K, 11 other states enjoyed special provisions under the Constitution. This is including most of the Northeast and states like Maharashtra, Gujarat, Andhra Pradesh, Karnataka, and Goa. Furthermore, Himachal Pradesh has restrictions on who can buy agricultural land while, more recently, Haryana brought in a law to reserve 75 per cent of certain jobs for local residents. J and K's autonomy should be seen in that context.

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9. Singh, Bhadra. GST Council recommendations not binding, says SC, would 'disrupt fiscal federalism' if so treated. The Print. May 20, 2022. https://theprint.in/judiciary/gst-council-recommendations-not-binding-says-sc-would-disrupt-fiscal-federalism-if-they-were/963514/
10. Ananthakrishnan, G. SC: GST panel proposals not binding, can disrupt fiscal federalism. Indian Express. May 20, 2022. https://indianexpress.com/article/india/both-centre-states-have-power-to-legislate-on-gst-supreme-court-7925449/

The amendment of Article 370 to remove J and K's autonomy and then divide the state into two union territories marks a particularly serious attack on the federal structure and the place of states in it. To understand why that is the case, Bhatia presents a succinct summary of the manoeuvres that he calls 'a clear case of abuse of union power.' Bhatia describes the situation as follows:

'Article 370 of the Indian Constitution – as it then stood – guaranteed the 'special status' of Jammu and Kashmir. It also aimed to prevent its evisceration by making the consent of the elected government of Jammu and Kashmir mandatory for any amendment of the terms of the Article (and therefore, as a corollary, any change to the relationship between Jammu and Kashmir and the rest of India). The Central Government got around this barrier by a simple stratagem: a year and a half before the events of August 5, 2019, the government of Jammu and Kashmir had lost its majority in the legislature and had fallen. Instead of fresh elections being scheduled within short order, what had happened, instead, was that the central government had taken over the state through the imposition of President's Rule, under Article 356 of the Constitution (meant for situations where a state's constitutional machinery breaks down). As long as Article 356 is in operation, a state's government is the central government (acting through the President). Thus, as the state of Jammu and Kashmir was under President's Rule, the central government interpreted the term 'Government of Jammu and Kashmir' in Article 370 to mean itself, and thereupon, it took its consent, and amended Article 370 to remove the formal autonomy enjoyed by the state.

'Once that was achieved, the scene shifted to the Union Parliament, where the government had a substantial majority. The parliament passed a law that stripped Jammu and Kashmir of statehood, and converted it into a Union Territory (that is, territories within India that – to various degrees – are directly controlled by the Central Government). In doing so, the parliament purported to act under Article 3 of the Constitution which – as we have seen – authorises parliament to create and extinguish states, or alter their boundaries, subject only to consultation with the legislature of the affected state.'[11]

In the Article 370 case, the Central Government, acting as a temporary caretaker of the state, implemented far-reaching changes that ordinarily only a state government should be undertaking. Also, the central government used powers under Article 3 to unilaterally dismember a state and create Union Territories out of it. But does Article 3 even give that power to the centre? If yes, then all states are at the mercy of the centre and that does not sound like a federal entity at all. Both these questions remain unanswered because the Supreme Court has not taken up the Article 370 case so far. Unlike in the GST Council

11. Bhatia, Gautam. A Federal Framework and a Centralising Drift: Re-assessing Federalism Under the Indian Constitution.

case, the Supreme Court has been more reserved in addressing this question of great Constitutional importance.

In India, getting federalism right is going to become more important with time, and also more complex. In the face of a movement towards the oneness of the nation (one nation - one tax, one nation – one election, one nation – one ration etc.), speaking of decentralisation may seem out of place. However, in reality, India's diversity continues to evolve and must be managed carefully. As Chakravarty points out, 'The average person in Bihar earns ₹45,000 a year while the average person in Karnataka earns ₹2.3 lakh, nearly five times more. 23 different political parties are in contention to win an election and govern the various states of India. The average person in Uttar Pradesh is 22 years old while the average Keralite is 35 years old.'[12] Add to this mix, the inequality between different states – the top five states – Maharashtra, Tamil Nadu, Karnataka, Gujarat and Kerala – produce as much economic output as the remaining 25 states and Union territories combined.[13]

What happens in 2026 when the expected delimitation increases the political power of more populous states in the north at the expense of the southern states where fertility rates are below replacement level? These states already contribute a disproportionate amount towards federal taxes and would next stand to lose political power as well. These are crucial issues for India's future and are at the heart of the decentralisation agenda in India. Otherwise, a Kannadiga might seek an explanation for why she should get only ₹50 for every ₹100 she pays in taxes while someone from Madhya Pradesh receives ₹260 while the share of Karnataka would decrease in the Lok Sabha while that of Madhya Pradesh would go up.[14] How do we ensure a fair system that ensures all can live with dignity?

GETTING DECENTRALISATION RIGHT

But what does the 'centralising drift' or a tax like the GST or Article 370 or delimitation have to do with everyday issues that ordinary citizens face? First, a hegemonic political party may seek not just more power but also seek greater conformity with its worldview. While proponents of one nation and one everything (tax, ration, language, etc.) might think it is a truly wonderful and winning idea, and it may yield political dividends in the short term, significant dangers lurk. Pushing this line risks impacting India's diverse communities in unpredictable ways. There is nothing to suggest that an agenda of uniformity

12. Chakravarty, Praveen. 'The 'one nation' bhajan can go out of tune.' Deccan Herald. September 4, 2022. https://www.deccanherald.com/opinion/the-one-nation-bhajan-can-go-out-of-tune-1141957.html
13. Ibid.
14. Ibid.

won't generate strong resistance from long-established cultures across India. That could prove destabilising and create an environment inimical to socioeconomic development.

Beyond the realm of politics, there is also a significant concern about the effectiveness of governance structures that play a large role in determining the pace of economic progress in the country. Just as in the sphere of the Constitution and politics, there is a steady encroachment by the centre in the economic affairs of the states. In '*Unshackling India*', Ajay Chhibber and I point out that, 'The proliferation of national flagship schemes has blurred the role and responsibilities of the Centre and the states and diminished accountability.' We note that, 'The idea that the Centre will design national schemes, which will then be implemented in a prescribed manner by state governments and districts with huge variability in their capacity and governance quality is itself absurd.' As it is, 'India's share of local government spending and hiring is much lower than in most developed countries but also much lower than in authoritarian centrally dominant countries like China, where delegation and devolution are very substantial, making government far more effective.'

In India, there is a need to strengthen coordination, collaboration, and knowledge exchange at different levels of government. The central government has an important coordination and policy planning role and also implements key national programs. However, India's federal structure appears to be more centralised with limited opportunities for local stakeholders to have a say in broad policy formulation. A decentralised system could be more effective to deliver public services in India. There is evidence to suggest that village-level meetings (gram sabhas) help better target poverty programmes and help temper rent-seeking behaviour among local politicians.[15]

Another study in West Bengal and Rajasthan found that women's reservations help improve the delivery of public goods in villages. In more women-led panchayats, investments in drinking water went up compared to villages led by men. The hypothesis appears to be that the presence of women leaders encourages greater participation of females in the affairs of villages and with more women present at meetings, there is greater investment in areas that are priorities for women.[16] But it isn't the case that decentralisation only improves public service delivery. Decentralisation has the potential, still unfulfilled, to transform how poor and marginalised communities get a 'seat at the table'. The negotiating

15. Besley, Timothy, Tim Besley, Rohini Pande, and Vijayendra Rao. 'Participatory Democracy in Action: Survey Evidence from South India.' Journal of the European Economic Association 3, no. 2/3 (2005): 648–57. http://www.jstor.org/stable/40005007.
16. Raghabendra Chattopadhyay & Esther Duflo, 2004. 'Women as Policy Makers: Evidence from a Randomized Policy Experiment in India,' Econometrica, Econometric Society, vol. 72(5), pages 1409–1443, September.

room for weaker sections of society could improve if we take decision-making closer to them.

For this to happen, the Centre and states should have an institutionalised coordination mechanism and this should be replicated at the level of states, districts and blocks. Feedback loops along this entire chain can have many desirable impacts, including the implementation of good practices and improved monitoring of development challenges and programmes.

Around the world, decentralisation has been a regular feature of development. But economic and public service delivery imperatives have not always driven decentralisation. In Latin America, decentralisation was a response to the fall of autocratic regimes as democracies took shape. In Africa, political systems took the form of very diverse societies and decentralisation was a way to mediate competing aspirations. In the countries of the former Soviet Union, established central authorities fell and decentralisation stepped into the vacuum.[17] The World Bank notes that, 'Although the main reason for decentralisation around the world is that it is simply happening, there is a multitude of design issues that affect the impact of different types of decentralisation on efficiency, equity and macro stability.'

We must be careful to not think of decentralisation as a panacea. Nothing is a panacea in economic development. There is a lot of trial and error, and the circumstances of individual countries have a lot to do with how effective decentralisation ends up being. However, with a more centralised approach, India's progress, while considerable, remains woefully inadequate to 'lift all boats'. Perhaps it is time to rededicate ourselves to the promise of federalism and push the envelope to secure the dreams of all Indians. Otherwise, in celebrating the disempowerment of those unlike us, we may end up making everyone worse off. The decentralisation model of Jammu and Kashmir and other models deserve to be debated. Perhaps GST is not appropriate for India or maybe Article 370 is a model worth emulating for all Indian states, keeping in mind their own unique needs and aspirations. The contestation of such ideas would be in line with the principles of federalism enshrined in the Constitution, potentially sustaining India's economy through a turbulent phase ahead.

17. Decentralisation & Subnational Regional Econ omics. World Bank. http://www1.worldbank.org/publicsector/decentralisation/what.htm

Infrastructure and Financing

National Monetisation Pipeline: Silos and Future of the Public Distribution System (PDS)

Siraj Hussain and Shweta Saini

NITI AYOG RELEASES THE NATIONAL MONETISATION PIPELINE (NMP) DOCUMENT

The Government of India envisages raising significant amounts of money via its asset monetisation drive. While retaining the ownership of the assets, monetisation lets a private party create, operate, and transfer the asset after a fixed duration of time. Many assets, including airports, mines, railways, ports, and power projects, have been shortlisted for monetisation. Warehouses of food grains run by the Food Corporation of India (FCI) are also proposed to be monetised. We argue that operating warehouses and silos in big cities is not a good policy option. We also argue that there is a need to reimagine the Public Distribution System by moving to cash transfers in a gradual manner. In that case, the requirement for storage capacity will be lower.

INTRODUCTION

On 23 August 2021, NITI Ayog released the National Monetisation Pipeline document in two volumes. It was envisaged that over the four-year period from 2022 to 2025, the Union Government will be able to realise about ₹6 lakh crore through the monetisation of assets created in the public sector. NITI Ayog had identified valuable assets of airports, gas and petroleum pipelines, mining, ports, roads, railway, stadia, telecom, urban real estate, and warehousing. During the financial year (FY) 2021–2022, the monetisation of assets of the value of about ₹97,000 crore was completed. There is no warehousing project which could be monetised last year.

Under monetisation, the ownership of the assets will stay with the Government or the Public Sector Undertaking (PSU) and the private party selected for monetisation will have to deliver the required services and return the assets after the period of concession is over.

NITI Ayog's monetisation potential of about ₹6 lakh crore included warehousing assets of ₹28,900 crore, road assets of ₹1,60,000 crore, and railway assets of about

₹1,52,496 crore.[1] Assets of power generation and transmission, mining, telecom, and pipelines of natural gas and products were other major assets which were projected to be monetised.

Apart from inviting the private players, the NITI Ayog document also envisages active participation of state governments in monetising their public assets. For this, several assets were identified and these included bus terminals, sports stadia, roads and highways built by the state governments (like state highways), and other district roads. The warehouses of state government agencies used for storing food grains procured under price support operations like Co-operative Marketing Federations, Civil Supplies Corporations, and Agro Industries Corporations were also identified as potential candidates for monetisation.

It must be noted that the assets which were identified for monetisation were created by PSUs over the last seventy years. Some of these assets are owned by monopolies created with the full backing of the Government. In the case of petroleum and gas, for example, the assets were created by oil PSUs for their own use. In some other cases, like civil aviation, railways, and highways, large investments were made by the Government to create the assets for use by the public. Here, the investment was not made by the actual user of the assets.

SOME ASSETS OF OIL PSUs ARE NOT SUITABLE FOR MONETISATION

The petroleum companies in the public sector, Indian Oil Corporation, Bharat Petroleum, Hindustan Petroleum Corporation Limited, and Oil and Natural Gas Commission use the pipelines of either their own company or of another oil company. In these cases, the user charges payable after monetisation may be more than the cost of owning and using these assets. The oil PSUs have been able to raise funds from the market and banks at highly competitive rates. It is doubtful if the private companies who get these assets can raise funds at a cheaper rate. Moreover, in the case of oil and gas pipelines, the users at both ends are petroleum and gas companies and there is not much logic in introducing a private player in the middle only for carrying petroleum or gas through the pipelines.

In addition to this, in view of the critical nature of assets in critical infrastructure sectors like petroleum, there is a view that handing over the assets to the private sector for a long period of up to thirty years may not be the optimum and desirable course of action from the point of view of security of the country.

1. https://www.india.gov.in/spotlight/national-monetisation-pipeline-nmp

SOME ASSETS ARE MORE SUITABLE FOR MONETISATION THAN OTHERS

Most of the projects which were successfully taken up for monetisation in FY 2021–2022 were public-private partnership projects of highways for which the Toll Operate Transfer (TOT) model was successful in the initial year of using the private sector for managing the road assets. Similarly, the National Highway Authority has used the Infrastructure Investment Trust (InvIT) for this purpose. Leasing of mineral and coal blocks, six airports, and port terminals were other projects which were successfully monetised in FY 2021–2022.

The Government also proposes to use the assets of some closed public sector undertakings. For example, the surplus land of Bharat Earth Movers Limited, a Ministry of Defence undertaking, about 123 acres in Bengaluru and 401 acres in Mysuru, may be leased out. Similarly, the surplus land of Hindustan Machine Tools (HMT), about 89 acres in Bengaluru, is also slated to be leased out.

In our view, it may be easier to monetise the projects which are used by the public as the company leasing those assets can levy user charges and realise its profits over the next twenty or thirty years. In the case of coal mines and electricity generating units, the buyers are electricity distribution companies or bulk users of coal. So, they are also suitable candidates for monetisation and they will attract the interest of large corporate houses.

Roads have long been used for the build, operatem and transfer models of public–private partnership projects. That is why, the Government estimates that the value of asset pipeline for roads may be ₹60,200 crore during the period FY 2022–2025. For the power sector, the estimated value of assets is ₹85,032 crore.

The airports were earlier managed by the Airport Authority of India, and they have large parcels of precious land in the vicinity of airports. Airports are used by the richest sections of Indian society, and they offer an enormous scope of real estate development involving hotels, convention centres, and fancy offices. Airports are monopolies and they face no competition at the local level. The real estate bonanza to its developer is visible to anyone who uses the Delhi Airport.

MONETISATION OF WAREHOUSES

The NMP had mentioned that a storage capacity of 175 lakh tonnes for food grains will be created through modern silos. However, the creation of storage capacity through silos is not a new idea and it has been under consideration by the Government since United Progressive Alliance (UPA)-II.

The UPA Government had launched the Private Entrepreneurs Guarantee (PEG) scheme under which, storage gaps were identified in each district and the FCI/State Governments gave a guarantee to pay storage charges for seven to ten years. The land was procured by the successful bidder and the warehouse was constructed as per the specifications of the FCI. Due to the guarantee of storage charges for the next seven to ten years, the PEG was found attractive by the private sector and 152 lakh tonnes of storage capacity has been sanctioned since 2008, out of which, 144.67 lakh tonnes have been completed. The storage problem faced by the FCI has, therefore, been largely solved in most districts of India.

For the construction of silos by the FCI, the Planning Commission was insistent on going through the viability gap funding (VGF) model. In the case of warehouses, it was a better idea to construct warehouses or silos in locations where there was a gap in storage capacity, even if the FCI or the State Governments did not own land at the identified location. This insistence of the Planning Commission on the VGF model for silos caused a delay of several years as a result of which, no progress could be made till 2014. It was only when Modi 1.0 Government came into power that the Planning Commission was replaced by NITI Ayog. The insistence on the VGF model for silos was dropped and the FCI was allowed to invite tenders under which the land was to be procured by the successful bidder.

The Modi 1.0 Government decided to create 100 lakh tonnes of storage capacity through modern silos. The FCI was allotted 29 lakh tonnes, out of which it has completed a silo capacity of 6.25 lakh tonnes at twelve locations and it is already being used for the storage of wheat. At twenty-eight other locations, a capacity of 14 lakh tonnes is under various stages of implementation.

The State governments were allotted 68.5 lakh tonnes of silos out of which, 6 lakh tonnes capacity has been completed and 1.5 lakh tonnes is under implementation in UP. The Central Warehousing Corporation was allotted 2.5 lakh tonnes, but it was not taken up as it could not reach an agreement with the FCI on the payment of storage charges for silos.

Details of silos projects of the FCI are given in the Appendix.

PRIVATE SECTOR FINDS THE FCI'S SILO PROJECTS ATTRACTIVE

Before the announcement of the monetisation pipeline, the FCI had been following the model of inviting bids for silos at identified locations, which did not have sufficient storage capacity. The successful bidder was to procure the land and build the silo along with railway siding so that the food grain could be moved in bulk rather than in bags. In a few cases where land was available in existing warehouses of the FCI, it followed the VGF model and provided land for silos.

At many locations identified for silos, the selected company could not procure the required area of land. About 1.5 to 2 km of land is required for railway siding and considering land holding pattern and acquisition issues, this translates to about 16 to 20 acres of land for a silo of 50,000 tonnes. This has been a major reason for the termination of several projects and the slow implementation of many other projects. In order to address this problem, the FCI came up with the idea of silos in hub and spoke model (details in the Appendix). The spoke silos are without railway siding and they are of smaller capacity of up to 25,000 tonnes. From there, the food grains are to be moved to hub silos having railway siding. These silos are of larger capacity—50,000 to 1,50,000 tonnes. Under this scheme, tenders for 34.875 lakh tonnes at 80 locations have been invited by the FCI. Out of this, about 25 lakh tonnes are without providing land, that is, through the non-VGF route.

The private sector has found silos projects attractive as the FCI and state governments guarantee payment of storage charges for up to thirty years, even if food grains are not stored in silos and storage capacity in silos remains unutilised.

Since tenders of silos floated by the FCI and some state governments have been found attractive for investment by the private sector, the need for monetisation of existing warehouses for raising funds is not really there as new silos have already been approved by the FCI, at locations where additional storage capacity was required.

FCI WAREHOUSES IN MUNICIPAL LIMITS OF LARGE CITIES NEED TO BE MOVED OUT

At many locations, the existing warehouses of the FCI are inside the boundaries of municipal corporations, on extremely expensive land. For example, the FCI has a warehouse in the posh location of Borivali in Mumbai (120 acres). Similarly, it has warehouses in Mayapuri in Delhi (35 acres), Talkatora in Lucknow (29.5 acres), and Chandari in Kanpur (68.5 acres). The FCI warehouses in Chennai, Ludhiana, Patiala, Pune, and many other locations are also located in the hearts of cities and transporting food grains to these warehouses by road causes frequent traffic jams. In Pune[2] and Thoothukudi[3], Tamil Nadu, the residents near the warehouse have complained of insects and pests in their residential colonies. Therefore, the warehouses of food storage by FCI as well as the state agencies need to be located outside the city limits.

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2. https://punemirror.com/pune/civic/insects-from-fci-godowns-infest-housing-societies-on-kp/cid5101728.htm
3. https://www.thehindu.com/news/cities/Madurai/moths-from-fci-godown-invade-houses-giving-sleepless-nights-to-residents/article36477982.ece.

Transportation of food grains by railways is much more efficient and cost effective than transportation by road. But it is not feasible to bring railway lines to the warehouses located in the hearts of big cities. The use of such expensive land where warehouses are presently located, in metropolitan and big cities, for the construction of silos under asset monetisation schemes, is not really desirable.

The land of these warehouses is so expensive that scores of silos can be funded by just the monetisation of this land. The storage capacity, through silos, should therefore be created outside municipal limits of big cities so that food grains can move by rail and truck—without disturbing the city traffic.

WHICH WAREHOUSES ARE SUITABLE FOR MONETISATION?

Many of FCI-owned warehouses are located across India in rural areas, outside municipal limits of cities. In these warehouses, the staff is deployed by the FCI and there may be a case of monetisation of these warehouses so that the management of food grain stock passes into private hands. In many of these warehouses, the private sector will be able to better utilise the surplus land by adding storage capacity and leasing it out to the private sector for storage of non-food items. There is a growing demand for warehouses in large states as the Goods and Services Tax (GST) has incentivised locating warehouses near consumption centres.

CONNECTING LAND ISSUE WITH MONETISATION OF WAREHOUSES

Creation of silo storage capacity under the monetisation pipeline may be a good idea only for those locations where the private sector is not able to get land for silos with railway siding and the FCI or state governments can provide sufficient land—which is required for building silos with railway sidings.

Using land in existing warehouses within municipal limits of large cities and giving it to the private sector (for a thirty-year period) through monetisation, for running warehouses or silos, would be a bad policy choice. Even if the private sector brings efficiency in running the silos and warehouses, it will do very little to decongest the cities as trucks will continue to move into such silos/warehouses for the transportation of food grains. Normally, the foodgrains move from FCI silos/warehouses to warehouses of state governments. They are then moved to fair-price shops.

A more useful method of unlocking the value of such parcels of land is to move such warehouse outside the boundaries of large cities and build silos at such locations. The land thus freed can actually fund many more silos, warehouses, and other rural infrastructure. At locations outside the cities, the silos can be built by the private sector if a suitable piece of land, large enough for railway sidings, is provided by the FCI or the State Governments.

INSUFFICIENT CAPACITY UTILISATION AND THE FINANCIAL BURDEN

As of the end of August 2022, only about 65 per cent of the FCI's storage capacity was utilised at an all-India level. Even in the large procuring states of Punjab and Haryana, the capacity utilisation was only 73 per cent and 70 per cent, respectively. In Andhra Pradesh and West Bengal, it was only 31 per cent and 29 per cent, respectively. Due to lower wheat procurement this year, the stock levels are the lowest in five years and even the existing storage capacity is underutilised. In fact, the FCI would be vacating many hired warehouses due to lower capacity utilisation. In the past, payment of rent to underutilised hired warehouses has attracted (uninformed) objection from the Comptroller and Auditor General of India (CAG).

REIMAGINING THE PUBLIC DISTRIBUTION SYSTEM

Lastly, a clear imagination of the future of the PDS is needed so that excessive warehousing and silo capacity is not created. It means that the Government needs to engage in wide-ranging consultations on the roadmap to direct benefit transfer (DBT) of food subsidy, at least in the states where literacy rates are high, internet penetration is good, banking infrastructure is widespread, and food grain availability in the open market is assured.[4] It means that a clearer assessment is needed for estimating the requirement for the physical distribution of food grains in each district. Based on the research paper cited above, it can be said that the physical distribution of food grains may be required in poorer states in eastern India, like Bihar, Jharkhand, West Bengal, Chhatisgarh, and the north-eastern states.

The National Food Security Act (NFSA 2013) envisages direct benefit transfer of food subsidies. Under Section 12 of the Act, the Union and the State Governments 'shall endeavour to progressively undertake necessary reforms in the Targeted Public Distribution System'. The reforms include cash transfers to the targeted beneficiaries. Despite all the tall claims about the Jan Dhan Yojana, Aadhaar, and Mobile number (JAM trinity) and direct benefit transfers, there has not been any serious effort on the part of Union or any State Government to

4. Saini et al (2017). Indian Food and Welfare Schemes: Scope for Digitization Towards Cash Transfers: ICRIER working paper 343.

test direct benefit transfer of food subsidies. The pilots undertaken by the Union Government in the Union Territories of Chandigarh, Puducherry, and Dadra and Nagar Haveli have been half-hearted.

From a twenty-year perspective, there is a case for giving money directly to the PDS ration card holders rather than giving food grains in physical form. Another related dimension is the future of procurement of food grains at the Minimum Support Price (MSP). If procurement has to continue in its present form, storage facilities in the form of silos will be required in future also. In that scenario, monetisation of existing warehouses in locations outside city limits may bring much-needed efficiency to their operations.

CONCLUSION

Before undertaking the monetisation of warehousing assets of the FCI, it would have been better if efforts were made to project the future of the procurement of food grains and the PDS. Will the business, as usual, continue and 600 lakh tonnes of food grains still be procured, stored, and distributed? If the answer is yes, the monetised silo projects may be necessary. However, if the economy grows at 7 per cent per annum, the number of persons deserving of cheap food grains under the PDS should come down and the requirement of food grains and, therefore, the silos will be accordingly lower.

If the Government is successful in diversifying cropping patterns to meet the ecological needs of various regions, the requirement for storage capacity may also go down as the procurement itself may see a decline.

A more efficient way of providing nutritional security, at least in the well-developed and food-surplus states, can be through a Direct Benefit Transfer. The real success of the JAM trinity will be achieved when such a large-scale transfer of subsidy is made through the use of much-touted technological achievement.

India at 100: Some Thoughts on Infrastructure Issues

Dr M Ramachandran

INTRODUCTION

'Develop a roadmap for India's growth policies to aggressively push the nation towards middle-income and beyond by 2047, the hundredth anniversary of India's independence'—this is the vision Prime Minister Modi has set for the country. So the target is laid down—to move from a lower-middle-income country, backed by robust productivity, growth, competitiveness being ahead of economic performance and an economy which has the potential to deliver high and sustained growth. As Dr C Rangarajan puts it, by 2047, India will achieve the status of a developed economy—which means achieving a minimum per capita income equivalent to US$13,000. For India to be able to acquire the status of a developed economy, the foremost task is raising the growth rate. Achieving a continuous growth rate of 7 per cent over the next two decades will be the game changer. He is of the view that this would require raising the gross fixed capital formation rate from the current level of 28 per cent of the gross domestic product GDP to 33 per cent. India will need to absorb the new technologies that have emerged and are emerging, and its development strategy must be multi-dimensional and have a strong export sector as well as a strong manufacturing sector. Since growth without equity is not sustainable, strengthening the system of social safety nets will also be a requirement.

The next 25 years are going to be exciting for the country. Some basics which I believe will definitely happen are:

- India will be a solid economic power, respected by the world.
- India will be a permanent member of the United Nations (UN) Security Council.
- Centre–State relations would have stabilised and there will be mutual respect and accommodation in all policy/governance matters.
- A stage would have come where people, particularly the younger generation, will eagerly look forward to and keenly listen to deliberations and discussions in the Parliament and State Legislatures just because of their quality and professionalism.
- India's third level of governance, both at the urban local body and village panchayat levels, would have become strong and will take care of all matters assigned at those levels.

- Digitisation would have taken over at every level—including villages—thereby, making life easy even for the common man.
- Dependence on the Government will be minimal, restricted only to essentials—which will also get delivered in a time-bound manner.
- India will be respected globally for its cultural strength, heritage, and value-based systems.
- India will become a preferred tourist destination because of the huge variety it offers, the ease with which visits can take place, and the uniqueness of the attractions it has.
- Hopefully, we will succeed in hosting our first Olympics in 2036.

The world's population is expected to be 9.7 billion by 2050—of which, India would account for 1.7 billion. According to the 'Word Population Prospects, 2022', brought out by the UN Department of Economic and Social Affairs recently, one of the notable features of this population will be that, as India ages, 16 per cent of the population is expected to be made up of people over 65 years. Providing for the elderly is something that requires special attention. Hopefully, India would have developed policies and systems to take care of this segment along with strategies for their active participation in the constructive activities of the country. Also, India would have substantially improved its Global Hunger Index ranking—which currently stands at 107——by proactively addressing issues of undernourishment, child stunting, child wasting, and child mortality. Moreover, India should be able to substantially improve its present World Happiness Report of the Sustainable Development Solutions Network ranking of 136 (among 146 countries). Furthermore, stepped-up efforts for accelerating poverty reduction should lead to the presently ~229 million poor people—the largest such population by country—getting pulled out of poverty.

The subsequent sections of this article highlight some of the key areas where our efforts would need to remain focused to make India the India of our dreams as it turns 100.

TRANSPORT AND LOGISTICS

While expanding the high-value manufacturing base, the supply chain—which depends on a strong infrastructure system made up of modern roads, ports, railways, and airports—will have to be complemented by integration with logistics. The logistics framework will have to be strengthened to bring down its costs from the present 12 to 14 per cent-level to the international benchmark of 6 to 8 per cent of the GDP. The National Logistics Policy, along with the recent initiative of PM GatiShakti to integrate government arms with a common portal for single-window access to services, will play a critical role in reducing the cost of logistics to a single digit by 2030. The National Master Plan and its projects through the National Infrastructure Pipeline get aligned with the PM GatiShakti framework which can naturally be expected to be a game changer in the infrastructure scenario of the country. The Union budget for the financial year (FY) 2022–2023 has set in motion the process of having a big public investment for modern infrastructure, terming it 'readying for India at 100' highlighting that the seven engines of roads, railways, airports, ports, mass transport, waterways and logistics infrastructure will drive the GatiShakti. The 2023–24 Union Budget takes this further, continuing the emphasis on capital investment with a record rupees ten lakh crore spending planned. This, coupled with the policy objective of improving the logistics performance index ranking to be among the top 25 countries by the year 2030 and creating a data driven decision support mechanism to have an efficient logistics eco system wound play a big role in bringing about the changes in the logistics scenario thereby supporting the expansion of the manufacturing base. Preparing a master plan for ten thousand kilometres of green highways and expressways and implementing 35 multi modal logistics park projects are all sound beginnings in taking infrastructure to an entirely different level.

Role of railways will undergo a change in this envisaged scheme of things. Rail could get pre-eminence as the preferred mode in the logistics scheme, with road playing key role in the first and last mile service. It is envisaged that overall modal share of freight in transport could go up to 50 per cent from the present 26 per cent. Rail freight service will have to be fast, reliable and flexible, working in hub and spoke networks. This, with measures to increase the share of inland water transport in freight movement from the present 8 per cent to 15 per cent would boost this segment as well, helping generate more economic activity along the waterway routes. It is widely believed that the NLP with the PM GatiShakti will take India to the level of a global factory.

For coping with passenger expectations, faster trains like bullet trains and next level high speed trains connecting major cities and destinations will be the option. While last year's Union budget has projected initiating manufacturing process of 400 new Vande Bharat trains in three years, this years budget refers to laying of 4500 kms of rail network every year, 1275 stations undergoing makeover and railways having freight share of 35 per cent. More cities will have metro networks and organised, efficient public transport so that dependence on personalised vehicles comes down substantially and roads are freed of pollution and congestion.

To take another example of planned strategy, for the ports sector, the goal under Vision 2047 is to increase port handling capacity from present 2605 Million Tonnes Per Annum (MTPA) to 10,000 MTPA . Presently the capacity of the 12 major ports stands at 1597 MTPA and that of the 78 operational non major ports at 1007 MTPA. Already the Maritime India Vision 2030 goal of developing global standard ports in India is being pursued actively.

The airport sector also is getting reorganised with more world class airports coming up at more locations through the public private participation mode and also the number of airports doubling in the country to reach 220 by the year 2025

EXPORT THRUST NEEDED

Though in terms of GDP, India stands as the fifth largest in the world, our exports are still not commensurate with this position as we rank only eighteenth among our global peers with an export figure of US$ 422 billion in the year 2021-22. This calls for a vigorous effort, also involving states, to increase our export earnings. There is potential as can be seen from an analysis of states' contribution.

- Of the total 29 states and 8 UTs, the top ten states account for as much as 85.3 per cent of our exports.
- Even within this, substantial contribution comes from only five states namely Gujarat (with share in country's exports at 30.05 per cent), Maharashtra (17.33 per cent), Tamil Nadu (8.33 per cent), Karnataka (6.13 per cent) and Uttar Pradesh (4.98 per cent).
- There is lopsidedness in this participation in the sense that the better contributing states are from the west and then the south.

If being next to the coastal areas is an advantage, we have to actively look at what more needs to be done to enable all the other states to actively participate in the export efforts. Promoting coastal shipping, much improved ports to the hinterland which has potential to export, inland water transport and aggressive development of logistics would have to be given priority.

The projected emphasis in the foreign trade policy on the districts as export hubs could be a game changer in the process of increasing exports. Presently, of the 766 districts in country, the top ten per cent of districts contribute as much as 85 per cent of India's exports. The top ten exporting districts presently are: Jamnagar, Surat, Mumbai, Pune, Bharuch, Kanakapura, Ahmedabad, Gautam Buddha Nagar and Bengaluru Urban. These districts, as is evident, are concentrated in the three states of Gujarat, Maharashtra and Karnataka. There are 82 districts which do not export any item at all. So if the policy aberration which probably results in their not being participants in the process gets addressed, it will be good for the country if all of them or most of them can be part of the process. Moving away from the present concentration of exports of non manufactured goods also will actively contribute to export dynamism and economic vibrancy. On a related note, with focused efforts in the coming years, the 305 districts presently figuring at the bottom level and another 305 at the middle level should be able to join the most prosperous group of 70 districts in terms of average pay roll, average wage and average number of employees.

Overall the picture that India is viewed as a domestically oriented economy with very limited engagement with the global economy would have changed as we reach our hundred years. With exports accounting for about 18 per cent of India's GDP, the country's share in global trade mostly remaining flat, our export growth in real terms need to up. Our less trade oriented nature than as it is among many of the developing nations and shift towards more skill intensive sectors like pharmaceuticals would have undergone a change with programs like Aatmanirbhar Bharat and the Production Linked Incentives playing a key role in the desired directions.

SUCCESS IN IMPLEMENTING CLIMATE CHANGE AGENDA

There is no denying the fact that climate change and the policies triggered in response naturally pose significant challenges. But through our determined efforts and commitment to the agenda we would have demonstrated to the world our sincerity in achieving four of the five Panchamrits or nectar elements announced at 26th session of the Conference of the Parties (COP 26) in Glasgow, namely,

1. India will reach its non fossil energy capacity to a level of 500 Gigawatt (GW) (from 157.3 GW) by 2030.
2. India will meet fifty per cent of its energy requirements from renewable energy by the year 2030.
3. India will reduce the total projected carbon emission by one billion tonne from now till 2030.
4. By 2030, India will reduce the carbon intensity of its economy by 45 per cent.

Progress in moving steadily towards the fifth point of achieving net zero emission by 2070 should be substantial by the time we reach hundred years of independence.

India would have become a global power in the creation of grid-scale storage capacity recognising the fact that the capacity to ramp up supply to meet peak in demand and also to meet sudden interruptions in renewable energy generation as the share of RE in the overall portfolio increases. The challenge involved in achieving the commitment of ensuring that half of India's electricity is derived from non fossil fuel sources by the year 2030 itself is huge considering that presently we are at 57.7 per cent of capacity through such source and the non fossil fuel share is projected to go upto 64 per cent by the year 2029–30. Since it is recognised that much of India's emissions are on account of its coal use, our efforts will have to continue beyond 2030 also to keep bringing down the fossil fuel share.

Also we should be able to make good progress in terms of the long term low emission development strategy just recently released at CoP 27 held at Sharm el- Sheikh. Currently India's emissions are rising and will do so as it develops. By pursuing options like green hydrogen expansion, increase in nuclear capacity, acceleration of renewable energy development and use of biofuels combined with deep dives into other contributing sectors such as transport, industry, urbanisation and our efforts to blend our emissions trajectory towards zero in these sectors, India would have made substantial progress in the desired direction in the next twenty five years. Our plans to maximise the use of electric vehicles, ensure that by 2025 the per centage of ethanol blended with petrol to increase by twenty per cent from the existing ten per cent and making a strong shift of passenger and freight vehicles to public transport would have started showing good results. Other priority activities like focusing on improved energy efficiency through the Perform, Achieve and Trade (PAT) scheme, expanding the National Hydrogen Mission, increasing electrification and enhancing material efficiency and recycling also would have made substantial progress. Just to focus on the content of the PAT scheme which is essentially an emissions trading scheme, effective monitoring could lead to achieving the targets set to reduce emissions by a fixed amount in industries like aluminum, fertilizer and iron and steel.

India is expected to stand out in our committed efforts to achieve the long term goal of climate agreements of preventing global temperatures rising beyond 1.5 °C or 2 °C by the end of the century.

URBANISATION

The world continues to experience an increase in its urban population and India is no exception. Urban areas are expected, as per UN Habitat's World Cities Report 2020, to absorb virtually all the future growth of the world's population. With nearly 54 per cent of the world population now living in urban settlements and projected to rise to 68-69 per cent by the middle of the century, it is visualised that urbanisation will be an integral part of the development process of countries, irrespective of their size, location or status. Though India has a low to moderate level of urbanisation, the importance of India's urbanisation is central in the scale of urban population growth and the extraordinary growth that India has registered in the number and population of cities with over one million population. As cities grow in numbers and size, their share in GDP also rises correspondingly. According to the Central Statistical Office, the per centage of GDP originating in cities and towns has risen to 52.6, making them approximately twice as productive as the rural areas. As a former Secretary General of the UN put it 'The major urban challenges of the twenty first century include the rapid growth of many cities and the decline of others, the expansion of the informal sector and the role of cities in causing or mitigating climate change'.

But as of now our cities are financially emaciated and hence not in a position to meet the increasing challenges of governance at that level. India's urban population is estimated to reach 80 crore by 2050. Requirement of funds to cater to such huge population is very high but municipal revenues and expenditure have stagnated at around one per cent of GDP for over a decade as the recently brought out RBI's maiden Report on Municipal Finances shows. Creating and running efficient towns requires fixing urban planning and governance, something which has not happened as envisaged by the Seventy-Fourth Amendment of the Constitution. Hopefully the coming years should see major decisions empowering the urban local bodies to function better at their level for the larger overall development of the city and to have the necessary personnel and fiancés to make each city liveable in the full sense of the term.

At this stage it is also important to keep in mind the investment requirement to upgrade urban infrastructure as projected by the World Bank in its recent report titled 'Financing India's Infrastructure Needs: Constraints of Commercial Financing and Prospects for Policy Action'. This report underlines the need to improve the financing avenues for India's urban local bodies. Like other earlier projections also, this report also suggests a host of policy actions including switching to a more stable, formula based and unconditional fiscal transfer regime at both state and central levels for urban local bodies and creation of a dedicated structure such as Cities Investment Support Unit. It will be one of the key agenda initiatives India will be taking in the context of where we plan to be by the year 2047. Since it is clear that urbanisation will play a big role in India's journey towards the goal with urban population projected to reach 600 million by the year 2036 thereby signaling additional pressure on the already stretched urban infrastructure and services, investment to the tune of US$800 billion will need to take place over the next fifteen years to upgrade the cities.

The point being emphasised here is that urbanisation, irrespective of how it may be looked at, is an integral constituent of India's development trajectory. It is now well understood and recognised that urbanisation is not just a demographic phenomenon, assessed in terms of scale, pace of growth or its distribution between cities of different sizes, but also about the form, spatial spread and connectivity across spaces. It is about what urban areas produce in terms of gross/net domestic product and what they consume. Urbanisation naturally is associated with a higher level of infrastructural services, innovations and knowledge and naturally this aspect will be significantly reflected in the overall progress we will be making by the time we reach hundred.

CONCLUSION

In brief, there are challenges in the roadmap upto 2047 but we have the capacity and determination to meet them effectively. As the India Competitiveness Initiative, the Roadmap for Better Growth-India @100, India's future performance will depend not only on how well it addresses the challenges of today but also on how well it responds to the changes in the context that it will be facing over the years to come. The positives are: India's demographic profile is a major growth enabler, India's strong IT skills position to serve the rapid digitalisation of the global economy and FDI and trade will continue to provide growth opportunities.

It has been recommended in the above report that an effective strategy for India needs to be based on a transparent articulation of the country's economic development goals. Also in the context of India's ambition to achieve middle income status, it cautions prosperity measured as average GDP per capita is insufficient and a range of four additional measures would be required namely, growth should be matched by social progress, prosperity should be shared across all parts and regions of the country, growth should be environmentally sustainable and prosperity should be solid and resilient in the face of external shocks. No better way to conclude than repeat what Prof Michael E Porter of the Harvard Business School said: As India that achieves higher performance has relevance far beyond India's borders, the entire world has a lot riding on India's success. We may remind ourselves that the distance between today and 2047 appears long, but it is shorter than the time that has past between the economic reforms of the early 90s and today. We have no time to wait and we should get going faster.

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Digital Financial Incluison

Banking in 2047

Tamal Bandopadhyay

We have entered into *Amrit Kaal*, the 25-year-long lead-up to India@100. What will the banking turf look like when the nation turns 100?

Before I crystal gaze, first, let's take a look at how the banking sector has evolved in India since 1947.

If independence is one milestone, there are two more milestones for the sector in the past 75 years—nationalisation of private banks in two stages in July 1969 and April 1980 and the economic liberalisation of 1991.

There were 97 scheduled commercial banks in 1947, collectively holding ₹1,090 crore deposits; their advance portfolio was ₹475 crore. Imperial Bank had little over one-fourth share of the deposits of ₹287 crore. There were 551 non-scheduled banks.

FIRST MILESTONE

Fourteen banks with deposits of at least ₹50 crore each were nationalised at midnight on July 19. A second round of nationalisation followed in 1980, of six more banks with deposits of at least ₹200 crore each.

Just ahead of the first phase of nationalisation in June 1969, there were 73 commercial banks with 8,262 branches. The deposit portfolio of banks was ₹4,646 crore and the loan book was ₹3,599 crore.

The liberalisation of India's banking sector started soon after the opening up of the economy, with the release of the first Narasimham Committee Report in December 1991. Then Finance Minister Manmohan Singh appointed the committee on 14 August 1991, chaired by M Narasimham, the thirteenth Governor of the Reserve Bank of India (RBI). Yet another committee, headed by Narasimham, was appointed by another Finance Minister, P Chidambaram, in December 1997. These two seminal reports laid the road map for the Indian banking industry, still a work in progress.

SECOND MILESTONE

In March I991, there were 272 scheduled commercial banks in India. These banks had 60,220 branches across the nation out of which 35,206 were rural, 11,334 were semi-urban, 8,046 were urban and 5,624 were metropolitan. Roughly, one branch covered 14,000 people in 1991 when the deposit portfolio of the banking system was ₹ 2.38 trillion; and the credit portfolio was ₹ 1.32 trillion.

AND, NOW

As I write this in October 2022, there are 100 banks out of which 12 are public sector banks (PSBs), 21 are private banks, three are local area banks, 12 are small finance banks, six are payments banks and 46 are foreign banks. Besides, there are 43 regional rural banks. They are also scheduled as commercial banks. There are also 45 foreign banks, two of which are locally incorporated. Collectively, the PSBs, private and foreign banks have a 1,22,976-branch network and 2,11,332 Automated Teller Machines(ATMs) as of March 2021.

We have come a long way. Still, only one Indian bank is among the top 50 banks globally by assets; the credit-to-GDP ratio in India is far lower than most developed nations and even Bhutan; and India is among seven countries, home to half the world’s 1.4 billion adults without access to formal banking, a World Bank report says. According to the report, 130 million Indians don’t have access to formal banking. Among those who have access, many are being exploited by banks in a repressive financial system.

THE ORIGIN

Let’s look back. Banking has been in practice in India for a long. The *Arthashastra* of ancient Indian polymath Kautilya, dating back to the first millennium BC, mentioned creditors, lenders and lending rates.

Depending on the definition, the world’s oldest bank is either Banca Monte dei Paschi di Siena (BMPS) of Italy or Berenberg Bank of Germany. BMPS, now in a bad shape, was founded in its present form in 1624, but it originated from a mount of piety, an institutional pawn broker, in 1472. Berenberg, founded in 1590, is the world’s oldest merchant bank.

Commercial banks appeared much later in India with the Bank of Bombay, in 1720. It lasted for five decades till 1770 when the Bank of Hindostan made its appearance in Calcutta.

The eastern city was also the birthplace of the first Presidency Bank. Bank of Bengal was set up in June 1806. It got the authority to issue currency notes in 1823. The Bank of Bombay, the second Presidency Bank, was set up in 1840, and the Bank of Madras, the third, came onto the scene in July 1843.

Three banks were merged into one to form the Imperial Bank of India in 1921, which played the role of the Central Bank till the Reserve Bank of India was set up in 1935.

While the Britishers established these banks, the first Indian bank, Allahabad Bank, came into being in 1865. The Punjab National Bank followed in 1895 (in Lahore) and, 11 years later, the Bank of India was set up in 1906.

Between 1906 and 1913, many more banks mushroomed, including the Central Bank of India, Bank of Baroda, Canara Bank and Indian Bank. By December 1913, there were 56 banks of different hues, including 12 exchange banks, engaged in the foreign exchange business. By 1930, the number of commercial banks almost doubled to 107.

Both World War I (1914–1918) and the Great Depression (1929–1934) saw many banks biting the dust. By 1947, the entire banking industry was privately owned and six of them had at least ₹ 100 crore deposit portfolio each.

BANKING REFORMS

The first Narasimham report was the springboard for the initial banking reforms – deregulation of interest rates, end of directed credit, reduction of statutory pre-emptions and the entry of new banks.

The so-called Cash Reserve Ratio (CRR) or the portion of deposits that commercial banks keep with the central bank (on which they don't earn any interest) was 15 per cent in 1991. Similarly, the banks needed to buy government bonds and maintain a Statutory Liquidity Ratio (SLR) of 38.5 per cent at that time. Both sucked out 53.5 per cent of their deposits.

In October 2022, CRR was 4.5 per cent and SLR 18 per cent.

The minimum loan rate, prescribed by the regulator, was 16 per cent in 1991. Banks are free to decide on the loan rates as well as rates of deposits now.

The key to the business of banking is the quality of loan assets. The definition of non-performing assets (NPAs) and loan restructuring are dynamic phenomena.

Following the Narasimham Committee recommendations, a structured framework was put in place in the early 1990s, after the introduction of income recognition and asset classification norms. Initially, this framework was meant only for restructuring industrial accounts. In 2008, its scope widened to deal with stressed non-industrial accounts.

By 1994, the gross NPAs of all scheduled banks were estimated to be 19.07 per cent of all assets; for PSBs it was even worse at 24.8 per cent. It took more than a decade to reduce those NPAs. Falling interest rates in the twenty-first century allowed banks to book huge treasury profits; they used surpluses to provide for bad loans.

RBI started tightening definitions of bad assets and classified them as sub-standard, doubtful and loss assets, early this century but the prudential norms were held hostage by government policies.

The PSBs held the bulk of the NPAs but since the government did not have the money to recapitalise them, the thrust was on forbearance. Infrastructure was the holy cow in the first decade of the century. There were many incentives, including a regulatory cushion, to lend to infrastructure. These loans were also continuously restructured, and enjoyed the standard tag.

Sensing that too long a rope had been given to the banks for managing their loan books and some of the corporations using bank funds for both debt and equity, Raghuram Rajan, who took over as RBI governor in September 2013, decided to tighten the screws.

LIPSTICK ON A PIG

Instead of cleaning up their balance sheets, many banks indulged in what Rajan described as 'pretend and extend'. They pretended that everything was fine and extended fresh loans to keep the books clean. Mocking this practice, Rajan said with a straight face, one 'can put lipstick on a pig, but it doesn't become a princess'.

To address this, the RBI created the Central Repository of Information on Large Credits in 2014. Once the banks started supplying data in real-time for all loans of ₹ 5 crore and above, the regulator got a sense of how growth-hungry banks were giving loans to large corporations even though their balance sheets did not justify such risk-taking.

No bank wanted to miss out on the credit growth story. Between 2006–2008, bank credit grew at a scorching pace. It dipped after the global financial crisis in the aftermath of the collapse of iconic US investment bank Lehman Brothers Holdings Inc. but picked up again in 2011.

ASSET QUALITY REVIEW(AQR)

Once the RBI was convinced that the banks were camouflaging NPAs through fresh loans and other innovations, it launched the asset quality review or AQR, a first-of-its-kind health check of Indian banking, in 2015. The banks were given six quarters from October–December 2015 to January–March 2017 to clean up the mess.

Before the exercise ended, there was a change of guard at the RBI but the new boss Urjit Patel carried on the clean-up exercise with greater zeal. The gross NPAs of the banking sector, which rose to 11.2 per cent in the financial year 2018, dropped to 6.8 per cent by December 2020.

By March 2022, the gross NPAs of banks declined to a six-year low of 5.9 per cent. As the bank credit has started growing over 16 per cent by September 2022, the gross NPAs are expected to decline further. Credit Ratings agency CRISIL expects gross NPAs will decline 0.9 per cent to 5 per cent in FY 2023 and further improve to a decadal low of 4 per cent by March 2024. The biggest improvement is expected in the corporate segment where gross NPAs are likely to fall to 2 per cent, from a peak of 16 per cent as on 31 March 2018.

As I write this piece, the banking sector in India seems to be fighting fit. The quality of loan assets has been improving, the provision coverage ratio (money set aside to take care of the bad loans) is rising and the banks have got back their appetite for giving loans (but not throwing discretion and risk management to the wind). The loan growth of the industry has been at a nine-year high.

The Narasimham Committee made certain other critical recommendations. For instance, it said the number of public sector banks should be reduced. There could be three to four big banks; eight to ten banks with nationwide presence; and smaller regional banks. The PSBs should enjoy autonomy and the era of dual control, between the RBI and the banking division of the Finance Ministry, should give up to the ghost.

Following the consolidation drive by the government, the number of PSBs has shrunk from 27 in 2017 to 12 now. Seven of them are fairly large and at least one, the State Bank of India, is among the top 50 banks by assets, globally.

At the next stage, the government has decided to experiment with the privatisation of PSBs. The February 2021 Budget announced the government's intention to privatise two PSBs. Nothing concrete has happened so far on this front.

NEW PRIVATE BANKS

The industry also welcomed new private banks in three phases, in the early 1990s, early this century and in 2015. They are universal banks. While the concept of local area banks hasn't worked out well, two sets of new banks have made entry into the turf – small finance banks and payments banks. Of the two, payments banks are a failure. Banking licences are now available on tap – both for universal banks as well as small finance banks.

Autonomy for public sector banks is still a far cry even though the government has taken many steps to make them independent.

Shortly after a unique offsite of the CEOs of the PSBs and financial institutions, 'Gyan Sangyam', presided over by Prime Minister Narendra Modi and then Finance Minister Arun Jaitley in January 2015, the finance ministry assured freedom to all PSBs from interference by the government on commercial decisions, transfers, and postings, etc.

It has also made the selection process of CEOs of government-owned banks transparent by setting up the Banks Board Bureau (BBB) – an offshoot of the 'Indradhanush' framework for transforming the PSBs announced in August 2015. Describing this as 'the most comprehensive reform effort undertaken since banking nationalisation in 1970', a government note says, 'Our PSBs are now ready to compete and flourish in a fast-evolving financial services landscape.'

(In July 2022, the government transformed the BBB into Financial Services Institutions Bureau following a Delhi High Court order which said the BBB was not a competent body to select the general managers and directors of state-owned general insurers.)

POLITICAL INTERFERENCE VS POLITICAL INTERVENTION

However, there aren't too many takers for this optimism. At the 2015 'Gyan Sangam', Modi had said the banks would be run professionally and there would be no interference.

He added that he was against political interference but not political intervention in the interest of the people. Such political intervention, according to him, would enable the voice of the common man to reach such institutions. This has been the story of India's public sector banking industry all along.

The PSBs are political animals – the government's milch cow, used for everything from funding infrastructure to supporting Micro, Small And Medium Enterprises (MSMEs); opening millions of zero-balance accounts for financial inclusion; buying government bonds to bridging the fiscal deficit; and subscribing to electoral bonds to help political parties.

Till the third week of September 2022, there were 46.95 crores Pradhan Mantri Jan Dhan Yojana (PMJDY) accounts. Of these, the PSBs have opened 36.99 crore accounts; RRBs 8.65 crore; and private banks, 1.31 crore. The government launched the PMJDY in August 2014 for banking the unbanked.

FATE OF PSBS

After completing three decades of economic liberalisation, there are many questions on the fate of the PSBs: In what form and shape should they be allowed to function? How many of them should exist? The government wants to privatise at least two of them.

Let's wait and watch. Their presence is a must to address market failures and for financial inclusion and MSME- and infrastructure financing but we don't need all of them.

Indeed, consolidation has reduced the number of PSBs but not the government's share in the banking industry. The problem is not with the owner but with how the owner behaves.

This is why even before any PSB is privatised, privatisation by stealth has already started. In the 1990s, before RBI gave licences to the first set of private banks to open shops, PSBs held a 90 per cent share of the banking market. In 2000, their share was a little over 80 per cent. Now, they are much less than 60 per cent. PSBs' share in the incremental banking business is far lower – even in the collection of deposits, despite the sovereign backing.

NEW LANDSCAPE

But there is no gainsaying the fact that turf is changing. The trinity of Jan Dhan Yojana, Aadhar and Mobile number, popularly known as JAM, is changing the banking landscape at a breakneck speed, ushering in financial inclusion and spreading the coverage.

As RBI governor Shaktikanta Das said in one of his speeches in September 2022, technology, innovation and fintech are working in tandem and contributing to the dynamism of this sector.

None can deny the fact that penetration of telecom, availability of internet services, adoption of technology in facilitating access to credit and a more efficient payment system are deepening financial inclusion in the world's fifth largest economy, home to 135 crore people.

In July 2022, the number of broadband internet users in India was 807 million. At least 469 million Jan Dhan accounts, 1,340 million Aadhaar enrolments and 1,200 million mobile connections have created the right ecosystem for innovations in terms of the delivery of financial services.

In the same speech, Das said that the next decade of finance will be more focused on two central themes namely sustainable development and technology-led innovations, transforming the lives of common people.

The Covid pandemic has accelerated the push towards digitalisation, especially in the hinterland.

Between March 2020 and August 2022, Unified Payments Interface (UPI) transactions have grown manifold to reach a new high of 6,720 million transactions (valued at ₹ 11.16 trillion) in September 2022. The number of UPI QR codes enabled payment acceptance points increased by about 90 million (86 per cent, year-on-year) to reach 200 million by July 2022, making contactless payments a buzzword.

BANKS IN YOUR POCKET

Internet and mobile banking, electronic funds transfer, UPI, Aadhaar e-KYC, Bharat Bill Payment System, QR scan and pay, digital pre-paid instruments, et al have radically transformed the banking turf. Most Indian citizens carry banks in their pockets now that is their mobile phones!

Startup India, Digital India, India Stack, Account Aggregators, Peer to Peer lending platforms and 24×7 digital payment systems are some of the props of the fintech ecosystem which is still evolving.

We have an innovation-friendly banking regulator. By releasing its Regulatory Sandbox framework in August 2019, the RBI has become one of the few central bankers across the globe to have its very own regulatory sandbox ecosystem. After four theme-based cohorts on retail payments, cross-border payments, MSME lending and prevention of financial frauds, it announced a theme-neutral fifth cohort in September 2022 to increase the footprint of innovation in the fintech space.

The RBI has also set up the Reserve Bank Innovation Hub as a subsidiary in Bengaluru, besides creating a new Fintech Department to foster innovation and identify the challenges and opportunities in real-time.

It has also been working for phased implementation of Central Bank Digital Currency (CBDC) in both wholesale and retail segments. Like credit cards, internet banking and wallets, the CBDCs will be part of the payments system, supplementing the use of cash; it's not a cash alternative. It released a concept note on CBDC in early October 2022 and is likely to start the pilot projects by the end of the year. (NEEDS TO BE UPDATED/ DEPENDING ON YOUR PUBLICATION DATE)

Simply put, it will just be another way of paying for goods and services through a wallet. Many such wallets are operating in the Indian financial system. The CBDC will be one of them with a difference, it will be issued by the nation's central bank.

To simplify the process and cut down the cost, operational costs for the lenders and opportunity cost for the borrowers, the Reserve Bank Innovation Hub has been focussing on the digitalisation of Agri Finance in India. The idea is to enable frictionless delivery of Kisan Credit Card (KCC) loans in a paperless and hassle-free manner and reduce the turnaround time as visits to bank branches will be a thing of the past. Once this is in place, there will be an end-to-end digital process for seamless and quick access to rural credit.

A pilot project has already been launched in Madhya Pradesh and Tamil Nadu in partnership with the Union Bank of India and the Federal Bank, respectively, for new KCC loans and renewal of such loans up to ₹ 1.6 lakh per borrower.

'Eventually, we desire to develop and operationalise an integrated and standardised technological platform to facilitate frictionless credit to all segments of society for the whole country, with special emphasis on rural and agricultural credit. And if we can do this in the next one year, it would be a major milestone in India's growth story and journey towards India@2047,' the RBI governor has said.

At the same time, he has also flagged off the risks. While technology is enhancing inclusion and deepening the penetration of financial services, it has ushered in an era where enormous amounts of consumer data are being generated and leveraged by a few entities, the so-called big techs, which have a huge customer base.

The challenge before the regulator in the new world is how to balance the potential risks while fostering innovation and competition. It needs to keep a strict vigil on market and business conduct, operational resilience, data privacy, cyber security and financial stability.

DIGITAL LENDING NORMS

So far, the RBI is up to it. To stop the misuse of technology and customer exploitation both in terms of charging high-interest rates and using coercive methods for collection of loan repayments, the banking has directed the lending service providers not to lend from their balance sheets but play the role of outsourcing agents for banks and non-banking financial companies.

The scale and speed at which digital lending has been spreading in India without checks and balances have forced the RBI to come up with guidelines on digital lending in September 2022. This is based on the November 2021 report of a working group on digital lending.

Let's get a sense of the digital lending world first. A 2020 Bank for International Settlements paper has estimated total global digital lending, through fintech and big techs, at US$ 795 billion in 2019. Since then, it has grown by leaps and bounds.

Fintech, or financial technology, is the term used to describe any technology that delivers financial services through software, such as online banking and mobile payment apps; big tech refers to major technology companies such as Apple, Google, Amazon, Facebook and Microsoft.

The largest market for both fintech and big tech is China; the USA is the second largest market for fintech but its share in big tech is relatively small.

Based on data from a sample of banks and Non-Banking Financial Companies (NBFCs) (representing 75 per cent and 10 per cent of the total assets of banks and NBFCs, respectively, for FY2020), the RBI report has pegged the amount of money lent through digital mode by banks at ₹1.12 trillion in contrast to ₹53.08 trillion via physical mode. For NBFCs, it's ₹23,000 vis-a-vis ₹1.93 trillion.

Between 2017 and 2020, the loans given through the digital mode rose more than 12-fold,from ₹11,671 crore to close to ₹1.42 trillion for the sample. Since the onset of the Covid pandemic, the pie has grown many times more.

THE FUTURE

This is the story of Indian banking so far. Both the body and the soul of the industry have changed. The sellers' market has become a buyers' market. From addressing the cycle of life, the lifestyle of the customers is on the banks' radar now. Beyond meeting financial needs, they are becoming a marketplace for everything one wants.

The fintech and big techs are finding ways to throw the banks out of business while the banks are fast changing themselves into technology companies in the new financial world where brick-and-mortar structures are running the risk of turning into anachronism. Technology is no longer an enabler, it's the driver of the banking business.

Those banks which are changing in sync with time will survive and flourish. Others that cannot change may turn into dinosaurs and find themselves in the Reserve Bank of India Monetary Museum at Fort, Mumbai, which covers the evolution of money in India -- from the earliest barter system and the use of cowries to paper money, coins, stock markets and modern-day electronic transactions.

The customers will step in to get a feel for history and heritage but not shed tears for them.

Harnessing Technologies of Future for a Sustainable Growth Economy

Dr Saurabh Garg

Right through the history of mankind and its evolution, the only thing that has remained constant is 'change'. Very often this change had to do with the basic survival instincts of any species; ours has been no different. While biological evolution is one way to respond to changing surroundings, humans have been blessed to innovate even outside of their self. Humans have relied mostly on technology to not just survive, but also to grow and evolve much faster.

Making lives easier and more productive has always been 'the' factor that keeps pushing our kind to the limits of our imagination and beyond. Whether it was crude mechanisation brought about with the industrial revolution or the new digital age, this has always been the guiding principle. Thus, doing more with less and doing the same differently and more efficiently motivates us all.

In the same vein, it is also a shared belief of our kind that inequities in the distribution of the virtues of technology among people shall only lead to short-lived successes and may also imperil furthering its larger societal goals. While continuous technological innovations are the key to achieving sustainable growth, equitable growth/development is an equally cherished and essential goal for the benefit of society at large.

The technologies driving growth must also align with the environment so that the growth is sustainable and does not eventually deteriorate people's lives in the long run.

In this context, some of the buzzwords of today's world that keep ringing louder than ever before are 'Responsible and Sustainable Technologies', 'Green Technologies', 'Digital Equity', 'Shared Technologies', 'Global Digital Public Goods, 'Open Systems', etc.

TECHNOLOGIES OF FUTURE

Regardless of sector or vertical, new-age technologies are gradually ushering in the transformation of organisations and economies. The economic and financial landscapes are being revolutionised by rapid breakthroughs in technology which, more often than not, are disruptive with immense long-term potential to benefit society at large.

Some of the broad domain areas are witnessing a lot of churning regarding the introduction of technologies that have a potentially far-reaching positive impact, especially on developing countries like ours, are given below:

- **Artificial Intelligence (AI) and Machine Learning (ML):** AI technologies provide a plethora of opportunities to complement human intelligence and combat socio-economic issues.
- **Web 3.0:** For web applications that are more decentralised, customised and amenable to the use of Artificial Intelligence/Machine Learning (AI/ML), thus enriching the overall experience of the gen-Z users.
- **Quantum Computing:** Applications in secure communication, and disaster management through better prediction, computing, simulation, chemistry, healthcare, cryptography, imaging, etc.
- **Further enhancements to Semiconductor Technologies including that of Semiconductor Nanotechnology:** This aims to give a major push to the hardware industry by eliminating boundaries between the digital and physical worlds.
- **Smart manufacturing:** This encourages the use of Internet of Things (IoT), Blockchain, Big data Analytics, Artificial Intelligence and Robotics as part of Industry 4.0, more commercial use of additive manufacturing (namely 3D printing).
- **Smart Mobility:** This includes the use of IoT and AI/ML in new-age transportation and logistics solutions, autonomous and remotely piloted vehicles, vehicles powered by renewable and clean fuels.
- **Advanced Communication Technologies and security thereof:** Encouraging the adoption of 5G, Cloud computing, penetration of broadband internet to remotest of and least developed of areas using satellite-based internet, optical fibre, etc., for use-cases such as Tele-health, remote learning, etc. Advancements in cyber security and the hardening of communication systems are also expected to stay apace with the communication and networked technologies. This includes building more secure cryptography solutions as well as the use of Homomorphic encryption technologies, etc.

- **Space Technologies:** This includes a plethora of futuristic technologies like Satellite-Based Quantum Communication, Quantum Radar, Self-Eating-Rocket, Self-Vanishing-Satellite, Self-Healing Materials, Humanoid Robotics, Space-Based-Solar-Power, Intelligent Satellites and Space-vehicles, Make-in-Space concept, Artificial-Intelligence based space applications, etc.
- **Blockchain based technologies:** This includes the development of solutions in areas such as decentralised financing (DeFi), sovereign digital currencies, and the possible creation of sovereign identities.
- **Augmented/Virtual/Mixed Reality technologies:** A coming together of virtual and for an immersive experience like the Metaverse.
- **Biotechnology:** This includes advancements in areas such as Synthetic DNA, Development of Vaccines, 4-D printing and Tissue Engineering, Gene Editing, Gene Sequencing, Quantum Microscope, Biosensors, etc.
- **Agri-food Technologies:** Sustainable and remunerative agriculture (and its allied sectors) is key to the food security of societies. Technologies related to climate resilient farming, the development of high-yielding seed varieties, resource-conscious and frugal irrigation, seeding, harvesting and post-harvest technologies will define the future of agriculture, especially for developing countries which have large percentages of their population dependent on it.
- **Climate and Environmental conservation:** This includes the focus on green and sustainable technologies, renewable such as solar, green Hydrogen, etc.

It is expected that a lot of the above-listed areas and technologies shall have synergy as well as interdependencies among them to ensure a holistic technology framework. This shall possibly require close collaboration among sectors and industries and lead to an impact that is universally felt by all sections of society.

Digitisation, Digitalisation and Digital Transformation

It is also important to acknowledge the role and extent of the digital character of new-age technologies in their successful deployment and acceptance. Digitisation, in this age, has to be the common link in all the sectors of any successful economy as well as in all the aspects of a progressive society.

The indispensability of going digital in any recent or future technological endeavour cannot be emphasised enough. Digitalisation of services and practices in any domain has the potential to transform that area and bring it to a higher growth plane and trajectory.

Digitalisation is, therefore, not an alternative but an imperative foundational rail to any of the technologies of the future.

Some of the important use cases of digitalisation for India and the world that will remain relevant for a long time are:

- **E-Governance:** For a more responsive, transparent and accountable state.
- **Affordable Healthcare for all:** for example, Telemedicine.
- **Affordable and quality education for all:** for example, Tele-education, use of Augmented Reality (AR) and Virtual Reality (VR).
- **Generation and distribution of energy/power for all:** for example, Smart Grid.
- **Universal Financial Inclusion:** A basic bouquet of digital financial services and beyond.
- **Digital and open marketplaces.**

Aadhaar: Rail as well as the wagon for the digital revolution in India

Aadhaar has become one of the most important pieces of public digital infrastructure ever to be built in the country. Aadhaar has played and continues to play an integral role in providing a unified national digital identity framework.

The strength of this foundational infrastructure is now being increasingly felt in almost every sphere of life of residents of the country. Aadhaar is the world's largest Digital Identity Platform, which was planned and rolled out with a clear set of developmental objectives. The astounding success of Aadhaar and its Digital Identity Platform with billions of authentication transactions already being performed on it has proved its reliability, robustness and security to the entire international community.

'Aadhaar', the most trusted ID, is held by almost one-sixth of the population of the world residing in India and is the foundation of India's digital democracy. Aadhaar has reached saturation point covering a large number of the population. The saturation of the adult population of India in terms of Aadhaar enrolment is near 100 per cent. More than 1.35 billion Aadhaars have been generated to date and about 700 million updates in Aadhaar have been done by the residents. Over 85 billion Aadhaar authentications have been done to date, with more than 70 million authentications getting logged every single day.

Ever-expanding usage of Aadhaar: Striving towards greater Ease of Living

The uniqueness of Aadhaar along with its completely digital and portable nature makes it a ready candidate for an enormous number of applications and use cases, both in government as well as in private spaces.

More than 1100 government schemes already use Aadhaar, either for efficient delivery of welfare benefits to the people or for the ease of governance and ease of living. Leak-proof distribution of social welfare benefits made possible through

Aadhaar-enabled clean and unique beneficiary databases has led to enormous savings of public money.

Aadhaar provides a foundational platform, with the potential to build a multitude of identity-led applications on top of it. India Stack is an example of this which is a group of applications that leverage the identity layer provided by Aadhaar and superimposes it with the paperless, cashless and consent layers. Aadhaar-based e-Sign for paperless experience and digital payments systems such as Aadhaar Payment Bridge (APB) and Aadhaar Enabled Payment System (AEPS) are some of the examples of solutions that have been born out of this.

The Financial sector as well as the telecom sector of the country have become some of the biggest users of Aadhaar for providing user services that are quicker, more accessible and more secure, all thanks to Aadhaar-led user authentication which is cost-effective as well as user-business friendly. More than 300 Non-Banking Financial Companies (NBFCs) have already been notified to use Aadhaar and still, more are on their way to partnering with Unique Identification Authority of India (UIDAI) for providing a plethora of financial services to the people of this country.

Like online authentication of Aadhaar, offline verification of Aadhaar using ways such as secure QR code scanning, secure offline Aadhaar e-KYC (Electronic Know Your Customer), offline Face match, etc. is also taking root in minds of people and industry. Some of the more recent use cases are in establishing and verifying the identity of a user during entry at airports using Digiyatra.

Taking Aadhaar Global: Digital Identity Architecture for the World

Aadhaar is now past its initial phases of enrolment saturation, consolidation of its systems and processes and gaining technological maturity. The focus is now on rapidly expanding the domestic usage of Aadhaar as well as going global with Aadhaar and establishing India as a global leader in identity systems.

UIDAI with its phenomenally successful experience of driving the Aadhaar platform and ecosystem is in a unique position to offer to the world a trusted and tested **Global ID Standard that has Aadhaar at its core**. UIDAI is also committed to playing an active role in the adoption of the standard by providing holistic end-to-end support to partner nations in developing the ID systems, providing the architecture, and assisting in successfully implementing it on the ground and finally, building a plethora of use cases/applications that the residents of that country can leverage in an affordable, secure and user-friendly manner.

Making Aadhaar the **preferred digital ID architecture of the world** can also potentially pave the way for the global proliferation of several other digital public goods (DPG) that either already exist in India or may be developed by India in future and forms the basis of the various digital public infrastructure (DPI) platform.

This is in sync with the government of India's push to make India a global hub of innovation and proliferation of global DPIs for the benefit of the masses worldwide.

Technology lies at the heart of Aadhaar

Aadhaar was conceived as an online identity platform that used technology to deliver on its promises:

- **Uniqueness** – ensuring one person one ID,
- **Online verification** and KYC to enable digital transactions,
- **Not requiring expensive credentials** – such as smartcards, etc.

These powerful features of Aadhaar delivered at a billion-plus-population scale encouraged a plethora of useful applications. All this was made possible through the smart use of cutting-edge technologies, be it multimodal biometrics, distributed computing, data analytics, mobile apps, etc.

Aadhaar and UIDAI have always been at the forefront of developing or using state-of-art technologies to ensure that it is successfully meeting their mandate of providing reliable, secure and resident and industry-friendly identity solutions and services.

In this context, some of the technologies that have been adopted or are in the process of being adopted at UIDAI include the following:

- Unified my Aadhaar portal for a one-stop place for all Aadhaar services in local languages;
- Multiple services on mAadhaar mobile application;
- Use of Secure QR code and Offline e-KYC for offline verification of Aadhaar;
- Introduction of Virtual ID, Aadhaar Lock, and Biometric Lock for providing confidence to the resident in securely using Aadhaar for various services;
- Integration with Digi locker for consent-based fetching of resident documents as well for address update on other identity documents based on address on Aadhaar;
- Extensive use of AI/ML for liveness check of resident biometrics and document validation;
- State-of-the-art UIDAI's own Private Cloud Infrastructure;
- Indigenous development of Automatic Biometric Identification Solution (ABIS) solution (using deep learning algorithms and Artificial Neural Networks) to reduce dependencies on proprietary solutions;
- Integration with Indian Space Research Organisation (ISRO)/Bhuvan System for location-based resident services.

Innovations in Aadhaar Authentication

The core strength of Aadhaar is its ability to be authenticated anytime and from anywhere. Some of the innovations that Aadhaar has been able to bring to its authentication landscape are as follows:

- **Face Authentication:** This is an indigenous smart-phone based solution for Aadhaar Authentication using the 'Face' modality. It is contactless and has a liveness check built into it. This makes it more secure and reliable. It extensively employs AI/ML for ensuring the liveness of the modality captured as part of authentication. An extension of online face authentication is offline face-match which too has great potential in terms of its usage.
- **IRIS-based Aadhaar Authentication:** This has been in place for a long and is being vigorously promoted now due to its inherent strengths which came to the fore, especially during COVID-19. Just like face-modality, it is contactless and more secure and also reliable than fingerprint-based authentication, especially for people with worn-out fingerprints.
- **Fingerprint Image Record (based) authentication:** Fingerprint Image Record (FIR) has been launched for ensuring the liveness of the fingerprints captured and checking cases of possible fraud via fingerprint cloning, etc.
- **More secure Registered devices for Enrolment and Authentication:** For added security, the new devices shall have encryption of Identity Information captured at the device chip/hardware level.

Robust Security of Aadhaar: Key to gaining the trust of residents and partners alike

UIDAI works with state-of-the-art techniques and technological advancements in Information Security and has conceptualised models and frameworks to explore some of the best ways to protect the integrity of the system from illegal actors and at the same time ensure its availability to legitimate users.

Aadhaar has a multilayered secure architecture. UIDAI-Central Identities Data Repository (CIDR) is ISO27001 certified for Information Security. UIDAI is also certified for ISO 27701 for privacy protection as an extension to ISO27001. Regular security feeds from government security agencies such as National Critical Information Infrastructure Protection Centre (NCIIPC), etc. are assessed for security strengthening.

UIDAI also ensures continued adherence and compliance to best practices in security by Aadhaar ecosystem partners through regular security audits of the partner infrastructure and processes.

Aadhaar@2047: A Technology-centric future, grounded in reality and of relevance to people

UIDAI is readying itself for a future that will be much more volatile and fluid in terms of technologies that will both shock and impress.

With Aadhaar authentication expected to become more commonplace than ever before, benefitting governments, businesses and users alike, UIDAI is arming itself to remain at pace with such a development.

This involves, inter alia, multiplying its capacity (from the current capacity of 100 Million transactions a day to more than 250 Million of them), becoming more self-reliant (indigenisation of key technologies), becoming even more accessible to the users (use of a basic smart-phone as a universal authenticator), and being at the forefront of using and harnessing technologies of future- a) Quantum-resilient cryptography, b)Adoption of additional biometrics, c) Aadhaar-led interactions within the metaverse, d) Use of Aadhaar in the decentralised block-chain world of affordable institutional and peer-to-peer finance, public consent ledgers, etc.

Digital Technology is meant to be used by the state to a) ensure transparency and accountability of governance, and b) meet the increased demand for digital services among citizens, to provide more simplified and high-quality services, at the door-step.

UIDAI has always been steadfastly aligned with this core objective. It has always remained abreast with the latest advancements in technologies that have a bearing in the Indian context and specifically in the context of providing digital-identity-led services to its people.

Towards this, UIDAI plans to keep breaking newer grounds in its digital journey by making the right partnerships with industry, academia and last but not least, with the residents, who form the center of its existence.

Open Network for Digital Commerce

T Koshy

INTRODUCTION

India is leading the charge in solving structural challenges to economic growth with technological solutions instead of pure regulation. Whether it is digital identification (Aadhaar), CoWIN in health, unified payments interface (UPI) in financial services, or now, Open Network for Digital Commerce (ONDC) in commerce, India has sought to leverage tech protocols assisted by regulation—that is, digital public goods to help its economy self-regulate and stay compliant. This has allowed for unique public–private partnerships that are geared to benefit India's ~1.4 billion population without losing private sector efficiencies or limiting innovation.

India's digital consumer base is rapidly growing—with its internet user base reaching 830 million in 2021 (an addition of half a billion people in six years). Low data tariffs of ~US$0.17/gigabyte have also facilitated the penetration of online access even in socioeconomically developing demographics. This has allowed Indian consumers to spend more than 700 billion hours (and growing) on their phones each year.

This rapidly growing digital inclusion has allowed digital public goods to be leveraged to level accessibility across products and services, while also creating a strong platform for innovation around other challenges such as digital and financial literacy, access to credit and other facilities, and capacity building.

In delivering social upliftment through digital public goods, there are three base components to assimilate: (1) unique identification to enrol the beneficiary, (2) payment system, and (3) the supply chain and logistics.

In the past decade, popularly known as the 'tech ade', India has pioneered tech-enabled solutions across all of these components, creating an interoperable suite of connectors that can practically plug and play with any organisation aiming to provide a product or a service.

UNIQUE IDENTIFICATION TO ENROL THE BENEFICIARY

Digital ID has been a global trend in the recent past with an estimated 5 billion IDs expected to be issued globally by 2024. India's digital ID programme, the Unique

Identification Authority of India's (UIDAI's) Aadhaar, is the largest digital ID program in the world—with over 1.3 billion IDs issued. Aadhaar is being issued to everyone everywhere in India, growing and evolving over the course of its implementation. With fingerprinting, iris scan, and facial recognition capabilities, manual labourers, whose fingertips had been worn smooth and who could not get their fingerprints recognised, and elderly people with cloudy eyes who could not get an iris scan, could still get themselves an Aadhaar number. Aadhaar found a fix for a plethora of challenges that a country like India is bound to throw up. Merging digital identity with technology allowed segments of the public that were previously unable to access social and financial services to benefit from these public services, and become prospective beneficiaries of private sector innovations that they were previously considered too risky for; for example, financial services.

Ultimately, beyond a unique identity—digital or otherwise—Aadhaar has enabled the distribution of services from liquified petroleum gas (LPG) cylinders to financial products to people that were otherwise unable to access it. Governments and other institutions were also able to significantly reduce losses due to fraud in providing these services to the wider citizenry.

It must be noted, however, that with the opportunities that Aadhaar—and digital ID, in general—opened, come questions around data privacy and protection. Regulation will play a role in ensuring that people maintain their right to privacy while also not being denied their right to access services. This could become an important topic for India's G20 Presidency as member countries aim to promote trade and the creation of global value chains and accomplish sustainable development goals through increased collaboration and cooperation.

PAYMENT SYSTEM

One of India's biggest contributions to scalable tech has been UPI. The National Payment Corporation of India was tasked with simplifying and democratising payments to reduce the cost of transferring money between and across individuals and merchants, thereby allowing millions of Indians to be able to transact with each other. The answer was UPI.

In today's world, it is often common to look to the West for experiential answers: How did the West industrialise? How did the West promote technological adoption?

However, two of the most populous countries in the East have actually superseded, in many ways, the technological innovations of the West. Driven by the sheer scale proffered by India's population and the disparity of demographic challenges, UPI, with over 200 million transactions a day, is just one example in a long list of such population-scale solution building.

The universality of UPI is on the rise, with the United Arab Emirates (UAE), Japan, United States (US), Singapore, Bhutan, Nepal, and recently, France adopting unified payment systems. India is also amalgamating the potential of UPI with Aadhaar with digital vouchers—which are either money vouchers or vouchers meant for a specific product (if the Government wants to ensure that the benefits are provided in kind with respect to certain goods and services). This has the potential to stimulate a breadth of further innovation in the way we transact in India, which could, in turn, foster economic growth across the country.

SUPPLY CHAIN AND LOGISTICS

UPI allowed money and kind to be transacted instantly, but there was still a gap in transferring the goods and services for which that money was transacted—especially when the buyer and the seller were not located right next to each other. This created a significant challenge during the COVID-19 pandemic, where people were under curfew and/or in containment zones and had difficulty in accessing essential goods and services without endangering others. India's private sector rose to the occasion and food-tech/ed-tech/other-tech companies came up with novel ways to transfer goods and services across distances. However, most of the benefits of these innovations were restricted to tier-1 cities. India is a country of 1.4 billion people: How could they cascade these innovations across their population?

The ONDC has been established as a not-for-profit company with the ambition to democratise and fundamentally revolutionise how digital commerce is conducted in the country. This construct is different from the platform model, where all the various functionalities are vertically integrated within a centralised entity—to a decentralised format where different functions are involved in an end-to-end e-commerce transactions can be performed by different entities.

In this decentralised model, buyers and sellers are at either end of the value chain and network participants (buyer apps and seller apps integrated with the ONDC) provide them with buyer and seller platforms to integrate with the network. The ONDC enables communication across these buyer and seller apps through a gateway, ensuring that all buyers interfacing with an ONDC-enabled buyer app will be able to access all the sellers (and their products) across all ONDC-enabled seller apps and vice versa.

In today's world, e-commerce applications are optimised across buyers, sellers, *and* logistics—leading to significant headroom for each of them to reach pareto-efficiency. The ONDC, through decentralisation, will allow buyer applications to optimise for buyers and seller applications to optimise for sellers—allowing different models with divergent service-level offers to meet each of their needs more effectively and efficiently.

Digitisation of sellers: Currently, there is a wide demographic of sellers—for example, local kirana stores and producers of indigenous products—who are unable to afford high platform fees and/or are not digital commerce-savvy. An open network for digital commerce will foster healthy competition amongst seller platforms, making them accessible to smaller sellers. Additionally, it will stimulate innovation in the tech community to solve for broader digital needs amongst the non-digitised; for example, inventory management and catalogue management. The ONDC will, therefore, make digital commerce small-business-friendly—not small-businesses, internet-friendly.

Accessibility for buyers: Buyers today are often limited in their choice of products because of availability issues in digital commerce—whether that be their preferred offline shop not being online, a limited variety of products for their needs, or logistical barriers to getting their products delivered. It is inefficient for a buyer to have to look through multiple applications to make an ideal and/or comprehensive choice for their ongoing needs; for example, a customer going on a holiday has to go to a separate portal to book their travel and a separate portal to buy travel accessories. The ONDC will allow buyers to access the entire universe of digitally-enabled sellers, reduce availability constraints, improve variety with increased seller selection, and potentially provide them with a one-stop shop for their needs. Additionally, logistics providers can focus on expanding overall multi-modal serviceability, including internationally, to mitigate any logistical barriers. While national serviceability will allow Indians to increasingly purchase Indian-origin products, international serviceability will allow Indian products (and firms) to compete globally—helping the Indian industry and economy grow.

In order to grow, micro, small, and medium enterprises (MSMEs), primarily need access to capital and markets. As Nandan Nilekani said, 'the account aggregator allows access to capital for small businesses leveraging their own data, and that is being rolled out and that will lead to democratisation of credit to small business…the second is how do they get access to markets and that's where ONDC comes in'.

WAY FORWARD

Moving forward, India is expected to continue its exponential digital trajectory with the internet's wide spreading reach beyond tier 2/3 cities into rural India. Just as roadside vendors and auto-rickshaw drivers have increasingly embraced digital money, it will not be long before rural farmers will be able to directly access their market through digital commerce. This digital revolution will help bridge the credit gap for MSMEs and consumers, reduce the cost of doing business, propel innovation in ancillary industries, and instil increasing trust in the digital economy through price transparency and mitigation of antitrust practices through technologically-backed market forces.

While the ONDC is disrupting the e-commerce landscape in India, it is not intended to disrupt e-commerce incumbents. Market penetration of e-commerce is only ~6 per cent in India, and the ONDC is targeting to increase the overall size of the digital commerce market to allow incumbents and newcomers to benefit from the wider market reach and not just redistribute the existing market.

The ONDC is first-of-kind globally, and the world is waiting with bated breath for the Indian digital commerce story to unfold and serve as an example. There will be ecosystem-wide engagement and innovation which will feed India's aspirational demographic and catapult the reach of its product and service offering to the rest of the world.

Regulatory Challenges Facing the Indian Digital Payments Landscape

Ram Rastogi

INTRODUCTION

India's digital payments landscape has transformed dramatically over the past five years. Today, 40 per cent of the payments (by value) are digital—contributing to a US$ 3 trillion digital payment market. This is a result of rapid expansion in the digital infrastructure, unified payments interface (UPI)-led migration to digital platforms, pandemic-led acceleration of shift in customer preferences, growing merchant acceptance, and disruptive innovations by FinTech players.

India will become a digital payment economy and merchant payments will emerge as the most powerful driver of this growth—especially in the offline segment—due to growing quick response (QR) code deployments. We expect that merchant payments will soon outpace person-to-person fund transfers.

We will also witness the progression from embedded payments to embedded finance as digital payments are becoming increasingly embedded in all forms of commerce. As more merchants begin to accept digital payments, it will unlock a significant change in access to credit for small merchants due to the creation of a digital transaction trail. Today, 30–40 per cent of the credit demand in the micro, small, and medium enterprise (MSME) lending landscape remains unmet. Digital finance can result in more merchants having access to formal credit.

The emergence of payment products like IMPS, AePS and UPI, coupled with growing apprehensions about handling cash during the COVID-19 pandemic, led to an increase in the number of digital payments by first-time users. Improvements in the payments infrastructure, disruptions in information and communications technology, a responsive regulatory framework, a conducive policy environment, and a greater focus on customer-centricity have transformed India's payments ecosystem.

Fuelling India's Economic Growth

According to a study conducted by the Centre for Economics and Business Research that was commissioned by Applied Communications Inc. (ACI) Worldwide, real-time payments resulted in estimated cost savings of US$ 12.6 billion for Indian businesses and consumers in 2021 (which helped to unlock US$ 16.4 billion of economic output—0.56 per cent of the country's gross domestic product (GDP) or the output of approximately 2.5 million workers).

The report also highlighted a clear correlation between real-time payments and economic growth. When delays in the transfer of money are eliminated, overall market efficiencies in the economy improve and there is a reduction in cash flow issues for households and businesses. Speedy and smooth transactions can fuel economic growth by augmenting higher consumption and selling. Additionally, ease of transaction also provides a fertile ground for the establishment of small local businesses because it reduces business owners' dependence on convoluted payment systems.

UPI is also bringing about a steady shift in the way rural India accesses banking services. The absence of intermediaries, transaction costs, and the elimination of the need to visit a brick-and-mortar branch has brought banking facilities to the remotest hinterlands. Moreover, the National Payments Corporation of India (NPCI) has ensured that the UPI ecosystem encompasses not just public and private sector banks but cooperative banks, which occupy centre stage in the rural banking system. The Reserve Bank of India (RBI) continues to take steps to push for greater adoption of UPI in cash-dominant rural areas. In a move to facilitate easier availability of credit in rural areas, the RBI, in June 2022, announced in that RuPay credit cards will be linked to UPI. The central bank also announced this year that UPI would also be available on feature phones (basic phones with only text and call functionalities) and users would not require an internet connection to use UPI facilities. This move is aimed at boosting financial inclusion in rural areas.

UPI AND ECONOMIC INCLUSION

The UPI apparatus has worked in tandem with the digital identity programme, Aadhaar, to bring about a revolution of sorts in the landscape of economic inclusion in India. With UPI, the idea of the Government being able to disburse incentives or benefits to the underprivileged sections of the society without leakages, delays, or the evaporation of funds through corruption has become a reality. Affordable access to benefits with no intermediaries or middlemen can have a massive trickle-down effect on the economy, especially at the grassroots level.

GROWTH STOPPERS

A key challenge facing payment players across the board today is thin margins—which prompts players to increasingly transition to high-margin offerings while doubling down on digital payment growth. These players have built large, captive customer bases with access to rich customer data and purchasing behaviour patterns and can diversify existing payment revenue streams by foraying into lending and investment facilitation among other avenues. Thus, SuperApp ecosystems are expected to emerge.

That said, unlocking the US$ 10 trillion opportunity will require certain enablers. There is a continued need to build customer trust. This can be achieved through a comprehensive approach to address frauds, simplification of digital onboarding and the know your customer (KYC) process, reduction of strain on the tech infrastructure of banks, access to better economies for digital payment players, and, finally, strengthening of the country's digital infrastructure.

MARKET CAP IMPOSED BY THE NPCI

The NPCI declared a 30 per cent market cap on the total volume of UPI transactions for all third-party app providers (TPAPs) on 5 November 2020. The cap is calculated on a rolling basis—per the total volume of UPI transactions during the preceding three months, starting on 1 January 2021. Once players cross the threshold of 30 per cent, they must stop onboarding new customers immediately.

PhonePe, Paytm, and Google Pay continue to dominate the UPI market. They collectively account for more than 95 per cent of the total transactional volume and the total value of UPI transactions as of August 2022. This new policy on market cap was formulated and implemented to ensure that the UPI infrastructure offers a positive customer experience and discourages a handful of players from monopolising the digital payments landscape.

ZERO MERCHANT DISCOUNT RATE (MDR)

Policy initiatives (such as the waiver of MDR) for providing financial incentives to promote digital payments show the Government's intent to further financial inclusion through digital pathways. This initiative was expected to make it easier for businesses to onboard merchants and influence more customers to adopt digital payments.

However, the zero MDR policy hurt the digital payments ecosystem as it threatened the survival of several payment gateway entities, hampered innovation efforts, and slowed down the expansion of India's digital payments infrastructure. This is demonstrated by RuPay's performance—even though it commands 60 per cent of the Indian debit card market, its monthly average transaction volume was less than 50 per cent (as against other debit cards) in the financial year (FY) 2021–2022.

Banks now hesitate to invest in improving their technology stack to smoothen the flow of digital payments due to the lack of incentives. The MDR may discourage players in the payments ecosystem from promoting digital payments. Therefore, some reimbursement or reconsideration may be needed to prevent this.

REGULATORY HURDLES

Innovative products are only the tip of the iceberg. Numerous complexities in the legal perspective crop up under the surface. It is, therefore, important to maintain a balance between encouraging emerging technological advancements and administering them accordingly.

Ever since the Digital Revolution, Indian regulators and policymakers have been grappling with the challenge of how to regulate the new and rapidly expanding digital payments landscape while safeguarding against potential risks.

CYBERSECURITY AND DATA PROTECTION

Fintech companies process large chunks of data, analyse market demands, and customise their offerings accordingly. They are, hence, required to adhere to the data protection and cyberspace laws.

DISTRIBUTED LEDGER TECHNOLOGY (DLT) AND SMART CONTRACTS

The DLT is regarded as the shared data by the users that have been circulated on various online sites and institutions which are not being administered. For instance, a contract that has been entered into by both parties through digital means may not be valid in all jurisdictions. In such a case, the legal scope will be ambiguous.

ROBO-ADVISORS AND LEGAL RESPONSIBILITY

Robo-advisors are digital platforms that provide automated, algorithm-driven financial planning services with little to no human intervention; for example, FundsIndia, GoalWise, and Aditya Birla Money's MyUniverse. The question that arises here is: In cases where a party acts on the advice of a robo-advisor and suffers an adverse outcome, who is to be held liable for providing unsound investment advice—the robot, the developer, or the financial architect?

Although there are no separate regulations for robo-advisors, a consultation paper issued by the Securities and Exchange Board of India (SEBI) states that under the current investment advisor regulations, there is no express prohibition for the use of automated advice tools by SEBI-registered investment advisors.

OUTSOURCING THE CORE BANKING SYSTEM TO THE PUBLIC CLOUD

Negotiations between a financial institution and an outsourcer should submit to the absolute requirements to ensure more transparency and stricter standards for data protection and penalties thereof.

BIOMETRIC AUTHENTICATION USING FINGERPRINT RECOGNITION

The authentication of biometrics can give rise to security concerns, even though they are collected with customer consent from the objects that they touch every day. They are subject to counterfeit by unauthorised third parties for illegal and malicious purposes.

LEGISLATION IN INDIA

The rise of innovation necessitates the need for regulation. Realising this, the Payments and Settlement Systems (PSS) Act, 2007—which provides for the regulation and supervision of financial transactions in India—was promulgated.

Under the PSS Act, 2007, two regulations have been made by the RBI: the Board for Regulation and Supervision of Payment and Settlement Systems (BPSS) Regulations, 2008 and the Payment and Settlement Systems (PSS) Regulations, 2008.

The BPSS is empowered to authorise, prescribe policies, and set standards for regulating and supervising all the payment and settlement systems in the country and exercises its powers on behalf of the RBI under the PSS Act, 2007.

The PPS Regulations, 2008 lay down the procedural requirements for commencing or carrying on a payment system. They cover matters like forms of application for authorisation for commencing/carrying on a payment system and grant of authorisation, payment instructions, and determination of standards of payment systems.

Together, they provide the necessary statutory backing to the RBI for overseeing the payment and settlement systems in the country.

In furtherance of the same, the RBI and SEBI have set up the Working Group on FinTech and Digital Banking and the Committee on Financial and Regulatory Technologies with the task of assessing the opportunities, risks, and challenges presented by the rapid growth of FinTech in India.

Spatially Dispersed and Job Generative Growth

Financial Ecosystem for Micro, Small, and Medium Enterprises (MSMEs)

Ajay Thakur

INTRODUCTION

Small and medium enterprises (SMEs) play a catalytic role in the development process of the economy as they constitute a major part of the industrial activity in these economies. This is reflected in the form of their increasing number and rising proportion in overall product manufacturing, employment, technical innovations, and promotion of entrepreneurial skills. India is expected to emerge as one of the leading economies in the world over the next decade in light of a positive political and economic scenario. The Micro, Small, and Medium Enterprises (MSME) segment is expected to play a significant role in the emergence of the Indian economy. The development of this segment is extremely critical as it generates significant levels of employment across urban, semi-urban, and rural areas in the country and creates inclusive growth. Therefore, the Government, policymakers, and multilateral financial institutions remain focused on addressing the barriers to the growth of SMEs.

The MSME sector is governed under the Micro, Small, and Medium Enterprises Development Act, 2006. This act came into effect to facilitate and promote the sector and enhance its competitiveness. In the year 2020, the Government has come out with a new definition of MSMEs.

NEW MSME CLASSIFICATION

The distinction between the manufacturing and services enterprises has been removed by making the investment amount and annual turnover similar for enterprises engaged in both sectors. The definitions of the micro, small, and medium enterprises as per the new criteria is given in Table 1.

Table 1: *Classification of Micro,Small and Medium Enterprises*

Sector/Enterprise Type	Micro-Enterprise	Small Enterprise	Medium Enterprise
Manufacturing and Services Sectors	Investment less than ₹1 crore Turnover less than ₹5 crores	Investment less than ₹10 crores Turnover up to ₹50 crores	Investment less than ₹50 crores Turnover up to ₹250 crores

Source:

Table 2: *Estimated numbers of MSMEs in India: Financial Year (FY) 2021–2022*

Activity Category/ Sector	Estimated Number of Enterprises (in Lakhs)	Share
Manufacturing	196.65	31%
Trade	230.35	36%
Services	206.85	33%
Total	633.88	100%

Source: https://msme.gov.in/ (*Accessed on: September 2022).*

As per Table 2, India has an estimated 633.88 lakh MSMEs. Of these, 324.88 lakh MSMEs are based in rural areas and 309 lakh are from urban areas. The sector has made significant contributions to the country's socio-economic growth and complemented major industries as well. MSMEs account for approximately 40 per cent of India's total exports, contributing 29 per cent to the gross domestic product (GDP) (6 per cent of the GDP from the manufacturing sector and 23 per cent of the GDP from the services sector) and giving employment to 110 million people across the nation. MSMEs, though critical to the growth of the country, lack of access to finance is a major cause of concern. Only 16 per cent of the MSMEs have access to formal channels of financing. As per Indian Finance Corporation (IFC)-Intellecap report, there is a credit gap of ₹16.67 lack crores in the MSME sector.

CHALLENGES FOR DEBT FINANCING

MSMEs primarily rely on debt finance for their operations and as such, all public policies primarily focus on ensuring timely and adequate debt finance to this sector. Lack of transparency in business operations is often cited as one of the key reasons for the financing gap in the Indian MSME sector, thereby increasing banks and Non-Banking Financial Companies (NBFC) risk perception of these enterprises resulting in reduced lending. While MSME promoters or entrepreneurs have good knowledge of their business operations, other factors, such as limited market knowledge and awareness, low production capacity, lack of working capital management, lack of sufficient managerial competency, and non-availability of adequate collateral, affect the banks' lending to the MSME segment.

CHALLENGES FOR EQUITY FINANCING

In India, more than 95 per cent of the MSMEs operate through proprietary and partnership models and thereby, fail to attract equity investors. Changing the legal structure of the enterprise to a limited or a limited liability partnership company would allow these enterprises to attract equity investments. However, it would also involve meeting the taxation guidelines and compliance overheads, which the majority of the MSMEs shun away as it might render their business model financially unviable.

The possibility of equity infusion in SMEs depends as much on the legal structure of SME enterprises as on the equity investors. Limited companies and limited liability partnership companies allow external investors to infuse equity into the enterprise as these legal structures limit the liability of the investors to the extent of their shareholding. On the other hand, other legal forms, such as proprietary and partnership firms, transfer unlimited liability to the equity investors, thereby discouraging the investors from infusing equity into such firms.

Financial transparency as well as adequate corporate governance, the key requirements for equity investment, prove to be major hindrances for SMEs when it comes to attracting equity investments—especially for those small enterprises that shy away from disclosing the required financials and giving away their ownership.

GOVERNMENT INITIATIVES

Here is a list of some initiatives that the Government has taken to support the MSME sector:

- MSME Business Loans in fifty-nine Minutes was introduced in 2018 and allows both new and existing businesses to utilise the financial assistance offered by the scheme. The loans provided under these schemes extend up to ₹10,000,000.
- The MUDRA Loan scheme was created to help 'fund the unfunded' and offer finance to micro-businesses. MUDRA loans are offered at all bank branches throughout India.
- The Stand-Up India scheme was created to provide loans for businesses run by people belonging to Scheduled Castes/Scheduled Tribes and women. The scheme is overseen by the Small Industries Development Bank of India

(SIDBI) and loans granted under this scheme can range from ₹10,00,000 to ₹1,00,00,000.

- The Credit Guarantee Fund Scheme for Micro and Small Enterprises helps SMEs obtain loans without any collateral. The scheme is managed as a trust by the Ministry of MSMEs. The scheme can offer working capital loans up to ₹2,00,00,000 with a preference for women entrepreneurs.
- The Prime Minister Employment Generation Program (PMEGP) is a bank-appraised and -financed programme to generate employment opportunities.
- Interest Subvention Scheme was Introduced by the Reserve Bank of India (RBI) to provide relief of up to 2 per cent of interest to legal MSMEs.
- There is a provision for collateral-free automatic loans up to ₹3,00,000 crores for MSMEs to buy raw materials, meet operational liabilities, and restart businesses.
- The government has contributed to the creation of attractive opportunities for domestic firms by disallowing global tenders in procurements of up to ₹200 crores.
- The commitment of the Government and public sector units (PSUs) to clear MSME debts within forty-five days has provided huge relief.
- The Government has announced Fund of Funds for MSMEs with an initial corpus of ₹10,000 crores, which will be leveraged through the daughter funds to the tune of ₹50,000 crores. This fund will be investing in the equity of growth-oriented companies.

Initiative and guidelines by Government regarding delayed payment of dues to the MSMEs.

With the enactment of the Micro, Small and Medium Enterprises Development Act 2006, buyers must pay the MSME units (for the goods and services supplied by the MSME units) according to the following schedule:

- Unless otherwise agreed upon between the buyer and the provider in writing, the buyer must make payment by the agreed-upon date. A maximum of 45 days of the agreement shall be allowed between the buyer and seller.
- On non-payment, the buyer shall pay the supplier compound interest with monthly rests at three times the Bank rate (determined by the RBI) on the amount from the appointed day or, at the agreed time, at three times the bank rate.
- The buyer is responsible for the interest as described above if the supplier supplies goods or renders services.

The Micro and Small Enterprises Facilitation Council shall resolve disputes about any amount due. The banks have been advised to comply with the payment obligations of large corporate borrowers to MSMEs while sanctioning/renewing credit limits to their large corporate borrowers (that is, those with working capital limits of at least ₹10 crores from the banking system). They should set aside separate sub-limits, within their overall limits, for meeting payments in respect of purchases from MSMEs—either on a cash basis or on a billing basis.

Launch of the Trade Receivables Discounting System (TreDS) Platform by the RBI

The guidelines pertaining to the TreDS platform were introduced in the year 2014 to facilitatate the financing of trade receivables of MSMEs from corporate buyers, government organisations and PSUs through multiple financers. The TreDS Platform was finally launched in the year 2018 and the Government has made it compulsory for all central public sector enerprises and corporates having turnover more than ₹500 crores to register on TreDS. TreDS is a payment system authorised under the Payment and Settlement System (PSS) Act for uploading, accepting, discounting, trading, and settling invoices/bills of MSMEs and facilitating both receivables as well as payables factoring (reverse factoring). MSME sellers, corporate, Central Government Enterprises, PSUs and financiers (banks, NBFC-factors, and other financial institutions, as permitted) are direct participants in the TReDs

TReDS Portals enable MSMEs to receive financing quickly with lower annual interest payout. The platforms' primary goal is to enable MSME sellers to get short-term finance through invoice discounting against major corporations, allowing them to efficiently manage their working capital requirements.The biggest benefit to MSMEs are that all the transactions processed under this system are 'without recourse' to MSMEs.

Initially RBI has given the licenses to three institutions to launch Treds Platform in the year 2017. These three Treds Platforms are:

1. Receivable Exchange of India Ltd (RXIL) TReDS, which is a joint venture of the National Stock Exchange (NSE) and SIDBI
2. Mynd Solution's M1 Xchange
3. Invoice Mart, which is a joint venture between Axis Bank and Mjunction Services

Recent push to MSMEs in FY 23-24 Budget

Over the years the government's focus and policies have shifted in favour of MSMEs.The FM has proposed to spend a substantial amount – a record ₹22,138 crore on allocations aimed at MSMEs as part of the announcement in the budget FY 22-23. The FM also announced several other majors to boost growth in the MSME sector.The launch of a revamped credit guarantee scheme worth ₹9,000 crore for MSMEs would enable collateral-free credit of ₹2 lakh crore loans to the small businesses. The cost of funds will be less than 1 per cent of the normal banking rates. The FM has also announced relief to government suppliers whose projects were stuck during the Covid phase and their bank guarantees were either forfeited or penalties were imposed on them. Now, 95 per cent of that money would be reimbursed to them, which is a huge relief as a large number of SMEs who were unable to fulfill the contracts because of Covid. To support MSMEs in the timely receipt of payments, FM also proposed the deduction for expenditure incurred on payments made to them by buyers only when payment is actually made to MSMEs. This means buyers cannot claim a deduction without first paying MSMEs. This will enable MSMEs to get payment on time.The presumptive tax limit for micro enterprises has been increased from ₹2 crores to ₹3 crores and for professional increased from ₹50 lakhs to ₹75 lakhs whose cash receipts are not more than 5 per cent of total receipts.

Alternate Sources for MSME Financing

Venture capital (VC) is rapidly emerging as an important source of finance for SMEs, especially for high-risk technology and innovative startups as well as for business expansion. The non-corporate structure, small size of these enterprises, higher transaction costs, and difficulties in exiting SME investments have been the prime reasons for the reluctance of venture capitalists and private equity players to invest in these enterprises. However, with several initiatives taken to develop the MSME sector and measures taken to develop SME stock exchanges, coupled with the number of SMEs venturing into non-conventional businesses such as e-commerce and retail, the VC and equity financing scenario in India is rapidly changing in the SME segment.

To increase VC funding amongst SMEs, the SIDBI has been playing a pivotal role through its subsidiary, SIDBI Venture Capital Limited (SVCL). India Opportunity Fund (IOF) set up by the Government of India along with the SIDBI, aims to provide ₹50 billion VC funding to Indian SMEs in emerging sectors such as light engineering, clean-tech, agro-based industries, logistics, infrastructure, educational services, and IT/IteS, among others. In view of the potential the SME sector presents, an increasing number of venture capital and private equity players are venturing into the SME segment.

While banks and non-banking financial institutions (NBFCs) play a major role in financing SMEs, the ability of SMEs and startups to access alternative sources of capital like equity funds needs to be enhanced considerably to encourage and develop entrepreneurship. Equity capital is often a more appropriate financing instrument for high-growth potential SMEs. Equity capital puts finance into the business without committing the company to inflexible repayment schedules or debt covenants that could see them lose control if results come more slowly than expected. It is also a more fitting way to reward investors prepared to take the risk of putting money into SMEs and startups. These investors do not get regular repayments of capital and interest, but they would get a greater share of the upside than lenders in the event of the business being a success. The firms typically look for equity capital to provide them with the financing they need for working capital, expansion, breaking into new markets, and growing faster. Today, capital markets, in general, have become more robust. Capital market regulations in India are among the best in the world. As the investor base keeps widening, it becomes inexorable to provide investors with a greater choice of investments. To create and conserve SMEs, a specialised capital market segment has been put in place that can provide equity capital to SMEs for their growth.

INTRODUCTION OF SME PLATFORM OF STOCK EXCHANGE

Understanding the importance of SMEs towards the growth of the economy and the problems pertaining to financing, the Prime Minister task force in 2010 recommended setting up of the SME Exchange. The Securities Exchange Board of India (SEBI) came out with the framework for SME Exchange on 18 May 2010. They also introduced a new chapter in the Issue of Capital and Disclosure Requirements (ICDR) Regulations on 26 April 2010. The first SME Exchange was launched on 13 March 2012 by BSE (erstwhile Bombay Stock Exchange), whereby the first SME got listed.

GUIDELINES FOR SME EXCHANGE/PLATFORM

The guidelines for listing have been made simpler to help a wide range of SMEs to get access to equity funding through the capital market. The brief guidelines for the same are:

- Issuers with post-issue face value capital up to ₹10 crores shall be compulsorily listed under the SME Platform; issuers with post-issue face value capital between ₹10 crores and ₹25 crores may get listed on the SME Platform; and issuers with post-issue face value capital above ₹25 crores can only get listed on the main boards of the Exchanges.
- Net Tangible Assets should be a minimum of ₹1.5 crores.
- The company or firm should be minimum three years old.
- The company should have a positive cash accrual in any one of the preceding three years.
- The company public issue should be 100 per cent underwritten and merchant banker/s shall underwrite 15 per cent in their own account.

- The merchant banker to the issue will undertake market-making through a member of the stock exchange who is registered as a market-maker with the SME Exchange. The merchant banker to the issue will be responsible for market-making for a minimum period of three years.
- The company should not have been referred to the National Company Law Tribunal (NCLT).
- There should not be any winding-up petition against the company that has been accepted by a court.
- The minimum investment on the SME Platform should be ₹1,00,000.
- The Stock Exchange will be the approving authority for the Draft Red Herring Prospectus (DRHP).

Compliances on the SME Platform

The compliances on the SME Platform (Table 1) have been relaxed to make things easier and reduce the cost burden. This also allows SMEs to slowly mature and bring in corporate governance and best practices which will further increase the credibility of the listed SMEs. The listed entity shall file the reports, statements, documents, filings, and any other information with the recognised stock exchange(s) on the electronic platform as specified by the Board or the recognised stock exchange(s). It is mandatory for the filing of various information with the exchange in electronic mode through online web portal (http://listing.bseindia.com). Effective from 1 December 2015, those filings that are not filed with the Exchange through the Listing Centre are liable to be considered as non-submission and consequently, non-compliant with the Regulations.

Table 1: *Compliances on the SME Platform*

S. No.	Compliance	Periodicity
1.	Financial Results	Within forty-five days from the end of the half year and in case of an Annual Financial Result, within sixty days from the end of the FY
2.	Shareholding Pattern	Within twenty-one days from the end of the half-year
3.	Annual Report	Within twenty-one working days of it being approved and adopted in the annual general meeting
4.	Certificate from the Practicing Company's Secretary Regarding Corporate Action	Within one month of the end of each half of the FY

5.	Compliance Certificate Certifying Maintenance of Physical and Electronic Transfer Facility	Within one month of the end of each half of the FY
6.	Statement of Investor Complaints	Within twenty-one days from the end of each quarter
7.	Reconciliation of the Share Capital Audit Report	Within thirty days from the end of the quarter

Source: _______*BSE*_______________________.

Compliance filing for entities other than those listed on the Exchange may be done through email to the designated ID, corp.relations@bseindia.com.

MIGRATION FROM SME EXCHANGE TO THE MAIN BOARD OF THE EXCHANGE

Once the SMEs get listed on the SME Platform of the Exchange, they get traded and after a certain period, once they become big and comfortable doing compliance, they would like to graduate to the main board of the Exchange. To facilitate migration from the SME Board to the Main Board of the Exchange, both the Exchanges and SEBI have come out with the guidelines which are as follows:

1. Market Capitalisation should be minimum ₹25 crores (The Market Capitalisation on Weighted Average Price (WAP) of preceding 20 traded days from the date of submission of application to the Exchange for migration from SME platform to the Main board should be equal to or more than ₹25 crores).
2. Minimum post-issue face value capital should be more than ₹10 crores.
3. No disciplinary action by other stock exchanges and regulatory authorities in past three years. There shall be no material regulatory or disciplinary action by a stock exchange or regulatory authority in the past three years against the applicant company. In respect of promoters/promoting company (ies), group companies, companies promoted by the promoters/promoting company (ies) of the applicant company, there shall be no material regulatory or disciplinary action by a stock exchange or regulatory authority in the past one year.

4. There should be proper redressal mechanism of Investor grievances.
5. There should be valid DIN No. and PAN number of directors.
6. They should provide following certificates to the Exchange at the time of migration:
   - The company has not been referred to the NCLT.
   - The net worth of the company has not been wiped out by the accumulated losses resulting in a negative net worth.
   - The company has not received any winding up petition admitted by a court.

BENEFITS OF LISTING ON SME PLATFORM

Listing SMEs on the SME platform has the following benefits:

- It provides SMEs with equity financing opportunities to grow their business from expansion to acquisition.
- Equity financing lowers the debt burden, leading to lower financing costs and a healthier balance sheet.
- It helps in unlocking the value of the company and wealth creation.
- It helps in enhancing the credibility of the companies and increases transparency, which helps in creating trust among stakeholders.
- It expands the investor's base, which, in turn, helps in getting successive rounds of equity funding.
- It enhances the company's visibility as it gives it greater profile and credibility.
- It provides greater incentive for employees as they can participate in the ownership of the company and benefit from being its shareholders.
- It provides the investors with entry into and exit from the company through the Exchange Platform.
- The promoters can also use the listed shares as collateral to raise debt funds.
- The SME sector will grow better on two pillars of the financial system, namely, banking and the capital market.

The Stock Exchages since inception of SME Platform has taken lots of measures to reach the SMEs across the country by conducting seminars with clusters, industrial associations, professional bodies, financial institutions and meeting SME promoters one to one. The huge efforts yielded results which is evident in the statistics mentioned below.

Table 2: *Statistics on the SME Platform*

S. No.	Number of Companies in BSE AND NSE SME Platform	Fund Raised (in Crores)	Market Capitalisation (in Crores)
1.	722	₹9318	₹1.20 Lakh

Source: BSE & NSE

Evolution of the FinTech Platform

The widespread use of smartphones has decreased the cost of data by 95 per cent in the past three years. From small vegetable vendors to big companies, everyone is using social media platforms to make credit decisions. The attractive offers by different FinTech companies and banks are opening new investment opportunities for entrepreneurs. Using the underwritings of digital payment data, FinTech companies in India are allowing companies with low credit scores or asset bases to get the required funds on time.

Today, MSMEs are actively choosing new FinTech companies that provide modern repayment facilities according to the demand of the company. The applicants on these FinTech platforms receive credit at a lower cost through an entirely transparent process. New-age FinTech companies are able to process and disburse the funds in less than three working days.

With the growth of technology in the FinTech industry, the credit gap in the MSME sector will be addressed. Also, banks will come forward to partner with leading FinTech companies to provide better customised SME lending solutions for future borrowers. This will come as a relief for future applicants as the cost of acquisition will further go down.

Even today, lenders are partnering with FinTech companies to improve the process of lending for MSMEs. By providing digital methods of lending, the MSME lenders are positively impacting the market by opening new doors of opportunity for companies that need capital for developing their services and products. In the future, digital lenders will instantly get access to the digitally-verified data of their customers from FinTech companies. This information will include data about income tax, GST, equities, mutual funds, and other metrics that reduce the risk of fraud. Once the data is properly verified, the lenders would be able to immediately disburse the amount based on the requirement of the applicant. This will reduce the time of fund disbursal.

India's credit lending infrastructure is now shifting towards digitisation, and with the availability of affordable internet, there is no going back. Further, conventional lending has several pain points due to which MSMEs seek alternative modes of lending. With the help of technology, digital lending platforms address several challenges, such as:

- Long processing time
- Lack of transparency not needed
- Inadequate loan amount
- Inflexible loan tenure
- High interest rate
- Collateral and documentation requirements.

Digital lenders have a shorter loan turnaround time of around a few hours or a day or two. Manual form filling is replaced with digital data capture and e-signature, making the process efficient for both lenders and borrowers. With digitally available data, lenders get a better insight into borrowers' creditworthiness and borrowing history, reducing misrepresentations on the borrower's part. While traditional lenders are in the early stages of rolling out consumer-oriented solutions, digital lenders have always stayed ahead of the curve by providing customised solutions with 24/7 access. With digital lending, operation efficiency has also increased as the business can save on infrastructure and human resources cost.

GOING FORWARD

MSMEs are key to achieving US$20 trillion Indian economy by 2047. However, for India to grow rapidly in the next decade, MSMEs must mature into large-scale corporations. India needs to triple the number of large-scale businesses, with over 1,000 mid-range businesses currently scaling up.

SMEs can only grow fast by using two pillars of funding—Debt and Equity. Only then small enterprises can transform into medim enterprises and medium enterprises can transform into large enterprises. This will generate employment and the economy can grow at faster pace. If we have to achieve 20 trillion dollar economy by 2047 then all the stake holders have to ensure that there should be sustainable and faster growth in the MSME sector.

To enhance the flow of credit to the MSMEs, financial institutions and NBFCs should consider venturing beyond the traditional lending approach and adopt a relationship-lending approach, which involves a move from Know Your Customer (KYC) to Understand Your Customer (UYC). An appropriate SME customer management involves a combination of several strategies, such as fully understanding the customer needs, matching the consumer needs to the best offers in terms of price, products, service level, and delivery channel, staying updated on several phases of the customer life cycle, and effectively managing critical moments during the customer life cycle. This would allow financial institutions to establish a strong financing relationship with their MSME customers and help them serve better. It would also enable them to optimise their risks, take effective pricing decisions, develop products and services specific to the MSME segment, and develop sophisticated collection strategies. This would, in turn, increase the profitability from the segment and keep a check on their NPAs.

The equity funding ecosystem needs to be made strong for the SME segment. The need of the hour is to create awareness among SMEs to access the SME Platform of the Stock Exchanges and raise equity funding for their growth, heathy balance sheet, credibility, and transparency. Listing on the Stock Exchange will further help them in unlocking the value of the company and create a succession plan. The SMEs also have to move forward to leverage all types of funding options available to grow at faster pace.

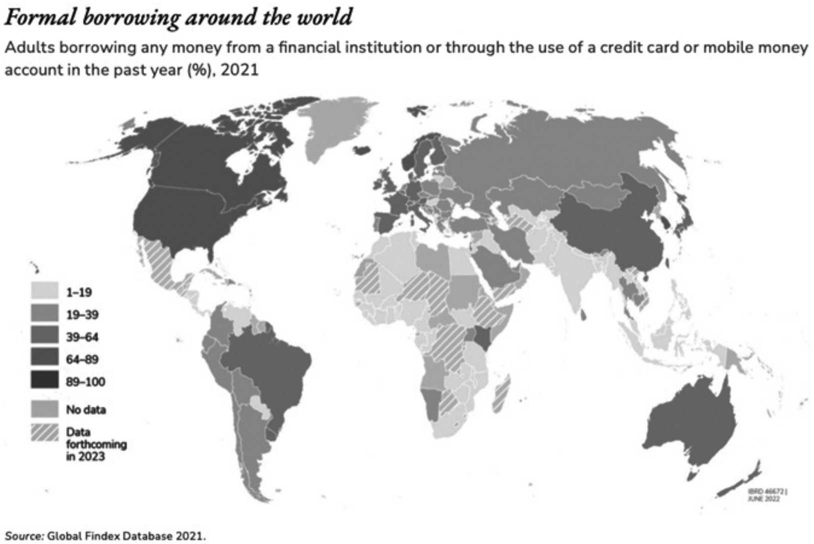
Role of Microfinance in Building a $5 Trillion Economy

Alok Misra and Vinay Singh

1. INTRODUCTION

The role of financial development and deepening in catalysing financial activity is widely accepted. Access to credit encourages the borrowers at the bottom of the pyramid to invest in entrepreneurial ventures or to strengthen their existing livelihood. Such businesses offer them the possibility of earning a higher income as compared to the alternative option of employment at low wages (Banerjee and Newman, 1993). Easier access to credit also helps newer segments of the population to avail the services of formal financial institutions. Multiple research studies have established the positive impact of credit availability on poverty reduction, women empowerment, household health, children's education and other human development indicators (Honohan, 2004; Beck et al., 2007; Demirguc-Kunt et al., 2008; Sahay et al., 2015; Ghosh and Vinod, 2017).

Figure 1: *Formal Borrowing Around The World*



Despite the progress made in improving financial inclusion, in 2021 only about 53 per cent of adults worldwide reported borrowing any money over the past 12 months (Global Findex Database 2021). In developed countries, borrowing from formal sources was pre-dominant. The percentage of adults borrowing from formal sources in developing countries continues to be low though it has increased from about 16 per cent in 2014 to 23 per cent in 2021.

2. ACCESS TO CREDIT IN INDIA

Providing easy access to credit to the poor sustainably has been an important goal for the policymakers in India, since independence. In 1951, the total population of India was 361 million, around 82.72 per cent of the total population lived in rural areas, and out of which nearly 60 per cent were poor. From 1950 to mid-1960s, efforts to expand credit availability to the poor focussed on the existing network of cooperative banks in rural areas and private commercial banks in semi-urban and urban areas. However, institutional constraints of cooperatives and the preoccupation of private commercial banks with the industrial and service sector proved to be a bottleneck.

Tardy progress in credit delivery resulted in a significant policy response which started with the nationalisation of private commercial banks in 1969 and lasted up to the early 1990s. This phase, euphemistically termed 'social banking', saw a broad swathe of measures starting from the nationalisation of existing private commercial banks, massive expansion of branch network in rural areas, mandatory directed credit to priority sectors of the economy, subsidised rates of interest and creation of a new set of rural banks at the district level and an apex bank for agriculture and rural development namely National Bank for Agriculture and Rural Development (NABARD) at the national level. The increase in banking network and volume of credit was supplemented by directions on interest rate regulation and provision of subsidies under various government programmes routed through the banking structure.

Such a decisive policy push did yield impressive quantitative results with the average population per bank branch falling tenfold from about 140 thousand to 14000 (Burgess & Pande 2003) between 1961 and 2000 and the share of institutional agencies in rural debt increasing from 7.3 per cent in 1951 to 66 per cent in 1991(RBI 1954; GOI 1992). However, the quality of formal sector penetration posed serious issues.

Government interventions through directed credit, state-owned Rural Financial Institutions (RFI) and subsidised interest rates increased the tolerance for loan defaults as credit was perceived as a dole from the state. Loan waivers by the government added to the problem. It weakened the structure financially and certain common trends became visible across the banking sector during the early 1990s. Two major problems were: (a) high incidence of loan default leading to an increase in risk cost and reduced ability to recycle funds and b) high transaction cost in retailing rural credit, yet lending at concessional rates causing insufficient financial spread (Misra 2008). The All India Debt and Investment Survey of 1991 showed the wide gap in formal sector share in rural household debt across income categories. The households in the bottom 3 deciles of household income had ~40 per cent share of the formal sector in cash debt, while the top household income decile had a high 81 per cent share from the formal sector. The inadequacies of a supply-driven, subsidised and normal banking-oriented approach in undertaking last-mile inclusion were evident- it was neither reaching the poor nor was it sustainable over the long term.

3. THE EVOLUTION OF MICROFINANCE IN INDIA: MICROFINANCE VERSION[1]

The evolution of microfinance in India coincided with the global development in microfinance and the evident shortcomings of the existing structure to meet the credit needs of the low-income clients. It found a supportive ecosystem on account of financial sector reforms ushered in 1991 in India.

In many developing countries, directed and subsidised rural credit programmes suffered from similar institutional weakness, cornering of subsidies by the better off and the exclusion of the needy from the reach of financial services. Microfinance projects began to take hold globally in the relatively dissimilar contexts of Bangladesh, Bolivia, and Indonesia as a reaction to these limitations of the formal sector. Professor Muhammad Yunus's ground-breaking work in Bangladesh in the late 1970s was followed by PRODEM in the 1980s in Bolivia and Bank Rakyat Indonesia (BRI) to provide financial services to the poor. In both the scope of their outreach and ability to recover costs, these interventions demonstrated techniques for lending to the poor that were more effective than previous approaches (Rhyne 2001; Robinson 2001). This laid the foundation for the evolution of the concept called 'microfinance' in late 1980s or early 1990s.

The contextual and design differences of various interventions are noteworthy. For example, BRI used individual lending while the Grameen Bank in Bangladesh used group lending and the Bolivian approach was characterised by commercial operations as against the subsidised operations of Grameen. However, the unifying message of these diverse innovations was that 'appropriately designed financial products and services enable many poor people to expand and diversify their economic activities, increase their incomes and improve their self-confidence' (Robinson 2001). Above all, this dispelled the myth that the poor

1. Promotion and Development of Microenterprises (PRODEM) was created in 1986 in Bolivia as a non-profit financial institution.

are not creditworthy. In addition, the unifying thread of these interventions lies in their similar principles, such as reliance on character rather than collateral as primary loan security, use of social capital, positive incentives for repayment, interest rates that approached or covered costs and focus on sustainability which have guided the movement till now (Rhyne 2001).

The impetus for microfinance interventions in India in the early 1990s can be attributed to multiple factors: the realisation of the inability of the formal banking system to reach the poor sustainably, the beginning of financial sector reforms in the early 1990s and the success of microfinance interventions across the world especially in Asia and India by NGOs (Task force 1999; Thorat 2006). NABARD, as the apex agency for rural development, began to search for alternative models of reaching the rural poor. It was found that the poor tended to come together in a variety of informal ways to pool their savings and dispense small, unsecured loans at varying costs to the group members based on their need. This concept of self-help was discovered by social-development NGOs in the 1980s. The democratic nature of these groups, flexible operations and prudent use of savings and loans were impressive. The only constraining factor was the limited financial resources available to such groups- NABARD took the lead in linking the self-help groups (SHGs) with banks to overcome the financial constraint. The success of the programme was evident in high recovery rates of SHG loans (99 per cent) as compared to poor recovery rates under conventional rural finance. The increasing involvement of banks in the programme was another redeeming feature and by March 2005, SHG-Bank Linkage Programme (SBLP) covered 1.6 million groups.

Parallel to the SHG model of microfinance, many donor-funded NGOs started group-based savings and credit activities. As this work was taken up by the existing NGOs working in a range of developmental areas, the microfinance component was an add-on to their existing activities. The next phase of this approach had two features: the separation of microfinance as a separate vertical and reducing dependence on donor funds.

Just as NABARD had taken the leadership role for the SHG programme, Small Industries Development Bank of India (SIDBI) took a similar role for the MFI model which relied on making funds available to Micro Finance Institutions (MFIs) for lending to clients. Enabling fund flow to the MFIs also entailed more transparent financial operations, which expedited the process of separating microfinance operations with separate financial statements. Initially, SIDBI relied on lending directly as well as institutional strengthening through training and capacity development. To ensure linkage with the banking system for the flow of debt funds, SIDBI supported M-CRIL[2] in developing a rating

2. Micro-Credit Ratings International Ltd. (M-CRIL) is a microfinance rating agency working globally with focus on Asia. www.m-cril.com

tool for MFIs. This ushered in a new phase by providing a credible third-party assessment of performance and gaining the confidence of bankers. By 2005, the MFI model had transformed with the emergence of 'microfinance only' organisations as against earlier clubbing of microcredit with other developmental activities. Though the model had moved to a system of external ratings for performance assessment, established linkages with the banking sector and also received the support of the apex institution in the form of SIDBI, it retained its ideology of client focus and had a modest outreach of 1.76 million (M-CRIL 2009). The sector was dominated by MFIs organised as societies and trusts and employed a variety of models (Grameen, Individual and SHG) to deliver credit services.

Both models were growing modestly but sustainably till 2005 in line with the approach of slow progress in building social capital and using social structures to undertake financial intermediation. Various studies across the globe provided support to the view regarding the positive effects of microfinance both under the SHG model and the MFI model. Spurred by these developments, the World Bank, the Asian Development Bank (ADB), the United Nations as well as practitioners hailed microfinance as the new panacea against poverty. Things changed post-2004 for both SBLP and MFI models.

3.1 Fast Growth & Lack of Customer Focus Lead to a Crisis

The period 2005-2010 saw a rapid increase in the expansion of the microfinance sector. Unfortunately, during this period, the focus on client engagement and understanding (core of the microfinance model) was lost in the pursuit of growth. By the end of 2010, almost every state was witnessing high competition, credit saturation, multiple borrowings and rising default rates. It was evident that something was going to break.

By 2005, a critical mass of SHGs had been established and its promise of providing a quick and easy means of promoting inclusion and poverty alleviation efforts caught the interest of the policy makers. Ambitious targets for linking an increasing number of SHGs by banks, NGOs and government agencies were not accompanied by a focus on quality (Misra 2008). A comprehensive study on Self Help Groups in India by EDA Rural Systems and APMAS in 2006 found that 40 per cent of groups had very weak records and another 39 per cent had moderate quality records (EDA & APMAS 2006).[3] The growth was not spread out- 2010 data on the cumulative number of SHGs credit linked shows 53 per cent share of the southern region, of which Andhra Pradesh alone accounted for 24.7per cent. Similarly, average loans disbursed per group jumped from low

3. The study covered 215 SHGs spread across four states of AP, Karnataka, Odisha and Rajasthan

levels of ₹46,800 in 2008 to ₹1,15,829 – nearly a threefold increase in two years. Alarming signs of repayments dipping to 80-85 per cent, poor quality of groups formed by government agencies, deficiencies in hand-holding support required to nurture groups and lack of motivation required to sustain a long-standing programme with such huge numbers from both NABARD as well as banks did not bode well (Srinivasan 2010). A study by CMF on access to finance in Andhra Pradesh showed pure consumption accounting for 49.9 per cent of loans (Johnson & Meka 2010).

Though spurred by different factors, a similar period of high growth was seen in the Joint Liability Group (JLG) model-based MFI lending. The linkage of MFIs with banks based on independent ratings led to the infusion of substantial sums of money into the system. To ensure financial discipline, banks relied on prudential norms like debt-to-equity ratio to have reasonable levels of leverage. MFIs registered as societies and trusts found it difficult to raise capital from external sources due to their legal form. This led the MFIs to transform into Non-Banking Finance Companies (NBFCs), the only legal route permissible and acceptable to equity investors. The transformation phase started around 2004 and by 2008, all major MFIs had transformed into NBFCs and dominated the sector accounting for 90 per cent of the market share by 2010. Since regulations did not allow NBFCs to take deposits, MFIs had to fulfil their funding requirements through private capital as equity or from banks as term loans. MFIs, to continue to be attractive to investors, went for aggressive growth. As a result, MFI outreach touched 26.7 million clients by March 2010.

Andhra Pradesh (AP) was the state where these fault lines converged. It accounted for a high 25 per cent share of the total SHGs linked to banks. This overlapped with a strong presence of the MFI network. The result was rapid growth in lending accompanied by high competition, credit saturation, multiple borrowings and rising default rates. The ordinance of the Andhra Pradesh government in October 2010 proved to be the straw that finally broke the camel's back. More than 90 per cent of MFI loans in Andhra Pradesh overnight turned into Non-Performing Assets(NPA). Government scrutiny of the sector and news of defaults in Andhra Pradesh led the banking sector to heavily curtail the flow of funds in the form of term loans further choking the sector. It was time for a complete overhaul of the sector.

4. RESPONSE TO THE CRISIS: REGULATOR HERALDS A NEW REGIME- MICROFINANCE VERSION 2

Following the AP crisis, RBI constituted the Malegam Committee in 2011 to study the microfinance sector. Among other things, the committee was entrusted to perform the following tasks:

- Review the definition of microfinance and MFIs for regulating NBFCs undertaking microfinance.
- Examine the prevalent practices of MFIs concerning interest rates, lending and recovery practices from a ‘customer protection’ perspective.
- Delineate the objectives & scope of regulation of NBFCs undertaking microfinance and the regulatory framework needed by the Reserve Bank to achieve those objectives.

The new RBI regulations were introduced based on the recommendations of the Malegam Committee. The regulations notified the formation of a new category of regulated entities (REs) called NBFC-MFI (NBFC- Microfinance Institution) and were targeted at encouraging the growth of the microfinance sector alongside customer protection, improved regulatory oversight and avoidance of build-up of systemic risks. The regulations clearly outlined micro rules like:

- Criteria for eligibility of a customer based on income;
- Level of indebtedness of the borrower;
- Interest rates that could be charged by the NBFC-MFIs;
- Loan tenure is linked to loan size.

Given the class of customers catered to by microfinance, the Fair Practices Code was made stricter and greater focus was placed on corporate governance. Additional measures were proposed to strengthen the ecosystem and aid its development.

- Every NBFC-MFI had to be a member of at least one Credit Information Company (CIC), provide timely and accurate data to the CICs and use the data available with them to ensure compliance with the conditions regarding membership of JLG (joint liability group), level of indebtedness and sources of borrowing.
- All NBFC-MFIs were encouraged to become a member of at least one Self-Regulatory Organisation (SRO) which is recognised by the Reserve Bank and will also have to comply with the Code of Conduct prescribed by the SRO.

Monitoring of compliance with the regulations had a 3-tiered structure:

- NBFC-MFI themselves supported by SRO;
- Banks’ lending to NBFC-MFIs;
- Reserve Bank of India.

While the responsibility for compliance with all regulations prescribed for MFIs lays primarily with the NBFC-MFIs themselves, they were to be supported by the SRO. In addition, banks’ lending to NBFC-MFIs was required to ensure that systems practices and lending policies in NBFC-MFIs are aligned with the regulatory framework.

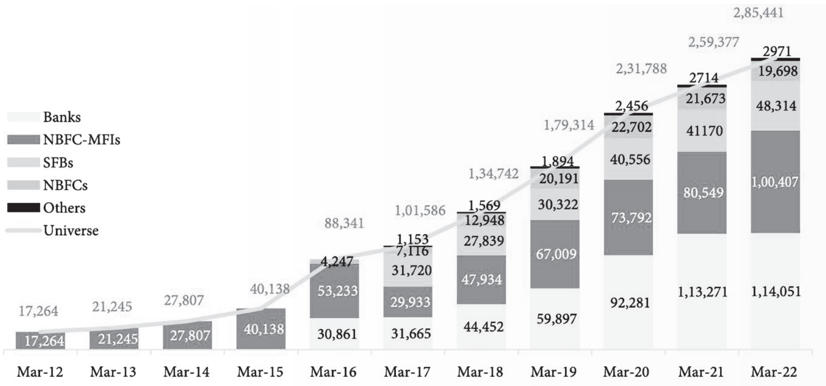
5. A DECADE OF FAR-REACHING CHANGES

5.1 Growth of Microfinance over the last decade

Under the new regulatory regime applicable for NBFC-MFIs, the JLG portfolio registered manifold growth over the last decade (Figure 2). The Gross Loan Portfolio (GLP) of the JLG lending has grown more than 15 times from ₹ 17,264 crore in March 2012 to ₹ 2,85,441 crore in March 2022. The number of unique borrowers has increased to more than 6 crore in March 2022. Other than the increase in loan volumes and outreach, two key aspects changed the landscape.

First was the move of large NBFC-MFIs and banks into each other's domains which were hitherto marked clearly with little overlap. Bandhan Financial Services Pvt. Ltd, an NBFC-MFI, was granted a universal bank license in 2014 which was followed by the graduation of eight more large NBFC-MFIs as Small Finance Banks in 2016. At the same time, many commercial banks and mainstream NBFCs started entering the microfinance space. As a result, the JLG microfinance market now has a diverse financial architecture. As of March 2022, the JLG microfinance portfolio was split between Banks (38 per cent), SFBs (17 per cent), NBFC-MFIs (37 per cent) and NBFCs (8 per cent).

Figure 2: *Growth in Gross Loan Portfolio- Entity-wise*



Secondly, following the regulatory changes, the microfinance sector also took major steps to ensure responsible finance.

- **Credit Bureau:** A separate microfinance credit bureau was established in 2011. Extensive efforts were taken across the sector to streamline the collection and reporting of data regularly to the bureaus. The MFI credit bureau expanded to cover the credit history of more than 6 crore microfinance borrowers with nearly 60 crore records. Application Programming Interface (API) integration between the MFIs and the credit bureau made the credit report of borrowers available in real-time and played an important part in underwriting decisions. At the same time, widespread awareness of the credit report amongst borrowers had a positive impact on repayment behaviour.

- **Self-Regulatory Organisation (SRO):** The regulations placed a high emphasis on ensuring customer protection. Consequently, Microfinance Institutions Network (MFIN) was recognised as the first Self-Regulatory Organisation (SRO) for NBFC-MFIs by the Reserve Bank of India in 2014. MFIN works closely with microfinance providers, regulators, government, and other key stakeholders to promote responsible lending, client protection, and good governance practices across the sector. The SRO played an important role in identifying issues concerning customer satisfaction and in evolving industry-wide norms.
- **Code of Conduct (CoC):** After widespread consultations by the SRO, an industry Code of Conduct was evolved as a document to guide the sector. The CoC stressed fair interaction, suitability of products and services, financial literacy and grievance redressal and employee engagement practices as the foundational elements of microfinance. The CoC found industry-wide acceptance and it has been regularly updated to keep abreast with the latest developments.[4]
- **Customer Grievance Redressal Mechanism (CGRM):** Given the geographical spread of the microfinance business and the profile of a typical borrower, a responsive customer grievance redressal mechanism is an important part of customer protection. MFIN supported the development of grievance redressal practices amongst its NBFC-MFI members. MFIN also provides a grievance redressal system for the customers of its members - the MFIN CGRM attends to more than 1 Lakh customers per year and handles complaints related to disbursement, repayment, insurance, errors in credit bureau records etc.
- **Employee Bureau:** The microfinance model requires a high-touch approach keeping in mind the borrower profile and the highest standards of customer service. This is provided by a frontline force of more than 2 lakh employed with different entities in the microfinance sector. To support the adoption of best practices regarding employee engagement, MFIN helped in establish an employment bureau for the microfinance sector. The member institutions share relevant employee information through the bureau.

5.2 Adoption of digitalisation

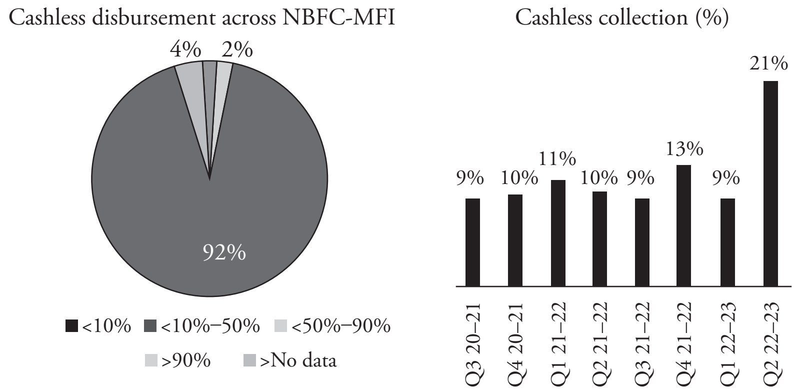
The rapid growth of the microfinance sector was supported by rapid and deep-reaching changes in the other sectors of the Indian economy. Increasing penetration of mobile phones, faster communication due to apps and dissemination of information using social media platforms had a positive impact

4. The latest edition of the Code of Conduct can be accessed at https://mfinindia.org/assets/upload_image/publications/IndustryStandards/Industry Code of Conduct (CoC) - 4th Edition.pdf

on the awareness and knowledge levels of consumers. The number of mobile phone subscribers hit 100 crore in 2016 and by 2018, the internet had more than 50 crore. subscribers. The Pradhan Mantri Jan-Dhan Yojana for providing a no-frills savings account to every citizen led to the opening of more than 40 crore accounts. These accounts provided basic banking transactions leveraging the Aadhaar Enable Payment Systems (AEPS) and the widespread business correspondent[5] network. Similarly, the launch of the Unified Payments Interface (UPI) changed the paradigm of digital payments which saw rapid growth.

Keeping in step with the changes, the microfinance sector initiated digitalisation efforts aligned to the levels of financial literacy of their borrowers. The microfinance model today deploys an optimum mix of technology and human touch. Tab-based solutions are employed in the field to achieve a faster turnaround of loan applications and customer complaints. The MFIs use API integration credit bureaus to pull the credit information report of loan applicants in real-time. A field force of nearly 2 Lakh across the sector provides an assisted digital interface to the borrowers.

Figure 3: *Cashless disbursements and collections*



Today, nearly 100 per cent of microfinance loans are being digitally disbursed directly to the borrower's bank account. The percentage of digital repayments is also improving due to constant efforts at customer awareness and training (Figure 3).

The widespread availability of a bank account and increased adoption of digital transactions have helped create transaction histories of microfinance borrowers. Such data is supporting the development of new lending products for the customers.

5. Business correspondents are retail agents engaged by banks for providing banking services at locations other than a bank branch/ATM. For example: a local kirana shop or the postman..

6. FROM ENTITY-BASED TO ACTIVITY-BASED REGULATIONS: MICROFINANCE VERSION 3

As discussed previously, the microfinance landscape in terms of entities completely changed from 2014–2022. While it heralded the business case of microfinance alongside inclusion objectives, it also led to regulatory issues. The RBI regulations of 2011 were framed when NBFC-MFIs were the only providers of microfinance; the situation changed with different REs having a substantial share of the microfinance market. All institutions had similar products, client profiles and operational methodology but the applicability of regulations to only about one-third of the market serviced by NBFC-MFIs was causing field issues.

- The new market structure faced a peculiar situation of regulatory arbitrage. While NBFC-MFIs had the same microfinance consumer profile as other REs and catered to about one-third of the market, they had to comply with different regulations.
- While other REs did not have to conform to regulations about interest rate caps, the number of lenders was limited to one client, linking loan size to a pre-fixed tenure etc., NBFC-MFIs had to follow all these norms.
- Since NBFC-MFIs are non-deposit taking entities, they borrowed funds from banks while competing with them on the final interest rate offered to the borrower. This put them at a competitive disadvantage.

It was important to address this issue as any adverse field situation could lead to collateral damage to the industry and nullify the gains made. MFIN along with other industry bodies took the lead in plugging this gap through the 'Code of Responsible Lending (CRL)' in 2019. CRL focussed on key issues of client protection and all microfinance lenders signing CRL voluntarily agreed to follow the norms. However, a few major lenders chose to not become a part of it. Regular discussions were held with the regulator by MFIN and other sector participants to rectify this anomaly. After the Reserve Bank of India (RBI) Governor's announcement that the RBI will be coming out with a discussion paper on regulation for the microfinance sector, the Consultative Document was released on 14 June 2021, and the final set of regulations was published in March 2022.

The new regulations are a paradigm shift in regulation on two main counts. First, the regulatory arbitrage based on the legal form of RE is no longer applicable, and all REs doing microfinance lending have to abide by the same set of rules. The sector has now moved to 'asset class' based regulation, over 'legal form of the entity' based regulation. Further, the regulatory paradigm has now changed to 'principles-based' over micro-business rules with greater accountability placed on the boards of REs. The regulations are designed to benefit and protect customers from indebtedness and unethical practices.

The key regulations governing the microfinance space now are summarised in Box 1. The *HouseHold* (HH) income limit has been revised to ₹ 3 lakh from the earlier ₹2 lakh in urban/semi-urban locations and ₹1.25 lakh in rural locations. This has increased the size of the microfinance market and the different regulated entities will now be able to serve the 'middle' segment which gets lost between the microfinance market and the typical banking customer.

Box 1

- Definition of Microfinance Loans:
  - Collateral free;
  - Annual Household Income: Up to ₹ 3 lakh [revised from the earlier ₹ 2 lakh (urban/semi-urban) and ₹ 1,25 lakh (rural locations)];
  - Household: Husband, Wife & Unmarried Children;
  - No restrictions on end use;
  - Irrespective of the mode of processing/disbursal: Physical or Digital.
- Borrower Indebtedness: Defined as 'the ratio of total loan repayment obligations to income ratio for the HH' and a maximum of 50 per cent is allowed. Earlier only NBFC-MFIs had to conform to the cap on the number of lenders and on loan outstanding.
- Cap on the pricing of loans applicable only to NBFC-MFIs removed.
- Board-approved policies to govern:
  - Method of household income assessment;
  - Limit on the ratio of 'monthly loan obligations of the household and monthly household income' (maximum 50 per cent);
  - Pricing of microfinance loans;
  - Policies regarding conduct of employees and system for their recruitment, training and monitoring.
- Credit Bureau: The following were made mandatory for REs
  - Submission of HH income data;
  - Submission of 'Loan Obligations To Income Ratio';
  - Use of credit bureau report to calculate HH indebtedness.

Further, the distinction between rural and urban has been removed which is the right step as with migration and interlinkages the boundaries between rural/urban often get blurred. As such households in rural areas would not be disadvantaged with lower credit limits despite having a higher capacity to pay. The total loan repayment obligations to income ratio of a maximum of 50 per cent of a household's income is a better approach to the indebtedness issue, unlike the earlier method of a limited number of lenders and fixing a cap on loans outstanding & that too only for NBFC-MFIs. The inclusion of board-approved policy on HH income assessment and HH level credit bureau checks to estimate the loan repayment obligations to income ratio adds robustness to the process and would ensure that clients are protected from overlending and in a way lead to timely repayments of loans and good portfolio quality.

Finally, deregulation of the lending rates for microfinance loans will have a far-reaching impact on RE's sustainability and encourage healthy competition among them which in the medium to long term should bring down the lending rates. The new policy stipulates that all REs should have a board-approved policy on pricing, which will be subject to regulatory scrutiny and clients have to be given a fact sheet disclosing an all-encompassing APR (Annual Percentage Rate). This flexibility in pricing is expected to spur innovation, incentivise REs to reach excluded areas as they can price for risk and at the same time ensure transparency in pricing disclosures to the customers.

With the progressive building of digital infrastructure building in the form of credit bureaus, universal bank accounts, digital payments, conducive regulation and diversified regulated entities (REs) operating in the micro-credit space, the sector is all set to unleash its potential in contributing to building an Inclusive India.

7. THE IMPACT OF MICROFINANCE

Going beyond these impressive numbers (Fig 2), several microeconomic studies have investigated the positive impact of microfinance on the borrowing household's health, education, income generation and consumption, on women's empowerment, and other non-economic benefits, namely, conflict resolution and social and political reconciliation (Johnson 2005, Grown 2006, Sanyal 2009, Huis et al 2017). However, as there was an absence of any macroeconomic study quantifying the contribution of microfinance to the Indian economy, MFIN commissioned a research project by the National Council of Applied Economic Research (NCAER).

Box 2

Contribution to Gross Value Added:

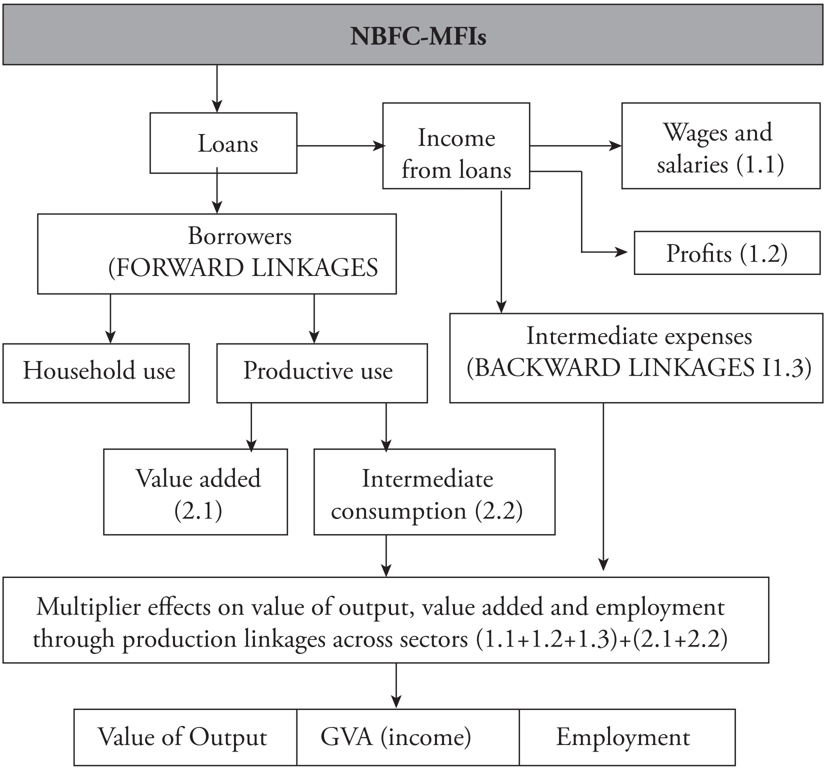
- Contribution of the direct, indirect backward and forward linkages of the NBFC-MFI sector: 0.61 per cent of national GVA.
- The contribution of microfinance sector as a whole including all entities: 2.03 per cent of GVA.

Contribution to Employment:

- Impact through the direct, indirect backward and forward linkages of the NBFC-MFI sector: 38.54 lakh jobs.
- The contribution of microfinance sector as a whole, inclusive of direct, indirect backward and forward linkages and including all including all entities: 128.46 lakh jobs.

The study titled 'Present and Potential Contribution of Microfinance to India's Economy'[6] was a pioneering attempt to estimate the contribution of microfinance to the Gross Domestic Product (GDP) and employment in India. The study estimated contributions of the microfinance sector to the macroeconomy in 2018–19 to be 2.03 per cent of the Gross Value Added (GVA) while generating nearly 1.3 Crore jobs. These numbers are significant. The financial sector as a whole, including insurance, of which microfinance is a part, accounted for 5.5 per cent of GVA in 2018–19. While the microfinance delivery system is relatively small even within the formal financial sector of the economy, the important effects of microfinance include its forward linkages: the households and enterprises that use credit to add value through their production processes. When we consider the 'forward linkages' of the sector, which in turn, generate value addition and jobs, the significance of the microfinance sector in the economy is more appropriately captured. Figure 4 captures these linkages.

Figure 4: *The contribution of microfinance to the economy*



6. The full report can be accessed at https://mfinindia.org/Resources/studyreport

8. AN AGENDA FOR THE FUTURE: CONTRIBUTING TO BUILDING A $5 TRILLION ECONOMY

Before delving into the future agenda and the promise of microfinance, it is important to appreciate the dimensions of the current gap. To do so, we analyse the potential market for microfinance in India as well as the current outreach.

An estimation of the current outreach of microfinance in terms of the number of borrowers is a challenging exercise. Borrowers take loans from multiple providers and there is no unique identifier for a certain borrower. For example, a customer who has availed of a loan from a Scheduled Commercial Bank (SCB), could be shown under SHG figures also and could also have taken a loan from an MFI. To further complicate the matter, the SCB outreach figure is available as the number of accounts and one client could have multiple accounts. With this background, we consider the following data points:

- Lending under the JLG model (source: MFIN quarterly reports)
- Coverage under SHG-Bank Linkage Programme (source: NABARD reports)
- Small borrower account of Scheduled Commercial Banks (source: Statistics released by RBI)

The outreach figures as of March ’22 are shown below

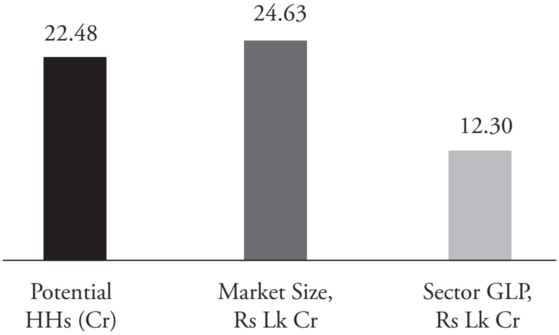
Figure 5: *Number of borrowers/accounts for different channels (Mar ’22)*

Channel/Lending Model	Number of Borrowers / Accounts (in lakh)	The amount outstanding (in crore)
SHG model	578	1,51,000
JLG model	580	2,85,441
SCB accounts (credit limit of ₹ 25,000 or less)	555	41,382
Total	1713	4,77,823

Based on our field experience, the overlap between these three channels is in the range of 40-60 per cent. Taking an assumption of overlap of around 50 per cent, we estimate the outreach to be around 850 lakh borrowers.

Estimation of the total addressable microfinance market and demand is a factor of two variables: the number of HHs which qualify for a microfinance loan based on the annual income criteria and average credit demand of such a household keeping in mind the cap on ‘total loan repayment to income ratio’. Using the census data from 2001 & 2011 and the Compound Annual Growth Rate (CAGR) observed over this period, we estimate the total potential microfinance HHs in India to be 20.32 crore (as of March 2022). Additionally, we assess the credit demand based on the CAGR observed in the average loan outstanding per borrower during the period 2018 – 2022. We estimate the total current microfinance market size to be ₹ 10 lakh crore (21–22) which is expected to grow to ₹ 24.63 lakh crore by 2025–26.

Figure 6: *Estimated microfinance market size by 2025–26*



We triangulate the estimated outreach data with the findings of surveys done on rural indebtedness. NABARD Financial Inclusion Survey (NAFIS: 2016–17) reported that 22.7 per cent of rural households had at least one member associated with a microfinance institution. Nearly one-third of the HHs had a relationship with an MFI for more than 5 years The All India Debt & Investment Survey (AIDIA: January–December, 2019) found that the incidence of indebtedness was about 35 per cent in rural India. About 17.8 per cent of households were found to be indebted to institutional credit agencies only. These figures indicate that there is a substantial potential for the expansion of microfinance services to cater to the existing market. Using the survey findings and the number of HHs estimated above, we estimate the microfinance outreach to be in the range of 5.08 crore to 7.11 crore HHs. Comparing the outreach data of borrowers and HHs, we get a ratio of borrowers per HH covered by microfinance in the range of 1.2–1.67.[7]

Based on the trends riding on features like fast adoption to client needs, doorstep delivery, adherence to a detailed set of regulatory guidelines on client protection and ably supported by the SRO, microfinance will be the key channel in meeting this unmet demand. This merits an examination of aspects that make microfinance suitable to bridge the gap. The following section examines both opportunities and issues.

8.1 Technological innovations and their adoption

Multiple development in the larger financial ecosystem will support the continued growth of the microfinance sector. The widespread use of digital payments is driving the change in consumer behaviour towards increased comfort with

7. Microfinance Potential Estimated HHs (2022) : 20.32 cr. Indebtedness at 25per cent/35per cent translates to 5.08 cr /7.11 cr HHs. Taking the estimated 850 lac borrowers, the ratio of borrowers/HH is 1.67/1.2 which seems feasible.

digital financial transactions. UPI (Unified Payments Interface) has been the pivot around which a vibrant payment ecosystem has developed in India. More innovations allowing for cross-border remittances on the UPI platform are being developed. As an increasing number of transactions move to digital channels, it will create transaction histories which will support the development of newer ways of credit underwriting. Cash-flow-based lending is one such use case. Instead of the traditional way of looking at income and expense, it analyses the cash flows of a business which forms the basis of underwriting. As small and micro businesses become a part of the formal economy, such lending models hold a lot of promise. The initiative to issue an Udyam Registration number for all micro and small enterprises will further promote the formalisation efforts. Udyam is a permanent registration and basic identification number which requires only an Aadhaar number for its generation. The Udyam number will help such enterprises benefit from government schemes. Loans given to enterprises linked to an Udyam number will qualify for priority sector lending for banks. The Account Aggregator[8] framework promises to make the process of accessing and sharing one's financial data secure and fast.

MFIs (Microfinance Institutions) have been increasingly adopting technology to enhance operational efficiency, improve underwriting models and, reduce expenses while continuing the focus on customer centricity. Keeping in mind the low-income, low-literacy levels of microfinance borrowers, digitalisation initiatives have been aligned to the rapid diffusion of smartphones and the growing comfort of borrowers with digital modes of transactions. Improvements in internal processes of MFIs aided by digitisation have improved the timeliness and quality of data being submitted to the Credit Bureaus. This has a direct impact on the improvement in the quality of underwriting as well as the turnaround time for processing loan applications. Borrowers now have multiple channels available to them for registering their grievances. Field teams have online access to data like the status of an application or a grievance and can offer better customer service. Faster access to relevant data also equips the Self-Regulating Organisation (SRO) to conduct better surveillance and be able to identify issues related to customer protection. Increased adoption of digital payments would also lead to better capital efficiency for the MFIs as well as reduce operational costs.

The adoption of any innovation follows a typical S-curve. There are a small number of people who start using a new product or process. Over time, as the word of mouth spreads, more people try the innovation. Once the critical mass of users is reached, the speed of adoption increases rapidly. Many of the initiatives

8. Account aggregators (AA) are RBI approve entities which helps an individual securely and digitally access information from one financial institution where they have an account to any other financial institution in the AA network.

mentioned above will become widely adopted over the next few decades. This will give an impetus to further deepening of microfinance. The microfinance sector is well-poised to leverage the evolving technologies optimally for providing better products and efficient customer service.

8.2 Supportive Regulations and Role of SRO

The new regulations for microfinance released by RBI in March 2022 have moved away from entity-based regulations to an activity-based regime and in doing so provided a useful case study of how a regulatory regime may adapt naturally in response to changing market dynamics, industry self-regulation, consumer evolution, technology diffusion, and the emergence of sector-specific institutions. These regulations put all the different microfinance providers on the same footing and positioned the industry for the next phase of growth very well. The announcement has been welcomed by all stakeholders, but it also requires the sector to display nimbleness, notably in monitoring compliance with the new standards not just at the business level but also at the credit bureau and SRO levels. As we know, for long-term sustainability, efforts at expanding market reach must be accompanied by an intense focus on customer education, transparency and protection.

The Code of Conduct (CoC) for the microfinance industry released in October 2022 provides a robust framework for customer protection. The CoC incorporates elements of Universal Standards of Social Performance Management (USSPM), Client Protection Principles (CPP) and sector best practices. Its implementation will position the sector well for future growth. Digital processes are being widely adopted by microfinance lenders to improve process efficiency and customer experience. At the same time, the speed of adoption and the level of comfort with digital interactions might differ across borrowers. The lenders should keep this aspect of customer adoption in mind and ensure that adequate measures are taken in terms of training and grievance redressal when introducing such initiatives. COVID-19 had an impact on the discipline of weekly meetings and consequently negatively impacted customer engagement. The thrust towards the digital collection of repayments also seems to have reduced the need to attend weekly meetings. Frequent meetings with the customer are one of the pillars of MF lending process. Lenders would need to continue to focus on institutionalising this practice and prevent its dilution. However, it should be mentioned that the revival of collections has been greatly aided by digital repayments. Although 98 per cent of payments is made cashless, collection by digital methods climbed from 5 per cent in the pre-pandemic era to 13 per cent in Q4 FY 21–22, enabling speedier recovery and more consumer comfort.

8.3 Educating clients about 'app-based lending'

Although digital modes increase process efficiency, they also give rise to the possibility of borrowers falling victim to fraudsters. The rapid growth of digital lending apps has increased these risks. The recently released RBI regulations regarding such activities are a positive step.

As the industry is going through these wide-ranging changes and adjusting to a new normal, customer grievance redressal is going to be of pivotal importance. The modularisation of product delivery and customer service has been seen to impact customer experience. The lenders would have to be mindful of the aspects of customer interaction and protection which they continue to manage in-house. At the same time, rapid advancements in Artificial Intelligence (AI) applications in this area promise an enhanced experience for customers. Lenders would have to plan the adoption of such tools to improve their customer centricity.

8.4 Avoiding geographical concentration

The sector also needs to be cognisant of the possible risks arising out of portfolio concentration and the opportunity provided by the underpenetrated districts. When the top 10 states are examined at the state level, they account for 82.4 per cent of total GLP as of 31 March 2022. Analysis at the district level reveals that activities are concentrated in the top 300 districts, which account for over 88.1 per cent of total GLP. From a geographical risk management standpoint, the data reveals that there are around 333 districts where the depth of outreach is less than the national average and much less than the top 300 districts, and where FIs can consider increasing operations.

Economic and geographical factors and the comfort derived from 'being where others are present' are the reasons for the skewed growth of the sector. The earlier cap on interest rates also could be a factor in restraining risk-taking involved in venturing into newer geographies. With the new regulations allowing flexibility to the lenders to design policies to respond to such situations, it is expected that the microfinance lenders would expand to newer areas and also be innovative in their product offerings. This would increase the depth and breadth of the availability of microfinance.

In summary, a supportive regulatory regime, encouraging changes in consumer behaviour, improvement in efficiency due to the digitalisation of processes, and the promise of continued economic growth present a picture of an exciting future. The microfinance model is well-positioned to benefit from these trends over the coming decades by continuing its focus on customer centricity. If the above aspects are kept in mind, and the responsible growth of microfinance covers 10 Crore more clients by 2030, it will be a humongous contribution to building a US$5 trillion economy. Pertinently, it will be a broad-based economic growth, wherein the rising tide will lift all boats.

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Microfinance - Way Forward for Financial Inclusion of Poor

Jiji Mammen

INTRODUCTION

The microfinance sector in India has evolved and matured over the last three decades. The microfinance movement in the country started with the self-help group (SHG) Bank Linkage Programme, wherein the groups of poor people, mostly women, each representing a household, came together and formed into informal groups and got themselves linked to banks for mobilising larger funds. Reserve Bank of India (RBI), in 1991, through a revolutionary decision gave approval for the informal groups to be linked with banks by opening a savings account and also getting a loan from the banks, based on the strength of their savings. After a review by an RBI appointed Committee, this programme was considered as a mainstream banking activity in 1996.

In the meanwhile, from the middle of nineties, taking a cue from the SHG Bank linkage programme and also the other microfinance programmes happening elsewhere in the world, some institutions started lending to smaller groups women based on a joint liability concept. Subsequently, in 2000, RBI gave its approval for such entities to act as financial intermediaries purveying micro-credit to poor borrowers, without collateral. This initiated the beginning of microfinance institutions in the country, which has become a major partner in the financial inclusion arena in the country. The Microfinance Institutions (MFIs) adopted the group approach in lending to the poor, who did not have any collateral to provide, by forming them into Joint Liability Groups (JLG). The social collateral was the basis of such an arrangement.

Over the last three decades or so, the microfinance activities by both SHGBLP and JLG have revolutionised the credit support to poor in the country. Together they have been responsible for extending financial services to more than 15 crore poor families or nearly half of the Indian population. Through microfinance activity, credit has been extended to the poor for their financial needs ranging from business capital to non-economic needs like meeting health and education expenditures and even other expenditures like house construction/renovation, consumption needs, etc. Thus, the microfinance sector has been the major contributor to the mass financial inclusion movement in our country.

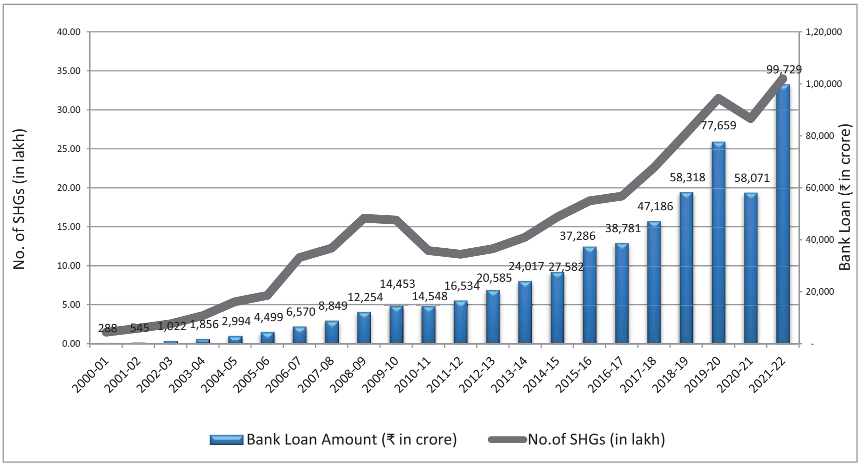
SHG Bank Linkage

The SHG Bank linkage programme was started as a pilot project aimed at linking 500 SHGs. But in the first year, 225 SHGs were linked with an amount of ₹29 lakhs. In three years, 4,750 SHGs were credit-linked with various banks. In 1996, RBI recognised SHG lending as a mainstream credit activity for banks and classified it as priority sector lending. Since then, SHG-BLP has taken the shape of a movement with more than 14 crore families and 1.20 crore SHGs.

The programme was also adopted as a channel for purveying many Government schemes. The Ministry of Rural Development, Government of India (GOI) has been implementing a National Rural Livelihood Mission since 2012, now known as Deendayal Antyodaya Yojana-National Rural Livelihoods Mission (DAY-NRLM), which adopted SHGs along with its federations at cluster, district and State level to extend support and encourage livelihood development among poor. As on 31 March 2022, bank credit of over ₹1.50 lakh crore is outstanding under the SHG bank linkage programme, connecting 14.2 crore low-income households in the fold of the formal banking system.

The credit disbursement to SHGs during FY 2021–22 touched nearly one lakh crore.

Figure. *Credit Disbursement to SHGs during FY 2021–22*



Microfinance Institutions

MFIs made their beginning in 1996 as specialised institutions for purveying micro credit. The programme got a boost in 2000 when RBI allowed such specialised institutions to provide microcredit to the poor. Several institutions came into being since then. In 2011, following the aftermath of a serious crisis developed in Andhra Pradesh (AP), the state where the MFIs thrived, and based on the recommendations of the Malegam Committee appointed by RBI to study the microfinance activities in the country, came out with a set of regulations for Non-Banking Financial Company (NBFC), providing micro-credit. A separate category of NBFC MFI was created. Two self-regulatory organisations, Sa-Dhan and MFIN were also appointed to oversee the activities of the microfinance sector. RBI has further refined the regulations in 2022, making it activity-based regulation rather than the entity-wise regulations which were in vogue.

It is also to the credit of the microfinance institutions and the work they did for the financial inclusion, especially in the deeper pockets, that when RBI decided to extend new licenses for banks in 2015, one of the MFI was elevated to a Universal Bank. Similarly, 8 out of 10 Small Finance Bank licensed in 2015 were Microfinance Companies. This has further boosted the microfinance initiatives in a larger way.

The number of microfinance loans today in the country is around 11 crore. This is extended by NBFC-MFIs, other forms of MFIs, NBFCs, Banks and Small Finance Banks (SFB). Together they have extended a loan of ₹ 2,63,760 crore. The unique number of borrowers under MFIs was estimated to be 6.13 crore by all microfinance lenders and 4.45 crore by microfinance institutions alone.

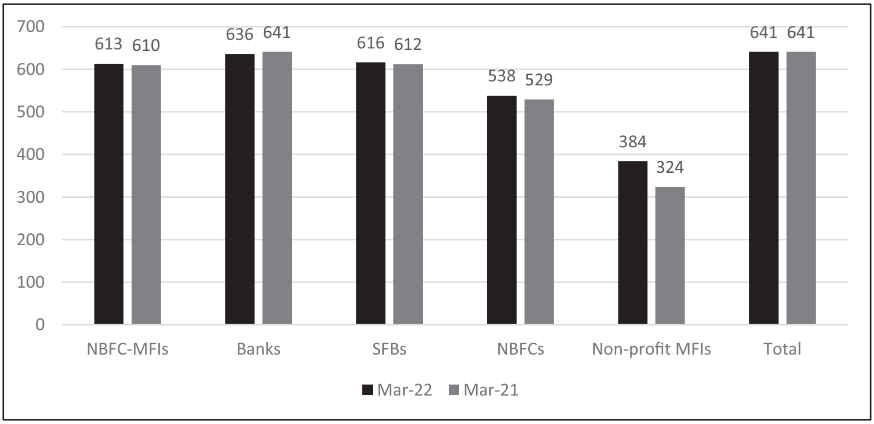
Table. *Lender-wise spread of Microfinance in terms of district coverage*

Indicators	**Type of lenders[1]**	**As of March 2022,**	**Lender Share (%)**
Number of Active loans (in lakh)	NBFC-MFIs	413	39%
	Banks	405	37%
	SFBs	172	16%
	NBFCs	78	7%
	Non-profit MFIs	14	1%
	Industry	**1,082**	**100%**
Loan Outstanding[2] (₹ in crore)	NBFC-MFIs	94,096	36%
	Banks	1,02,527	39%
	SFBs	44,154	17%
	NBFCs	19,076	7%
	Non-profit MFIs	3,907	1%
	Industry	**2,63,760**	**100%**

Lender-wise spread of Microfinance in terms of district coverage

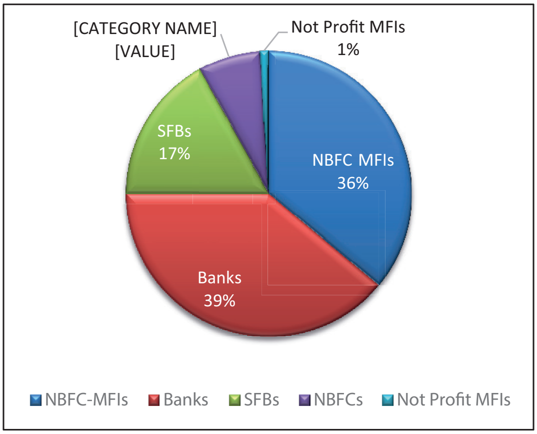
As on 31 March 2022, microfinance operations are spread across 641 districts of 28 States and 8 Union Territories. Banks are leading with 636 districts, followed by SFBs and NBFC-MFIs with 616 districts and 613 districts respectively. The NBFCs have operations in 538 districts and Non-profit MFIs have operations in 384 districts.

Figure. *Comparison of lender-wise data for the year 2021–2022*



The share of various micro-credit lending institutions in the credit pie indicates that the Banks had the larger share of 39 per cent, followed by NBFC MFIs. If the share of Small Finance Banks is also taken into account, the banking sector had a total share of 56 per cent. Banks normally adopt a Business correspondents model in delivering micro-credit. However, the recent data shows that the position is changing with NBFC MFIs taking a lead over the banks, based on 3rd quarter data for the FY 2023.

Figure. *Share Of Various Micro-Credit Lending Institutions*



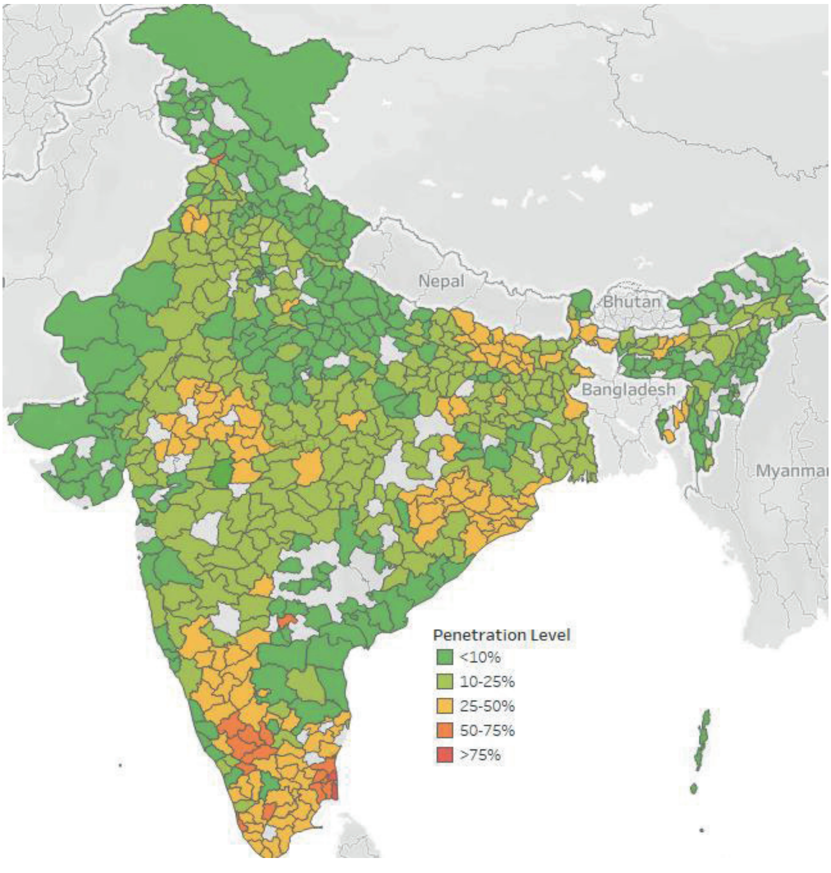
Total microfinance coverage

SHG Bank linkage has reached almost the entire country due to the efforts of various NGOs and developmental agencies. The NRLM programme has given a boost to its coverage throughout the country and is now being implemented in all the districts through the Rural Development Departments. Whereas, the coverage of microfinance institutions is not there in all the districts, although all the States and UTs have been covered by one or other MFIs. As per the data available, it is yet to reach around 100 districts and its presence in more than 300 districts is minimal.

Both the programmes together have an outstanding of nearly ₹ 4.14 million portfolio as on 31 March 2022. The coverage must have crossed ₹ 4.5 million by the end of 30 September 2022. This forms nearly 10 per cent of the total priority sector outstanding from the banking system.

District-level penetration of the MFIs in the country is depicted in the following map. While the South is pretty well covered, there are patches of less coverage in the North, West and North Eastern regions.

Figure. *Map Highlighting District-level penetration of the MFIs*

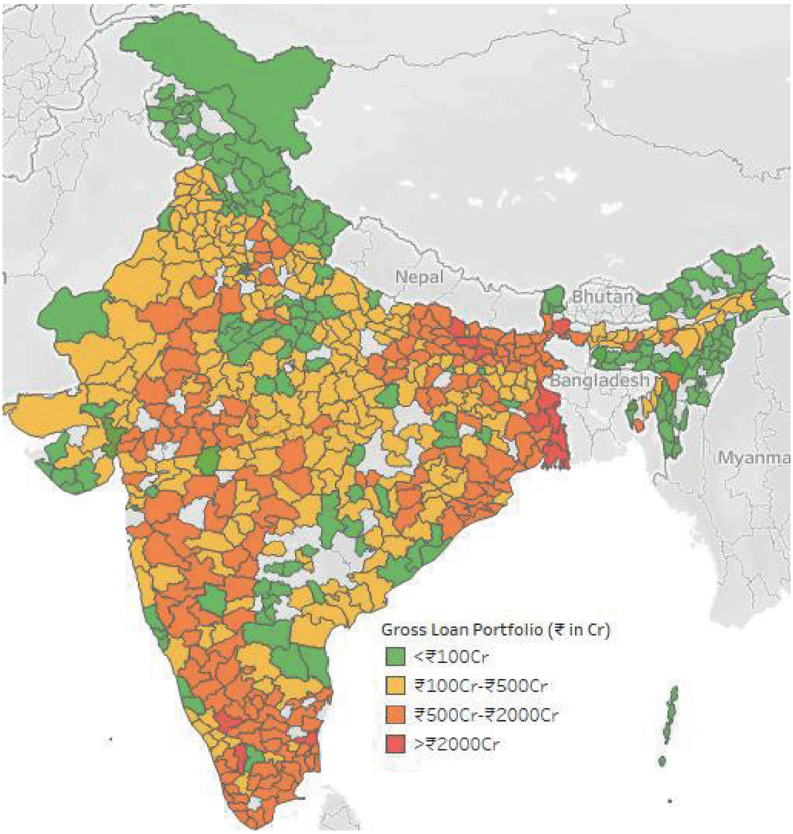


The microfinance penetration level is calculated by taking the number of active unique borrowers as a per cent of the total households in the district. The microfinance penetration level is below 10 per cent mostly in areas of Jammu and Kashmir (J and K), coastal Maharashtra, Western Uttar Pradesh, Uttarakhand, etc. while it is higher in areas of southern states such as Tamil Nadu, Karnataka, Kerala and eastern states such as West Bengal, Odisha, Bihar, etc.

The microfinance penetration level was 10 per cent to 25 per cent in 229 districts. There were also 2 districts in Tamil Nadu, Nagapattinam and Tiruvarur, where the coverage is above 75 per cent. Seventeen districts had more than 50 per cent microfinance penetration and 148 districts (mostly districts from Bihar, Karnataka, Tamil Nadu, Jharkhand, Odisha, West Bengal, etc.) had microfinance penetration level between 25 per cent–50 per cent. Out of the 124 aspirational districts, microlenders are operating in 113 districts and 33 of such districts of states such as Assam, Bihar, Jharkhand, Karnataka, Odisha, Tamil Nadu, etc. have microfinance penetration between 25–50 per cent.

The district-wise portfolio under MFIs indicates a high concentration of credit in the South and Eastern parts of the country.

Figure. *Map Highlighting District-Level Credit Concentration*



Thus, microfinance has been a major success story in the financial inclusion landscape of the country. It has enabled the poor to access credit from a formal institution without collateral to meet their both economic and non-economic needs.

Other Services extended

Microfinance programme is also a social empowerment programme for the poor, especially women. Women form more than 99 per cent of microfinance borrowers. The SHG Bank Linkage programme, by its very nature, is an empowerment programme, supporting social, educational and health upliftment, apart from financial services like savings, credit, etc. They are also vehicles for other financial services like insurance, pension, etc. In the case of MFIs, they mostly focus on credit activity. But they too, through cross-support activities, provide other financial products like Insurance, pension, etc. to the borrowers of microcredit and also support social empowerment through the collective action. Hence microfinance activity is one of the major financial inclusion activities along with the personal empowerment of poor people.

Issues faced by the microfinance sector

The microfinance sector is supported by both private and public initiatives. The sector that focuses on borrowers from the weaker sections of society has undergone several hurdles in the past. The major ones are the intervention by the political persons and State Governments. The sector is vulnerable to any external events. Hence, the ordinance of the State Government of Andhra Pradesh in 2010, restricting the activities of MFIs, caused a huge disruption to a fast-growing sector of microfinance, ending up with many microfinance players suffering huge losses. It has also resulted in the withdrawal of many MFI players from the State, thereby denying the facility of microcredit to the poor. A similar circumstance arose in Assam recently on account State Government declaring debt relief and waiver to microfinance borrowers.

Apart from such governmental intervention, the sector also suffered on account of uncalled-for announcements and promises by some vested interested persons in various pockets. Demonetisation and COVID-19 pandemic were two major setbacks to the microfinance sector across the country. All these resulted in increased delinquency and thereby causing huge losses to MFI players.

Over-concentration is another issue faced by the sector. Pre-2010, the concentration was in one state namely Andhra Pradesh, with more than 70 per cent of the portfolio confined to it. Post 2010, microfinance spread to other geographies. But still, there is a heavy concentration in a few States. About 80 per cent portfolio is in 10 states. The top five namely Tamil Nadu, Bihar, West

Bengal, Karnataka and Uttar Pradesh account for over 50 per cent of the total portfolio. Similar is the case related to district spread is concerned. The top twenty-five districts account for more than 20 per cent of the portfolio. There are more than 100 districts where microfinance activity is absent. In more than 300 districts the penetration level is less than 10 per cent.

Another problem being encountered by the sector is the lack of availability of capital, both for equity and for working funds. While the equity investments in MFIs, especially the top ones are from foreign entities, there is very little investment support from domestic investors. Again, the available capital required for equity is very scarce and difficult to be accessed by smaller MFIs. Similar is the case with working funds too. Although there are Development Financial Institutions like National Bank for Agriculture and Rural Development (NABARD) and Small Industries Development Bank of India (SIDBI) supporting the sector, the fund flow from them is limited to the top-rated MFIs only. The commercial banks that are into the financing of MFIs also limit themselves to the top ones. Hence, the smaller MFIs find it difficult to raise funds and they have to depend on NBFC and other expensive sources. Thus, their cost of funds is always high. The availability of funds itself is a major challenge.

Microfinance is a high-touch activity. Almost 2 lakh employees work in this sector and more than 60 per cent are field staff. The sourcing of the application, its due diligence and appraisal, sanction of loan, disbursement of loan amount and collection of instalments take place in the vicinity of the borrower. Although technology has been deployed to a greater extent, and it may further go up, the high-touch nature of the business will remain for a long. Getting the right kind of manpower, training and retention is a great task for microfinance institutions.

Way forward

The microfinance sector, both in the form of SHG Bank linkage and MFI intervention is needed and is the way forward for a country like India, having a huge land mass and a huge population, a large number of whom are socially and economically backward. Moreover, many parts of the geography are not easily accessible to mainstream players. MFIs are the most appropriate institutions which serve financial inclusion in their right spirits, reaching the base of the pyramid and serving them with various financial products. To sustain these institutions and help build them, there needs to be the right kind of environment in the country.

The major challenge of political and governmental interference in the activities of MFIs needs to be removed. Microfinance needs to be accepted as one of the legal and approved activities. The persons with vested interest who tries to vitiate micro-credit environment need to be dealt firmly. The sector should be allowed to function freely.

The regulators including self-regulatory organisations need to be strengthened to keep a close watch on the activities of the MFIs and should be empowered to take suitable actions against the erring institutions. The oversight by these institutions to ensure proper service is needed to sustain the microfinance activity flourishing.

Funding is an important factor for the survival of MFIs, especially the smaller ones. Dedicated funds may be created to ensure a smooth flow of funds to smaller MFIs. May be credit guarantee kind of mechanism can be created to make available funds from formal financial institutions to MFIs. Internal fund houses may be supported to invest in the equity of microfinance institutions in the country.

Promotion of new entities as financial intermediaries for microcredit, especially in the credit deficit areas, may be encouraged. There is a need to create a special fund, on the lines of the India Microfinance Equity Fund (IMEF), set up by SIDBI in the early 2000s, to identify, invest, train and support systems and processes in localised institutions, which are capable of developing into viable financial intermediaries for extending micro-credit. This needs to be done in areas where the mainstream players are absent.

Creating manpower suitable for the needs of microfinance is important. Institutions like Sa-Dhan may be supported to identify, train and develop a pipeline of human resources required for microfinance in different states and regions.

Conclusion

The microfinance sector has evolved over the time and withstood several tests in the past to be a resilient sector serving the needs of the poor. These institutions are needed for the development of the country and to achieve the goal of five trillion economy. Creating the right kind of environment and the right ecosystem is the need of the hour. If these institutions are supported, they can be an excellent vehicle for achieving financial inclusion among the poorer segments of the society, considering their reach and inclusive mindset.

Reference:

1. Sa-Dhan Bharat Microfinance Report 2022
2. Websites of NABARD and SIDBI

(Footnotes)

1. Lenders Count: NBFC-MFIs: 82, Banks: 18, SFBs: 9, NBFCs: 71, Non-Profit MFIs: 92.
2. Off-balance sheet (managed and business correspondent) portfolio of NBFC-MFIs and non-profit MFIs are included under Banks category for the purpose of this table.

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Reforms historian and author of the best-seller ModiNomics, Sameer Kochhar is Chairman, SKOCH Group. He is a passionate advocate of social, digital, and financial inclusion and is a foremost expert on governance and inclusive growth. His work has been acclaimed globally and endorsed by Mr Narendra Modi, Mr M Venkaiah Naidu, Dr Manmohan Singh, Mr Arun Jaitley, Mr P Chidambaram, Mr Yashwant Sinha, Dr C Rangarajan and Dr Montek Singh Ahluwalia. In his thinking, writings, and activities, his profound admiration for India's economic reforms and, by extension, those outstanding personalities who strive to make these reforms more meaningful and broad-based comes out clearly and unambiguously. He has published over 17 volumes, the most notable being *India 2030*: *A Socio-Economic Paradigm; ModiNomics; Defeating Poverty: Jan Dhan and Beyond; and Modi's Odyssey: Digital India, Developed India.*

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Ajay Thakur has been awarded the India Economic Forum Award for MSME Enablement by SKOCH Development Foundation, received the Dadasaheb Phalke Excellence Award, and received the Pillar of Hindustani Society Award from the Trans Asian Chamber of Commerce and Industry for contributing to the growth of MSME.

Amarjeet Sinha is a 1983 batch IAS officer of the Bihar Cadre who was an Advisor to the Prime Minister of India. He had superannuated in 2019 as the Rural Development Secretary in the Government of India. As Advisor to the PM, he handled all social sector schemes and policies. He has had the unique distinction of having played a major role in designing Sarva Shiksha Abhiyan and the National Rural Health Mission. He has also been training Indian Administrative Service Officer Trainees at the Lal Bahadur Shastri National Academy of Administration, Mussoorie on the social sector over the last one and a half-decade. Amarjeet Sinha has published seven books and a large number of articles in publications such as The Lancet, Economic and Political Weekly, Economic Times, The Hindu, etc. He also served as the Education/Human Development Adviser with the Department for International Development, Government of the United Kingdom, 2001-2005. He has been a field officer in tribal Singhbhum district of Jharkhand and in the extremist affected Jehanabad district of Bihar. He was associated with the design of the Bihar Education Project, the first EFA project after the Jomtien declaration 1990, on Education for All.

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Dr. Alok Misra has 30 years of professional experience in international development, rural finance, microfinance, inclusive finance, and research at both the policy and implementation levels. He began his career with NABARD in 1992. He was a member of the multi-institutional task force (2003–2004) responsible for establishing India's first online demutualised commodities exchange (NCDEX). He moved as CEO to a global microfinance rating, policy analysis, and technical advisory firm in 2008, where he served until 2016. Dr. Misra was Professor and Chairperson, School of Public Policy & Governance, Management Development Institute (MDI), Gurgaon, prior to joining MFIN as CEO & Director. He has worked in 24 countries across Asia, Africa, Europe, and the Pacific. He has authored the 'Inclusive Finance India Report' for two years and has written numerous articles and reports.

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Dr. Bibek Debroy is an economist and was educated in Ramakrishna Mission School, Narendrapur; Presidency College, Kolkata; Delhi School of Economics and Trinity College, Cambridge. Presently, he is Chairman, Economic Advisory Council to the Prime Minister, Government of India. He has worked in Presidency College, Kolkata (1979-83), Gokhale Institute of Politics and Economics, Pune (1983-87); Indian Institute of Foreign Trade, Delhi (1987-93); as the Director of a Ministry of Finance/UNDP project on legal reforms (1993-98); Department of Economic Affairs (1994-95): National Council of Applied Economic Research (1995-96); Rajiv Gandhi Institute for Contemporary Studies (1997-2005); PHD Chamber of Commerce and Industry (2005-06); and Centre for Policy Research (2007-2015) Dr. Debroy was also Member, NITI Aayog up to 5 June 2019. He has authored/edited several books, papers and popular articles and has also been a Consulting/ Contributing Editor with several newspapers.

Dr. C. Rangarajan is a leading economist in India who has played a key role both as an academic and a policymaker. Dr. Rangarajan was Governor of the Reserve Bank of India during 1992–97, at a time when India embarked on wide-ranging economic reforms that fundamentally altered the structure of the Indian economy. He was, until May 2014, Chairman of the Economic Advisory Council to the Prime Minister in the rank of Cabinet Minister, a position he has held since January 2005. He was President of the Indian Economic Association in 1988 and 2017 and President of the Indian Econometric Society in 1994. He is the author of several books on Indian Economy.

Dr. Deepali Pant Joshi, former Executive Director, Reserve Bank of India, is a development economist and a writer on subjects relating to economics. She served in offices of the bank such as Regional Director for Rajasthan at the RBI Jaipur, Chief General Manager-in-Charge of the Rural Planning & Credit Department at Central Office Mumbai, Chief General Manager of the RBI Regional Office at Hyderabad, Ombudsman for the State of Andhra Pradesh, Principal, Bankers Training College, Mumbai, etc. Dr. Joshi is a distinguished fellow at the SKOCH Development Foundation and a member of the Financial Inclusion Task Force (FITF) formed by the SKOCH Group. She was the RBI nominee on the governing council of the Institute of Banking Personnel Selection (IBPS) and the Director of the Board of the Andhra Bank. Her areas of interest include financial inclusion, rural planning, credit, and currency. She is a prolific writer and has several significant books to her credit.

Mr. Jiji Mammen has been appointed Executive Director & CEO of Sa-Dhan with effect from 17 June 2022. An industry veteran with over 36 years of experience in microfinance, agriculture and rural development, Mr. Mammen was earlier the Managing Director of NABFINS, an NBFC MFI promoted by NABARD. He was the founder MD & CEO of Micro Units Development and

Refinance Agency Ltd. (MUDRA), an NBFC formed to support the flagship programme of Government of India viz. Pradhan Mantri Mudra Yojana for three years from 2015. He has been CGM at NABARD, heading the regional offices in Rajasthan, Andhra Pradesh and Telengana. Mr. Mammen was also the country head of Department of Refinance in NABARD. A post-graduate from the Indian Agricultural Research Institute, New Delhi, Mr. Mammen also holds a degree in law and is a Certified Associate of Indian Institute of Banking and Finance (IIBF). He has been a faculty member at Bankers Institute of Rural Development, Mangaluru. He is widely travelled and has attended several national and international conferences/ seminars.

Dr. M. Ramachandran had a distinguished thirty-eight years in the IAS during which he held various challenging positions at apex policy making and implementation levels in the infrastructure area, such as Secretary to the Government of India in the Ministry of Urban Development, Chief Secretary of Uttarakhand, Infrastructure Development Commissioner, Principal Secretary for Transport and Energy, and Joint Secretary in charge of Shipping and Inland Water Transport in the GoI. He has been Chairman of Metro Rail corporations, including Delhi Metro, various city development authorities, and is now an Independent Director on the boards of Delhi, Hyderabad, Goa, and Visakhapatnam airports.

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He has an MPhil degree in Economic Planning from the University of Glasgow, a PhD in Project Planning, and has recently completed a certificate course in Public Policy Analysis from the London School of Economics.

Dr. Naresh Chandra Saxena was the topper of his batch (1964) in the Indian Administrative Service and retired as Secretary, Planning Commission, in 2002. He also worked as Secretary, Ministry of Rural Development (1997–99) in the Government of India. During 1993–96, he was the Director of the National Academy of Administration in Mussoorie, which trains civil servants. On behalf of the Supreme Court of India, he monitored hunger-based programmes in India from 2001 to 2017. He has chaired several government committees, such as those on 'Women's Land Rights', 'Identification of Poor Families', 'Implementation of the Forest Rights Act', 'Joint Review Mission on Elementary Education' and 'Bauxite Mining in Orissa'.

Dr Saxena received his Doctorate in Forestry from Oxford University in 1992. He was awarded an honorary Ph.D. from the University of East Anglia (UK) in 2006.

Mr. Ram Rastogi is a career banker and digital payments strategist, conversant with the latest digital technologies used in payments, real-time decision making, risk management, predictive analysis, and regtech.

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He has a rich banking experience of three decades with the State Bank of India as a senior executive driving its strategy, business development, ATMs, debit cards, and emerging payment systems. As a Head of Product Development with the National Payments Corporation of India (2011–2017), he mentored real-time payment systems in India like the Immediate Payments Service (IMPS), the Unified Payments Interface (UPI) and AEPS, cross-border payments, the Bharat Bill Payments System (BBPS), and other offline payment systems and their regulatory compliances.

He has also closely associated with regulators RBI and TRAI, related government departments, NGOs, public policy committees, fin-tech industry players and start-ups in creating complete ecosystems.

Dr. Rama V. Baru is a professor at the Centre of Social Medicine and Community Health at Jawaharlal Nehru University. She has taught the Masters in Public Health and PhD programs at the Centre for the last 26 years. She is an Honorary Fellow with the Institute of Chinese Studies, Delhi, and an Honorary Professor at the India Studies Centre, Central China Normal University, Wuhan, China. Her research focuses on social determinants of health and infectious diseases, health policy, international health, privatisation of health services, and inequalities in health. She is the author of *Private Health Care in India:Social Characteristics and Trends, a* Sage Publication. She has edited several volumes on *School Health Services in India: The Social and Economic Contexts (Sage Publication)*; *Medical Insurance Schemes for the Poor: Who Benefits? (Academic Publication);* a co-edited volume with Anuj Kapilashrami titled 'Global Health Governance and Commercialisation of Public Health in India: Actors, Institutions, and the Dialectics of Global and Local' published by Routledge. Her latest is a co-authored book (with Madhurima Nundy) 'Commercialisation of Medical Care in China: Changing Landscapes' (Routledge). She has published extensively in journals and contributed to several edited volumes.

She was awarded the Balzan Fellowship by the University College, London, the Indo-Shastri Canadian Fellowship, and the Yusuf Hamied Fellowship at the Mailman School of Public Health, Columbia University, New York. She was formerly a member of the Technical Advisory Group for Lymphatic Filariasis at WHO, Geneva. She chaired the committee that developed the curriculum for gender mainstreaming in the National Tuberculosis Programme, India. She is currently on several research and ethics committees at the Indian Council for Medical Research, the Department of Health Research, and the All India Institute of Medical Sciences, India. Most recently, she has been invited to be a member of the Strategic Technical Advisory Group for Infectious Hazards at the WHO, Geneva.

Radhicka Kapoor is a Senior Visiting Fellow at the Indian Council for Research on International Economic Relations (ICRIER). Prior to joining ICRIER, she worked at the Planning Commission and at the International Labour Organisation. Over the last few years, she has worked extensively on the various facets of India's labour market, in the areas of the informal economy, the impact of technological changes on the world of work, the measurement of employment and unemployment, the role of labour regulations, and industrial performance. She has authored several research papers, reports, and articles in leading newspapers on these subjects. She has recently edited a volume, 'A New Reform Paradigm: Festschrift in Honour of Isher Judge Ahluwalia' (Rupa Publications, 2022). She has also co-edited a book 'Towards a Just, Dignified, and Secure Future of Work: Lessons from India'. She completed her undergraduate degree in Economics from St. Stephen's College, Delhi University, and holds a Masters and PhD degree in Economics from Cambridge University and the London School of Economics, respectively.

Prof. S. Mahendra Dev is presently a distinguished professor at the ICFAI business school, Hyderabad, and Chairman of the Institute for Development Studies in Andhra Pradesh. He was the Director and Vice Chancellor, Indira Gandhi Institute of Development Research (IGIDR) in Mumbai for 12 years, from 2010 to 2022. Prior to this position, he was Chairman of the Commission for Agricultural Costs and Prices, Ministry of Agriculture, from 2008 to 2010. He was Vice Chairman of the *Board of Trustees of the International Food Policy Research Institute (IFPRI)*, Washington, D.C. He was a member and Acting Chairman of the *National Statistical Commission,* Government of India. He got the prestigious Malcolm Adisesaiah Award in 2016. He received his Ph.D. from the Delhi School of Economics and did his postdoctoral research at Yale University.

Salman Anees Soz is an economic development consultant, author and commentator. He has extensive experience across a range of economic development issues in Eastern Europe and Central Asia, Middle East and North Africa, Sub-Saharan Africa and South Asia. He serves as a consultant to multiple World Bank teams and was previously a consultant at the Asian Development Bank. He is a recipient of the World Bank President's Award for Excellence. His commentaries appear in a variety of media outlets. He also speaks on politics, economics and international affairs at universities, think tanks and conferences. He is Deputy Chairman of the All India Professionals' Congress and serves as an advisor to other institutions. He holds a master's degree in business administration from Yale University, a master's degree in economics from Northeastern University, and a BA (Hons.) in economics from St. Stephen's College, where he was the president of the Students' Union Society.

Dr. Saurabh Garg, Chief Executive Officer (CEO), UIDAI has worked on areas like digitalising agriculture, direct income transfer scheme for farmers, formation of the National Investment and Infrastructure Fund (NIIF); improving the Foreign Direct Investment (FDI) policies; preparing the framework for digital payments; revamping of the gold sector policies and has led negotiations for the Bilateral Investment Treaties (BITs).

Dr. Garg holds a Ph.D from Johns Hopkins University and is an alumnus of IIM, Ahmedabad and IIT Delhi. He belongs to the Indian Administrative Service and has worked in the World Bank and the private sector with Tata Administrative Service.

Shivani Kowadkar is a researcher at the Institute for Competitiveness in the field of policy pertaining to socio-economic development. She is also a consultant with the Ministry of External Affairs at India's G20 Secretariat. With the Economic Advisory Council to the PM, her work has focused on women and development, and trade. Her work in the policy arena spans different subjects, including gender, education, health, and digitisation. She has had the opportunity, through the Institute for Competitiveness, to publish articles on different policy areas in the Economic Times. Having an academic background in Development Studies from the Tata Institute of Social Sciences in Mumbai, Shivani is keen on pursuing interdisciplinary research.

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Mr. Siraj Hussain joined the IAS in 1979. He served as Chairman-cum-Managing Director of Food Corporation of India. He served as Secretary to the Government of India in the Ministry of Food Processing and the Ministry of Agriculture. In 2016, he was awarded a Doctorate in Philosophy (honoris causa) by Acharya NG Ranga Agricultural University.

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T Koshy is the MD and Chief Executive Officer of ONDC, the company established recently with an objective to strengthen and transform the ecommerce sector in India with a broad-based participation from both buyers and sellers across the country. He has a unique distinction of playing key roles in multiple transformation projects involving digital solutions to population scale problems. Prior to assuming this role,T Koshy served as the Senior Partner with Ernst & Young (India) in the Government & Public Sector Practice, leading consulting practice in Identity & Social Protection, Digital Service Delivery, Health, Education and Public Finance, and was involved in multiple projects in India and other developing countries. Major Projects in India in which he has played key roles include, Unique Identity (Aadhaar) Vaccine Intelligence Network, National digital education platform, GSTN, Co-WIN, etc. He has also been supporting many global projects funded by Developmental Agencies like the World Bank& ADB in the area of Identity & Social Protection.

Tamal Bandyopadhyay is an award-winning author and columnist.

Currently, he is a consulting editor with the Business Standard and a senior adviser to the Jana Small Finance Bank. Tamal was a key member of the team that founded Mint Business Paper and was an adviser on the strategy of Bandhan Bank, the first instance of a microfinance entity becoming a universal bank in India. Since starting his career with The Times of India, Tamal has worked with The Economic Times and the Financial Express, alongside the Business Standard and the Mint.

He has written seven books, the latest being 'Roller Coaster: An Affair with Banking'. Tamal Bandyopadhyay is also a contributor to The Oxford Companion to Economics in India and Making of New India: Transformation Under Modi Government.

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Dr. Vinay Kumar Singh trained to be a Chemical Engineer at IIT Kanpur and then did a dual major in Economics & Finance at IIM Calcutta. He completed his PhD in Economics from the Management Development Institute in Gurgaon.

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