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*Meeting health goals has implications on whether India will be able to unlock its demographic dividend / Photo: Pixabay-DEZALB.*

## ACCELERATING GROWTH AND DEVELOPMENT IN THE SDG ERA

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**Observer Research Foundation (ORF)** is a public policy think-tank that aims to influence formulation of policies for building a strong and prosperous India. ORF pursues these goals by providing informed and productive inputs, in-depth research, and stimulating discussions.



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# Introduction

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The world's progress in meeting the Sustainable Development Goals (SDGs) depends to a large extent on India's progress. India plays a strong leadership role at the global level around meeting these targets set by the international community in 2015. In July 2017, India reiterated its commitment to meeting the SDGs when it submitted a Voluntary National Review report on seven goals including poverty, health, hunger and nutrition, as well as gender equality at the High-Level Political Forum on Sustainable Development.

Despite progress in recent years, India continues to be hobbled by high incidence of mortality and morbidity. Disease, malnutrition and preventable loss of life pose a huge economic challenge and are a drain on the nation's human resources. Indian policy documents have started acknowledging this lately. For one, the Economic Survey 2016 by the Ministry of Finance acknowledged that while there are intrinsic reasons to invest in maternal and early-life nutrition programmes, they are particularly important for their high returns on investment. These programmes contribute to early physical and cognitive development that significantly influence the success of subsequent interventions—schooling and training—and outcomes in adulthood. Indian Prime Minister Narendra Modi in recent months has used various platforms to emphasise the importance of “development for all” and “development of all”. The prime minister recognises that a country aspiring to reach double-digit economic growth rates—and sustain them—must focus on health and nutrition policy, which are the mainstays of a productive workforce. This thinking is amply reflected in the ambitious Ayushman Bharat initiative as well as the National Nutrition Mission.

The SDGs are fundamentally interdependent goals and as such, action is required across various sectors in order to achieve them. Further, several of the goals and their collective externalities have the potential of contributing to India's economic growth. For India to realise its growth potential, it is crucial to address the building blocks of better health, enhanced nutrition, women's empowerment, and digital financial inclusion—all of which have the power to unlock the demographic dividend. In this context, the Observer Research Foundation (ORF) and the Bill and Melinda Gates Foundation (BMGF) explored the various issues related to the implementation of the SDGs in India through a high-level conference on 30 August 2017. This volume builds on the themes discussed at the conference. India's performance on the SDGs is critical for the world to achieve the goals. Is there an “India model” that can offer lessons to the world? For that, India must deliver on the SDGs in an equitable manner and ensure development for all citizens. India needs to move forward on this agenda by working on the SDGs in an integrated manner.

Meeting health goals has implications on India realising its demographic dividend and its growth potential. Indeed, India stands to lose some US\$4.58 trillion every year due to productivity losses related to NCDs and mental illness, among other health problems. Every year, more than 60 lakh people are being pushed below the poverty line by prohibitive health expenses. Public expenditure on health is only 1.4 percent of GDP, and although India's total health expenditure stands at 4.7 percent of GDP (around INR 5 trillion) – much of it is out-of-pocket expenditure. Similarly, while 20-30 percent of healthcare is sought through the public sector, almost 70 percent of care is sought in the private sector.

The public-private mix of financing and service provision for health in India raises the question: Do solutions also need to be hybrid? The SDGs bring with them the challenge of finding a comprehensive approach – the goals are intrinsically linked, they focus on multi-sectoral action, and they emphasise equity. Can India respond to this challenge by leveraging the entire health system – involving both the public and private sectors – to deliver on national goals?

India's high economic growth and increasing food production have failed to transform the nutritional status of its population. Malnutrition, in turn, has a deep impact on cognitive development in children. It is estimated that in India, every US\$1 invested in nutrition has a return of \$36 (or three times more than the global average). Both academic research and India's experience on the ground show that to address malnutrition, a multi-sectoral approach is required. This translates to prioritising action across poverty alleviation, education, gender empowerment, agriculture, and sanitation. Joint planning to make programmes nutrition-sensitive is key to addressing malnutrition, along with independent implementation and joint monitoring. How can a multi-sectoral approach help solve India's complex challenges?

Lack of data often hinders effective evaluation of health schemes and reduces the scope for mid-course correction. There is a need to strengthen the national statistical system to allow for goals to be tracked at disaggregated levels. Technology must be harnessed to streamline processes, and there must be an integrated system which allows for analyses to be run across different data sets. Experience of data-use by stakeholders needs to be discussed in order to identify systemic constraints that hamper evidence-based decisionmaking in the country's health sector.

Finally, an integrated set of solutions is needed to address complex issues challenging the economy and society. Ensuring progress on gender, health, and nutrition will be key to driving India's economic growth and development. While India has focused on a set of reforms, those in the area of human development have not received adequate attention. These reforms are critical to India's growth. India should acknowledge the strong linkages between national goals and act in an integrated manner, leveraging national initiatives like 'Make in India', 'Digital India', 'Swachh Bharat Abhiyan' and 'JAM trinity' (Jan Dhan-Aadhaar-Mobile) to improve development outcomes.



# 1



## India for the World; India for India

Shalini Rudra

Solutions to development challenges in a nation with 1.3 billion people should be more than just scalable replications of venerable remedies offered by the wealthy nations. This was the scope of the conference, “Accelerating Growth and Development in the SDG Era”, held in Delhi in August 2017 and attended by stakeholders from government, academia, and development organisations.

The conference was one in a series of events that are being organised by the Observer Research Foundation (ORF) and the Bill and Melinda Gates Foundation (BMGF) to ponder issues related to the implementation of the SDGs framework in India. The theme of the event was linking the SDGs to India’s growth agenda. The discussion was framed around the criticality of such frameworks in offering solutions to reconcile sustainability with equitable development, focusing on health and allied sectors.

Mr Sunjoy Joshi, ORF Chairman, in his welcome address noted that the SDG framework was a robust and comprehensive development objective that represents India’s aspirations. The SDG goals, Mr Joshi said, should remain at the core of responsible policy-making being embraced by India to attain the country’s economic and social goals.

The health-nutrition-sanitation triad of well-being holds the key to a nation’s social, political and economic advancement. Contrasting realities across India—of excellent performance in some attributes and massive failure in others—projects India as a hub of innovating resilient policies that juxtaposes contrasts. For instance, while on one hand, India’s economic aid diplomacy has made an impact across Africa and Asia, on the other, it is home to almost a quarter (195 million) of the world’s undernourished. Even as India steadily gains ground as a global power, it is yet to complete its own domestic transformation and address its fundamental developmental challenges.

Investing in health, nutrition and sanitation, mandated under the SDGs framework, also gives the Asian economies scope to harness the strengths of the largest cohort of the young. By spearheading policies to reap the benefits of a healthy demographic dividend, developing economies like India and China have the potential to make the present century, truly the “Asian century”.

To push the SDGs agenda, the key highlights of policies and programmes in India should be on developing a robust institutional framework supported by the right kind of combinations of skills and financial resources. Second, India needs to find solutions by employing data-driven analytics and monitoring solutions to strategise course correction. Thus, work on the 2030 agenda should begin with an acknowledgement of the interdependence and links between goals, with all complexities intertwined. While developing solutions to mitigate the development challenges, countries like India have had success stories that are worth looking at. Mr. Yuri Afanasiev, the UN Resident Coordinator

and UNDP Resident Representative in India, observed that India has on various occasions exhibited a business model that can be replicated. He referred to the successful implementation of the JAM trinity—Jan Dhan Yojana, Aadhaar and Mobile penetration — as well as Indian leadership in generic drugs manufacturing and production and distribution of low-cost LED bulbs.

These schemes have defied problems linked to scalability by channeling the least-cost and most innovative methods, and maximising the involvement of government to co-produce sustainable development. India, being the largest functioning democracy with immense scope of industrial growth, can mobilise its strengths to conceptualise participation in an industrial revolution of smart manufacturing. Discussing the cornerstone position of the democratic system, Mr Afanasiev emphasised how due processes in a democratic setup like India work out solutions to problems with a certain degree of sustainability and efficiency. Thus, instead of simply emulating established successful models from elsewhere, India must build on its people's strengths of innovation and creativity—and call it '*jugaad*' with a positive spin.

In his address, Dr David Wilson of the World Bank highlighted aspects related to human development in India. He noted that while India is ranked by the World Bank as the world's third-largest economy by purchasing power, in the World Economic Forum's Human Capital Index, India stands 105th out of 130 countries—behind all the BRICS countries and Bangladesh, Bhutan and Sri Lanka. Another paradox is that India has the largest number of tertiary graduates in the world while being home to the largest number of the world's illiterates. India ranks a low 116th of 157 countries on the SDG Index and given its population share, India has an uphill task ahead to achieve urgent improvements in education, employment and health. In fact, child health and nutrition is of fundamental concern because of its long-term impact on individual well-being and the economy. India has the ability to identify developmental concerns and the capacity to arrive at policy solutions. The case of successful HIV/AIDS prevention programmes through vast community engagement and effective surveillance is an important example of India's organisational ability and programme management. Here, management and administration of national and state-level AIDS Control Society has played a major role.

Policy-making in India is effective because it builds on existing strengths and works around the weaknesses of institutions and models. Similarly, India formed major national and international partnerships with developmental agencies (such as BMGF, USAID, DfID, and the World Bank) for programme support, technical inputs and capacity building.

To achieve the SDGs, India must display an urgency and adopt a similar model that harnesses the skills at the national, state and local levels. India should expand its focus beyond conventional public-health strategies and devise alternatives that are based on community engagement, accountability, and the recognition of rights. Social and

economic inclusion are also necessary to achieve greater impact from various technical public-health solutions. With advances in science and technology, policymakers and programme managers can make use of Big Data, geospatial analysis, machine learning, and other technologies for efficient targeting and delivery of various services.

Communication and outreach have also improved tremendously and should be used effectively in programme design. The eradication of Tuberculosis, for example, is an area where direct benefits of such technological coordination and community engagement can make an immediate impact. The Government of India has allocated an increased share of budget towards TB eradication. However, the constant search for a cost-effective model of healthcare delivery is critical, as sometimes, different solutions are required for varied problems.

Overall, it is important that India continues its focus on development innovations and programme implementation based on dynamic partnerships between government, the private sector, civil society and communities. Further, promotion of citizen engagement, accountability, and rights can further accelerate the approach toward the SDGs. India should embark upon achieving Agenda 2030 with an approach that market failure in the delivery of social goods and services such as health and education is a problem everywhere. But collaborations with the private sector for ideas, delivery expertise, finance, can be leveraged to the advantage of the public sector to boost the human capital agenda underlying the SDGs.



## 2



# The UHC Trajectory: Ensuring Quality Health Services and Financial Protection to All

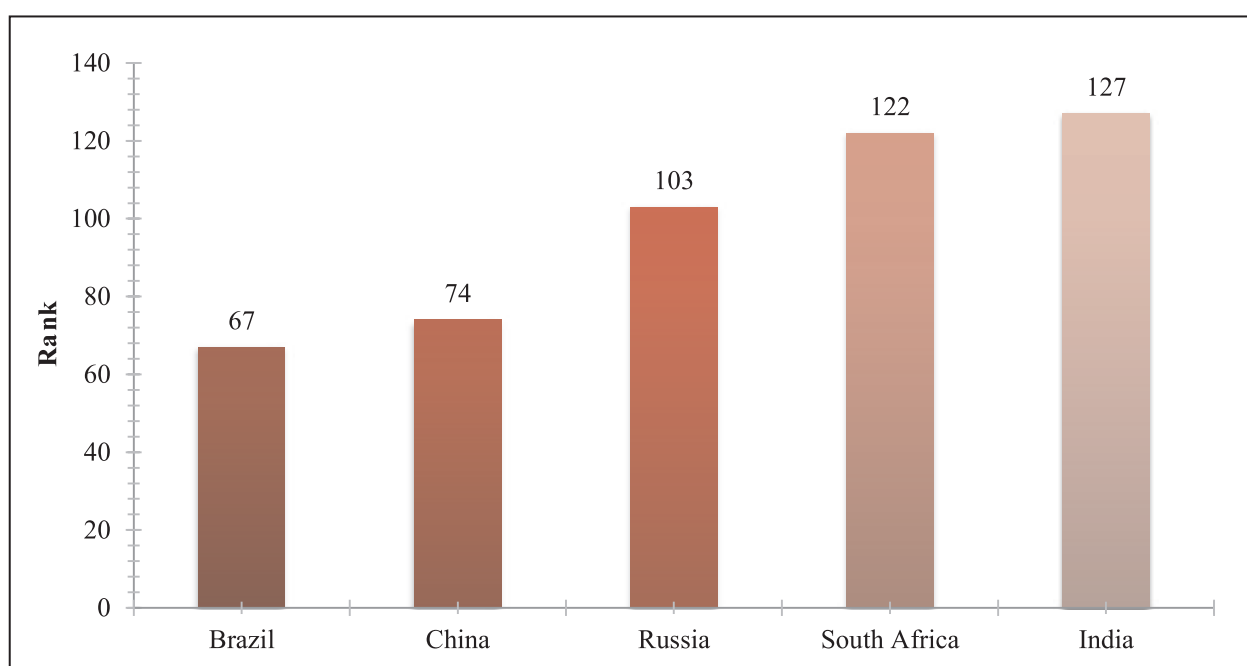
Priyanka Shah



Goal three of the ambitious Sustainable Development Goals (SDGs) requires all countries to achieve Universal Health Coverage (UHC) by 2030. This entails access to quality essential health care services; access to safe, effective and affordable medicines and vaccines; as well as financial risk protection for all at all ages. UHC could, therefore, be regarded as an umbrella goal for health in the new development agenda. The importance of this particular target cannot be overemphasised – it not only transcends all other health-related targets but also draws linkages with the rest of the development goals. The achievement of UHC is critical to the success of the overarching vision of the SDGs, which is “to leave no one behind”. Given the population size and health burden of India, one can also posit that the global accomplishment of the SDGs is contingent on India’s success.

While healthcare in India has witnessed considerable progress over the past decade, the pace of improvement has been slow and the country continues to be plagued by multiple challenges. A *Lancet* study published in 2017 ranks India 127th in terms of meeting the United Nations health-related SDGs – the lowest among its BRICS peers (Figure 1). It is clear, therefore, that India’s fast economic growth has failed so far to translate to significant progress in the health sector. To ensure sustained growth levels, the country requires a strong and healthy workforce – this is possible only when citizens are protected against health-related financial risks and can access quality health services. If India is serious about goal three—as it should be, given that health is a building block for the country’s growth and development—it needs to address the various obstacles to the accomplishment of UHC.

Figure 1: Performance on the Health-related SDG index among BRICS countries



Source: Global Burden of Disease Study 2016

First, it is imperative to look at UHC through a gender lens. This does not mean a discussion on women's health alone, but an approach to UHC that is inclusive in nature and attends to the needs of men and women. What is needed is a shift in narrative: to recognise that the onus of a woman and child's health does not fall on women alone but on the entire society. Addressing such issues requires going beyond health and delving into challenges that arise from societal attitudes, and gender discrimination when it comes to nutrition, education and sanitation. Given the patriarchal nature of Indian society, gender equity in health would need approaches that are much more women-centric and supportive of their multiple roles. These social determinants and root causes should be recognised while framing policies to extend UHC in the country.

Next, achieving UHC requires long-term, high-level political commitment. This, unfortunately, has been absent in the Indian context. At a macro level, the government spends a measly proportion (1.18 percent) of its Gross Domestic Product (GDP) on health – among the lowest globally. The long-awaited National Health Policy (NHP) 2017 proposed to increase public health spending to 2.5 percent of GDP by 2025. This is disappointing, to say the least, given that eight years from now India intends to continue spending well below the current world average of 5.99 percent. Together with low public sector investments in health, the system also suffers from poor coordination caused by the presence of a vast number of vertical health programmes (many of which deal with similar issues) and several institutions within the health department that must work together if they are to deliver anything worthwhile. This often leads to bureaucratic apathy and inertia, which tends to slow down delivery of healthcare services and hampers the smooth functioning of the healthcare system.

Finally, given that the private sector is the largest provider of healthcare services in the country, it would be impossible to achieve the 2030 goals without its active involvement. The government, however, should keep the lead as no country has built a successful health system devoid of a central authority. The challenge is in defining the role that the government wants the private sector to play in the provision of healthcare and how it can ensure that funds are spent efficiently. One way to do this would be through price control, as already done with stents. This is an effective tool to extend quality health services at affordable prices. Other such mechanisms need to be explored and implemented to maintain a balanced participation from the private sector.

## Way Forward

While it may be tempting to follow the path that other countries have embarked upon to achieve UHC, it is important to remember that India has its own unique challenges and therefore requires context-specific solutions. Within the country, too, certain states are

performing exceptionally and so rather than looking outside for lessons, India should look inwards and take lessons from the successes and failures of its own states.

Central to the UHC theme are access, affordability and quality. Given the crucial role of the private sector in the healthcare delivery system, India needs to begin seriously finding an ideal mix of public-private investments. It would also help to clearly define and distinguish the purview of public and private sectors within the health system. The government should leverage private sector resources to fill in the healthcare delivery gaps. Resource allocation is a critical decision that also needs to be taken. Speaking at a high-level consultation organised by the Observer Research Foundation and the Bill and Melinda Gates Foundation, Mr. C.K. Mishra, Health Secretary, stated that majority of resources should be directed towards “primary healthcare, to preventive and promotive health. It does not make sense to go on increasing hospital beds and simultaneously go on increasing the number of patients in the country. Therefore, all policies must converge on getting investment into primary healthcare”. In fact, the NHP released this year calls for two-thirds of health resources to flow into the primary health sector.

Should investments flow from public or private sectors, and how much? Where should resources be allocated? How can underlying socio-economic issues causing gender inequities be addressed? How can government accountability and transparency be maintained to ensure political commitment for UHC? Often, asking the right questions is the key to finding solutions. In order to redesign the Indian healthcare system so as to make it conducive to UHC, India needs to first recognise its failures. Perhaps it is time for a dose of realism – identifying gaps and flaws will only help find viable solutions and lead to informed policy-making.

3



## Addressing Malnutrition through a Multi-sectoral Approach: The Unfinished Agenda and Emerging Challenges

Malancha Chakrabarty



India has won significant battles against malnutrition. Unlike a few decades ago, instances of severe malnutrition such as kwashiorkor and marasmus are now rare. Latest figures from the National Family Health Survey revealed that there has been a ten percentage point-decline in stunting from about 48 percent in 2005-06 to 38.4 percent in 2015-16. However, national figures mask regional variations. On the one hand, there are states like Kerala and Goa which have a low burden of undernutrition. On the other hand, there are states like Bihar, Uttar Pradesh, and Madhya Pradesh which have a high incidence of undernutrition. Within the states, there is also considerable variation. For example, despite Odisha having stunting levels of 34.1 percent (also known as ‘high prevalence’) certain districts such as Cuttack (15.3 percent) and Puri (16.1 percent) are among the top 10 ‘low stunting level’ districts in the country. Similarly, in Karnataka, districts like Mandya have stunting rates as low as 18.6 percent while others such as Koppal have levels as high as 55.8 percent. Overall, however, India’s record in addressing undernutrition has been much poorer when compared to other countries such as China, Thailand, and Vietnam. Thus, the war against undernutrition is hardly over and meeting the World Health Assembly targets will be an uphill task for India. Moreover, the problem of undernutrition in India coexists with the problem of overweight and obesity and associated non-communicable diseases for a small, affluent section of the population.

The panellists at the ORF-BMGF conference agreed that India has a plethora of policies that address almost all aspects of the undernutrition problem but the implementation of those policies has been uneven. According to Purnima Menon, Senior Research Fellow at the International Food Policy Research Institute, the fundamental flaw in India’s approach has been its “food-centric” understanding of undernutrition. The discourse on undernutrition has largely ignored the social determinants of undernutrition; in particular, the role of women has been underappreciated. Gains in nutrition will be much faster with a more “woman-centric” approach towards tackling undernutrition because it is not food but birth which determines whether a child will be stunted or not. In Menon’s words, “the biggest risk factor for being stunted is who you are born to”. A highly significant burden of stunting is borne by the fact that children in India are born to mothers who are also stunted, uneducated, and not empowered enough to take care of their children. According to Menon, women-centric factors account for a bulk of the difference between high and low stunting rates in India’s states. Therefore, nutrition policies must try to address the key determinants of undernutrition such as women’s body mass index, women’s education, early marriage, and access to ante-natal care.

The panel observed that a multi-sectoral approach towards addressing nutrition is the need of the hour because nutrition does not belong to a single ministry. In fact, narrow departmentalism has been a critical constraint in the case of India. Amarjeet Sinha, Secretary of Ministry of Rural Development, stressed that a whole range of initiatives,

better sanitation, clean drinking water, and trained rural medical practitioners, were required to achieve better nutrition in rural areas. Nutrition outcomes tend to be better in areas where public investments have also been made in primary education and health centres, along with nutrition interventions. He gave the example of China where there was a dramatic reduction in child undernutrition and infant mortality during the period 1949–1979 – a number of initiatives were behind such success. First, the green tea kettle in school enforced the habit of making children drink boiled water. Public health facilities were improved through immunisation against diseases and training of traditional doctors. Lessons must also be learnt from better-performing states and districts of India. Sinha also underscored the role that communities play in improving the nutritional status of the population by highlighting the successes of women’s self-help groups in states such as Tamil Nadu.

Saumya Swaminathan, Director General of the Indian Council of Medical Research, emphasised the need for dietary diversity and absorption of nutrients, as over half of the Indian population is deficient in micronutrients. This is mainly because of a cereal-based diet. Carbohydrates account for over 80 percent of the diet along with small portions of fat. The bulk of the population is completely deficient in proteins and micronutrients. However, fruits and vegetables rich in vitamins and minerals are beyond the reach of most of the people in India who are poor. Access to a healthy diet that is rich in essential nutrients is necessary but not sufficient for better nutrition if the body is not able to absorb the nutrients. Often, young children, even from high-income households, get colonised by infections due to exposure to contaminated air and water.

The panel made the following recommendations. First, nutrition policies must take into account the role of social factors, particularly gender inequality. It will be next to impossible to address the challenge of undernutrition without addressing the key issues of early marriage, lack of control over child birth, and poor health of mothers. Most interventions must be targeted to two age groups: children between 0–1,000 days and adolescent girls. This is so because the first 1,000 days are crucial for the baby. Undernutrition during this period can have profound implications on the development of the child into a healthy adult. Similarly, it is important to target adolescent girls because they are likely to be the future mothers. Second, to address the issue of diabetes and micronutrient-deficiency, it is important to invest in improving nutrition literacy in India. Third, the basket under the public distribution system must be widened to include pulses, and processed fruits and vegetables to ensure dietary diversity. Last, linking agriculture to nutrition is critical. Farmers must be encouraged to produce nutritious crops and vegetable not only for the market but also for household consumption.

4



## Equity through Accountability in the Health Sector: Towards UHC in India

Oommen C Kurian

**M**ulti-sectoral convergence and integrated solutions considering regional specificities are needed in the health sector. To facilitate effective implementation in a situation of wide district-level disparities even within states, a performance-based categorisation of districts similar to what Karnataka has tried will be immensely useful. Availability and use of regular, good quality health data thus becomes a policy imperative. “Accelerating Growth and Development in the SDG Era”, the panel discussion organised in August 2017 by ORF and BMGF, explored issues of data in health and nutrition towards the SDGs.

Better data is needed for making a robust case for more state intervention in sectors like health and nutrition, and for harnessing the strengths of the well-entrenched private sector to achieve public health goals. In May 2016, the Health Secretaries of the States and Union Territories of India gathered in the capital and issued “The Delhi Commitment on Sustainable Development Goals for Health”. Among other measures, the document called for greater investments in health data collection, analysis and research. Given that the success of global SDGs over the next 15 years will largely depend on India’s performance, it is important to measure progress closely and ensure mid-course corrections when needed.

Real-time data flow will also have a major role to play in breaking the thick wall of suspicion that exists between the private and the public health sectors in India, given the inevitability of private sector engagement. After all, 70 percent of the population depends on the private sector for care. Data flow in itself can be a confidence building measure. High-quality data will be essential to ensure that the country’s health programmes hurdle the last mile. Huge unused bed strength in the private sector and long waiting lines in the public sector co-exist in India in secondary and tertiary healthcare, and a robust information infrastructure is a necessary condition for any solution that reconciles issues of financial and physical access using government’s bargaining power.

India has covered some ground in terms of streamlining its public-sector health information infrastructure. At present, as Graph 1 shows, 676 out of the 700 Indian districts regularly report public facility-level data to the national Health Management Information System (HMIS). Ninety-seven percent of Sub Centres, 94 percent of Primary Health Centres, and 85 percent of Community Health Centres submit regular health data. The quality of the HMIS data has improved over time, and some important information on improvements in equitable distribution of health infrastructure has become available.

Over the last decade, a 65-percent increase in public health infrastructure in Adivasi areas was recorded, compared to the much lower 10-percent increase in non-Adivasi areas. Similarly, the gap in human resource availability in the public sector between Adivasi and non-Adivasi areas has come down in the last ten years from 21 percent to three percent. It is also known that immunisation coverage is improving rapidly for Adivasi areas in states like Odisha and Chhattisgarh, at a much higher rate than the respective state averages. Gender gap in under-5 mortality rate too, is narrowing down, noted Mr Manoj Jhalani, Additional Secretary & Mission Director, NHM, during the ORF-BMGF event.



Graph 1: HMIS Data Reporting from Public Hospitals: All India.



Source: [https://nrhm-mis.nic.in/hmisreports/firmstandard\\_reports.aspx](https://nrhm-mis.nic.in/hmisreports/firmstandard_reports.aspx)

The National Health Mission (NHM) is using data from diverse sources including HMIS to zero down on geographies and populations that need more attention, and high-priority districts thus identified within Empowered Action Group (EAG) states already receive per capita 1.3 times more funds than other districts. Quality and reliability of the HMIS data still remains a problem despite improvements; and on some parameters, the difference between HMIS estimate and a third-party survey estimate can be reportedly as wide as 50 percent. Underutilisation of other existing datasets like National Nutrition Monitoring Bureau (NNMB) surveys remain a concern too.

India has not fully tapped into the potential that Information Technology (IT) offers to integrate the health information systems in the country. Notification of EHR standards was done to facilitate interoperability. The NHP 2017 has suggested that a national digital health authority will be responsible for developing common standards, notifying them, and to ensuring that there is buy-in from stakeholders. This is important, as the private sector, which provides care for almost 70 percent of the population is still mostly outside the purview of the national health information system. To overcome this binding constraint, a National Health Resource Repository (NHRR) is currently being rolled out.

Much of health policy debate in India typically happens post-facto: not during or before decisionmaking. To enable focus on using data, resolution of structural issues on both supply and demand sides are required. Given the complexity of the systems and the multiple stakeholders involved, there is a need for transparency in the datasets behind policy decisions for the sake of open and democratic decisionmaking. A strong digital architecture will help address both the supply as well as demand level concerns.

The government is doing considerable work around e-Health information systems, according to Mr Ashish Sharma, Partner, Strategy&. The digital architecture will need to be

open and inclusive so that the private sector participates voluntarily. In addition, it needs to be universally adoptable so that even if different stakeholders build components individually, these are built consistently and uniformly across the overall system.

The new health information infrastructure will also have to find ways of overcoming the inter-sectoral, inter-ministerial incoherence and inter-organisational incoherence in terms of numbers. Prof. Aasha Kapur Mehta of IIPA, New Delhi pointed out that, for example, while NITI Aayog's three-year action agenda seeks to reduce MMR to 120 per 1 lakh live birth by 2020, the National Health Policy 2017 aims to decrease the MMR to 100 per 1 lakh live births by 2020. Therefore, India has two different targets for the same year for MMR. The Indian Statistical Service, which forms the backbone of the National Statistical System, needs to be reformed and overhauled, starting with the vital registration system.

The trained personnel who collect data have been one of the first to bear the brunt whenever there is a cut-back, and over time, this has had an impact on the quality of the data collected, particularly morbidity data. The administrative data on morbidity exists in hospitals, but are never compiled or analysed. As a votary of the open data initiative, India needs to find ways of organising existing data in the system in a manner that every stakeholder finds useful. Improved levels of standardisation at the point of data collection will facilitate data use, and policy discussions informed by relevant numbers.

India has a great opportunity: it has the resources, owing to the consistently high growth rate, freeing up for improving healthcare coverage for its population. Giving priority to health is an area where perhaps India can learn from China, according to Dr David Wilson, Global Lead for Decision & Delivery Science of the World Bank. The Chinese government had concluded that catastrophic health spending forced so many Chinese to save at such disproportionately high rates, to an extent that they could not consume and contribute to the rebalancing of China's economy towards domestic consumption-led growth. China had a real economic reason to invest in universal health coverage, apart from equity. Given that India has a considerable proportion of its population falling under the poverty line every year because of healthcare spending, public health spending in India can be an investment for the future.

To make that investment meaningful, high-quality data is inevitable. India is planning to undertake an ambitious step towards UHC through the National Health Protection Scheme (NHPS), which will reportedly cover 70 percent of the Indian population. Ensuring a seamless transition from the existing RSBY to the proposed NHPS will require insights from the analysis of RSBY scheme data as well as survey data on impact. It is time for India to drop the much-discussed apprehension to programme evaluations and to liberate data being collected at institutions and by schemes including the RSBY data to facilitate independent evaluations.



# Human Capital in the Knowledge Age: Investing in India's Billion-Person Data Set

Samir Saran

The Fourth Industrial Revolution will prompt a tectonic shift in the way the world has traditionally organised economies. The Knowledge Age is giving way to a new barometer of economic aptitude – one that is predicated on possession of data and information, rather than the conventional advantages of cheap labour, or even coal and petroleum. This is because the ability of modern-day innovations, such as mobile supercomputing and machine learning, to enhance the way we live, work and exist is contingent on the consumption of data. In a context where data is the key to economic success, India is uniquely positioned to distinguish itself as a formidable actor. While data is regularly exchanged among developers, advertisers and consumers for services, its value is linked to the capabilities of the population it describes.

India is home to a young, billion-person community. Correspondingly, the country has the potential to access and develop a billion-point (1.3 billion to be precise) data set. Access to data of that scale is uncommon and generally monopolised by a handful of private stakeholders. In the United States, for example, the FANG (Facebook, Amazon, Netflix and Google) source and analyse the data of billions of diverse users on a daily basis. Similarly, in China, the BAT conglomerate (Baidu, Alibaba, and Tencent) dominate the data collection market of China's 1.4 billion citizens. India is the only country that has integrated data into its public infrastructure – the Aadhaar programme enables every resident of India to register for a unique biometric identification. With 1.18 billion Aadhaar enrollments, India is the largest country in the world with a unique digital identity.

The challenge for India, however, is to streamline systems to cultivate a data set that is educated, healthy and sustainable so that both the capacity of Indian citizens and the corresponding value of their data are strengthened. This re-conceptualisation of individuals essentially overturns India's approach to human capital investment itself – where such investment is no longer viewed as an altruistic, social welfare enterprise, but instead as an economic imperative that is necessary to sustain the country's rapidly expanding economy. Technology-based innovation has proved to be a successful social model in the past, and it can certainly be a remedy for the pervasive gap in services and skills that exists in Indian society today. If India is able to bridge this gap, it has the chance to possess a nearly unparalleled source of human capital and data that will catalyse the country's growth for the foreseeable future.

## **Commodifying Human Capital**

The state of the human will define the state of the economy. To reflect this reality, India will need to reshape its understanding of social services and investment. For nearly 50 years following independence, India's economy was largely insulated. This meant that for years



there was minimal external competition on its products, and in turn, on the quality of its labour force. Investments in health, education and skilling were therefore considered parallel social initiatives and rarely featured in the country's growth strategies, if at all.

Today, however, in a global environment increasingly dependent on data, human capital investment serves both an economic and a social purpose. Simply put, human development and economic growth should be viewed as interdependent measures. To reflect this reality, India must turn towards technology-based solutions to develop a healthy and well-educated society and capitalise on its data set.


## **A Technology-Driven Framework for Investment**

The digital platform presents India the opportunity to approach investment in human capital as a pragmatic, value-creating scheme that improves human knowledge and capacity. Where traditional social institutions have struggled, India's expansive digital economy can assume an efficient and cost-effective service-delivery mandate. The Direct Benefit Transfer (DBT) programme is a classic example of this potential. In an effort to streamline the way subsidy benefits were handed out, the government cut out the middleman and began depositing subsidies directly into eligible citizens' bank accounts. The result? An overwhelming decrease in subsidy scams, duplication and service-delays, which also saved the government some INR 50,000 crore.

Digital innovation for the bottom of the pyramid changes the approach to public goods delivery altogether – from a supply-driven mechanism to a more effective demand-driven one. In public institutions, if app-based programmes provided education and health coupons directly to beneficiaries instead of the institutions themselves, schools and hospitals would be forced to compete for customers, at least in urban and peri-urban settings. It would also allow communities to establish self-arranged solutions and mitigate governance or accessibility issues.

Investment through digital innovation can also ensure a greater level of oversight at the state and local level. Through decentralised programmes, customised by state and locality, digital applications can source baseline data regarding health and education indicators, starting with civil registration and vital statistics. This initiative would create a real-time monitoring system of states' progress in human development. A subsequent system could develop based off of this data that incentivises or rewards states that successfully improve their human development capacities.

Similar to how governments invested in the steam engine during the First Industrial Revolution or in financial systems during the rise of Wall Street, in this age, the Indian government can find value through investment in the health and education of its growing

labour force. As the investments in social services materialise, India's human development capacity will expand, leading to more qualified participants in the labour market and a more sophisticated set of available data. For India, in the Knowledge Age, its prospects for economic growth and power will be inextricably tied to innovations in technology, data and human capital investment. 

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