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INDIA 2024

POLICY PRIORITIES FOR THE NEW GOVERNMENT

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BROOKINGS INDIA

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POLICY PRIORITIES FOR THE NEW GOVERNMENT

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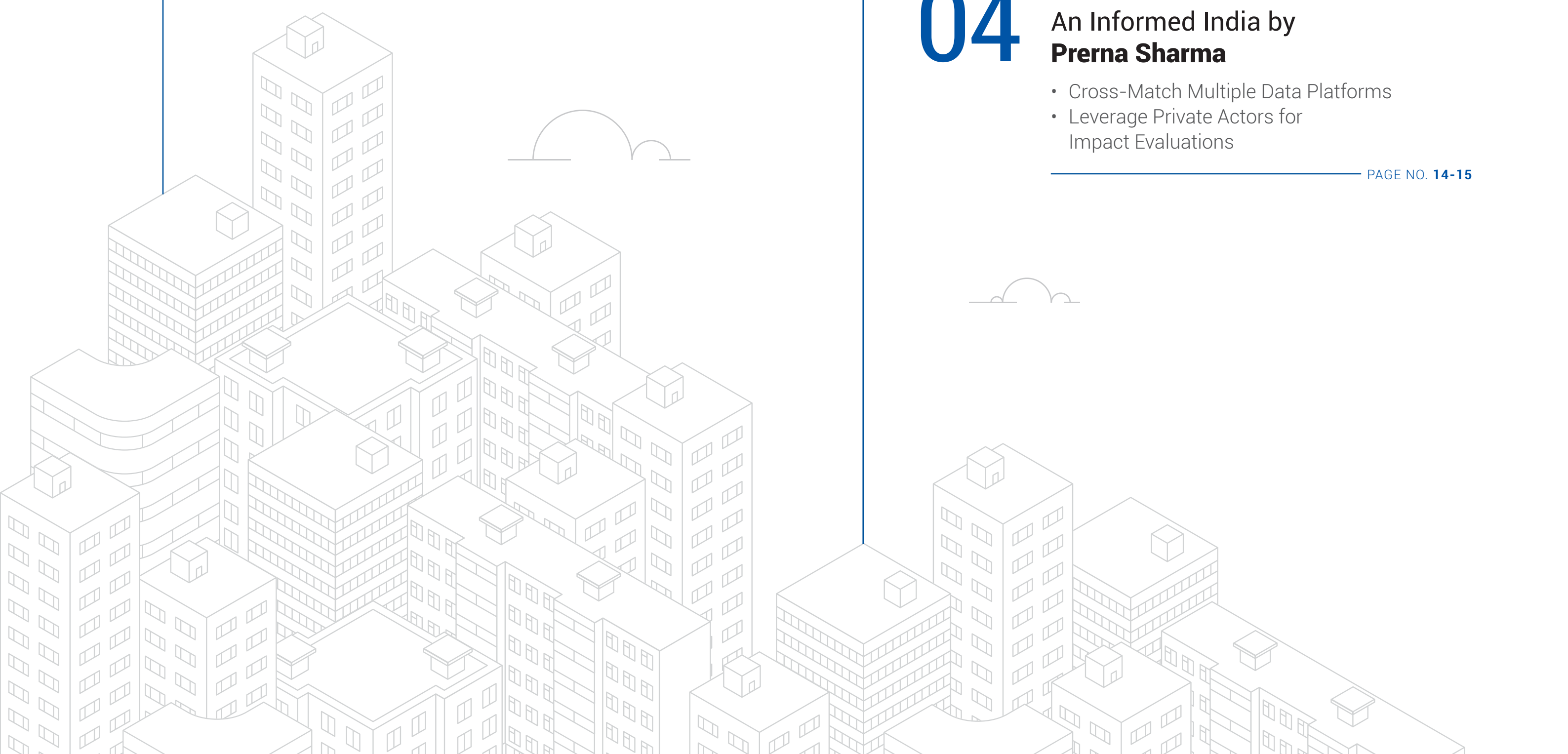
TABLE OF CONTENTS



SECTION 2

FOREIGN & SECURITY POLICY

SECTION 3

ENERGY, ENVIRONMENT & SUSTAINABILITY

INTRODUCTION BY SHAMIKA RAVI

A changing global order, energy transitions and climate change and rapid technological advancement - India's next government has the difficult task of steering the country through an interesting and crucial time. India 2024: Policy Priorities for the New Government, is a compendium of policy briefs from scholars at Brookings India, which identifies and addresses some of the most pressing challenges that India is likely to face in the next five years. Each policy brief is based on longer, in-depth and academically rigorous publications from the scholars.

For a fast-growing large democracy, human capital will be the driving force behind future growth. India must significantly invest in health and education to leverage its demographic dividend. Ayushman Bharat is a big step towards easing the healthcare burden on poor households. But to improve health outcomes, equal emphasis must be placed on the scheme's other objective —of improving primary health infrastructure at the local level. Scaling up this initiative would require expanding and strengthening primary health infrastructure, enforcing quality standards and conducting periodic audits.

While effective and affordable healthcare is on top of the agenda, education – at both the primary and higher levels – deserves close attention as a priority. Data shows that in India, unemployment is highly concentrated among the most-educated in the society. Nearly 35% of those with post-graduate degrees are unemployed, as opposed to only 6.2% uneducated young workers. This raises questions about the gap between skill and educational degrees. Against this reality, we analyse India's higher education sector and find that the government must make significant efforts to expand capacity, incentivise research and ease the regulatory burdens that bind educational institutions to small scale and low quality.

In modern India, cities have emerged as the engines of growth and opportunities. For people to thrive, cities must thrive as well. An increasingly urbanising country needs to address its crisis of affordable housing supply in urban centres. Empowering metropolitan bodies for better governance, boosting rental housing and funding urban local bodies emerge as some of those solutions.

On the global stage, India has a significant role as the world's largest democracy. Containing Pakistan, deepening partnerships with existing allies, and balancing Eurasia continue to be priorities. But the biggest external challenge India faces right now is China's rise and assertiveness. New Delhi's focus must be its neighbourhood, finding ways to open up to smaller countries and shape their long-term incentive structures to favour India. We must ask ourselves, what can India do to become a credible alternative to China? Does the solution lie in New Delhi improving its aid delivery and implementation in the neighbourhood, currently riddled with gaps?

Our foreign policy experts examine this in detail and suggest that India must adjust its strategies and structures in accordance with the new reality. Any reforms in this sector, however, are contingent upon building sufficient internal capability. The government must expand foreign services' intake, train manpower and allot adequate resources for public diplomacy and outreach initiatives. Our experts also argue for urgent defence reforms —a strong, secure India needs defence self-reliance and indigenisation.

The third pillar of this compendium deliberates India's transition towards a nation that balances its energy needs with sustainability. Brookings India scholars have long grappled with the choices and opportunities this transition presents, writing extensively about how it affects sectors such as coal, natural gas, renewable energy and power. A consensus that emerges is the need to manage resources more effectively. One suggestion, to attain this objective, is the consolidation of the various ministries into a single Ministry of Energy and Environment – a single decision-making body that will shape policy. Simultaneously, there is a call for the government to step away from some of its current activities in energy production and distribution, to reboot the discoms (distribution companies) and introduce independent and empowered regulators.

There have been significant gains through schemes such as the Saubhagya Yojana. It has ensured electricity access in the most remote areas of the country. The question now is: how can India further improve its electricity supply to each household? Similarly, while we have made great strides in renewable energy which is cheaper and cleaner than coal, but moving forward we have to ask: what about the systems-level costs that it imposes? India has set ambitious targets for electric vehicles, but how will it resolve the challenges of battery technology and costs? These are some key questions raised by our experts, who also provide some specific policy recommendations to address each problem statement.

The last several years have witnessed the emergence of India as the fastest-growing large economy in the world. The next five years in India will be a window of opportunity to push further policy reforms for sustained long-term growth. India has succeeded in lifting hundreds of millions of people out of poverty in the last 28 years, and now the focus of the government must be to ensure inclusive sustained development for the future. This compendium from a team of scholars at Brookings India provides specific policy recommendations to attain some of these targets.

A HEALTHY INDIA

PRACHI
SINGH

India's economy has grown at an impressive pace over the last few years, but overall, it still witnesses poor health outcomes. The wealth of a nation is its human capital and with poor health outcomes, India's human capital will suffer. This has a direct consequence on the economic well-being of the nation. Affordable, quality health care is thus the need of the hour. India has recently adopted the Sustainable Development Goals (SDGs) under which it is obligated to meet objectives such as Universal Health Coverage. However, a concerted policy effort is needed to achieve this goal. This requires a focus on three main areas: health insurance at the tertiary care level; quality of health infrastructure at the primary level; and the accessibility and quality of medicines available in the country.

1 SCALE UP HEALTH INSURANCE

In September 2018, the government announced the National Health Protection Scheme (NHPS), also called Pradhan Mantri Jan Arogya Yojana (PMJAY) or Ayushmaan Bharat (AB). AB has twin objectives, the first of which is financial protection for healthcare of up to Rs 5 lakh per family per year (a total of 10.74 crore families are the target beneficiaries) and the second being to operationalise 1.53 lakh health and wellness centers to provide primary care. As the scheme adds more beneficiaries, there are important aspects that warrant closer attention.

On the demand side, for any insurance scheme to be successful, the pool of beneficiaries should be diverse and large enough to mitigate risks for the insurer. Also, the scheme will have limited impact if the number of beneficiaries remain small or if the target population end up not availing medical care. For this purpose, awareness campaigns should be mobilised so that greater information can reach poorer households who are the intended beneficiaries. Any reservations regarding seamless healthcare delivery should be allayed by providing a robust IT system which can ensure quick and assured treatment.

On the supply side, tertiary healthcare take-up critically depends on the quality and availability of empaneled hospitals. Hospitals take a profit-driven decision to become an empaneled hospital under PMJAY. In this regard, the reimbursement rates provided for various treatments have to be intelligently designed. Rates should be flexible to take into account the location of the hospital as costs can be less in rural areas but are much higher in the cities. This difference in costs should be reflected in reimbursement rates. The government already gives land free of cost or at very low rates to new hospitals being set up in backward areas to incentivise them to become empaneled.As on the demand side, a strong data infrastructure can be beneficial to ensure timely payments to the hospitals.

2 IMPROVE PUBLIC HEALTH INFRASTRUCTURE

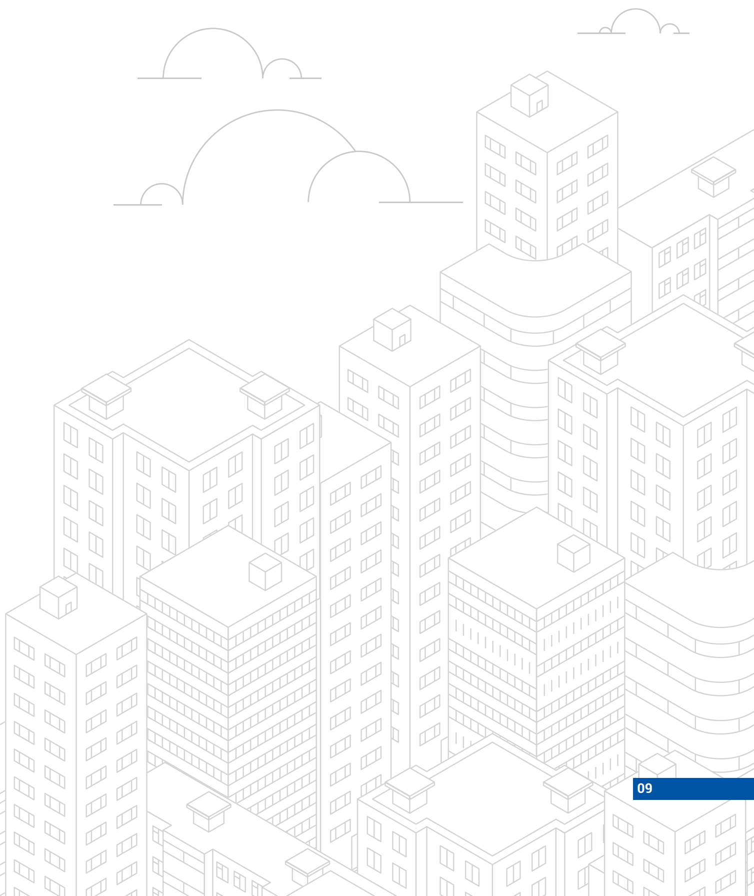
To provide free, effective, accountable and quality health care, India's current health infrastructure relies on a network of primary care facilities which comprise of Sub-Centers (SCs), Primary Health Center (PHC) and Community Health Center (CHC). Despite a good network of public health infrastructure, studies have shown that households still overwhelmingly depend on private providers for healthcare services. This has mainly been driven by the poor quality of infrastructure and care provided by India's public healthcare system.

Various government policies have been designed to address maternal and child health, as well as preventable communicable and non-communicable diseases. But the ambitious plan of providing comprehensive health care under PMJAY needs to be guided by a formal assessment of the current state of health infrastructure in India. Despite overall high growth in the availability of sub-centers, India still faces critical shortages in supporting infrastructure and most of these facilities are in a dilapidated condition. Addressing this shortcoming will require at least four steps.

First, there is a need to expand primary healthcare infrastructure further to meet population demands. While some states have a surplus, others such as West Bengal, Bihar and Uttar Pradesh face acute shortages. Overall,India still needs 32,900 more SCs, 643 more PHCs, and 2,188 more CHCs to meet its basic health infrastructure requirements. Second, the Indian Public Health Standard (IPHS) norms must be met. At present, 93% of SCs and 87% of PHCs and CHCs fail to meet the basic standards based on the revised IHPS norms of 2012. This will require, among other things, improvements in waste disposal, hygienic conditions for labour rooms, ensuring antiseptic conditions for operation theatres and newborn care units, and the maintenance of adequate stocks of medicines. Third, existing facilities must be supplemented with supporting infrastructure & services, such as water, electricity, and road connections. This will also require frequent audits to ensure functioning. Finally, population norms must be revisited. The current population norms are based on an old National Health Policy dating back to 1983. With the growing burden of non-communicable diseases, these population norms should be revisited to ensure that the health infrastructure meets India's modified disease burden.

3 PROVIDE AFFORDABLE, QUALITY MEDICATION

Indian households spend nearly half of their out-of-pocket expenditures on pharmacies, far outpacing expenditures in hospitals. The affordability, accessibility, and quality of medicines are three important dimensions which require urgent attention from policymakers. First, this will require creating a drug database for price comparisons among pharmacies, to direct consumers to the cheapest available options. This can benefit from the implementation of the Goods and Services Tax (GST), which tracks sales in individual pharmacies. Second, doctor prescriptions should be encouraged to focus more on generic medications, which would save consumers money. Third, a public database for substandard and spurious drugs needs to be created. Currently, no such database exists to inform consumers. Fourth, the hiring and training process for inspectors must be standardised, with a focus on local inspectors. Additionally, quality checks should be boosted at the manufacturing site to counter problems at the source. Finally, a centralised manufacturing licensing system is necessary. At present, Indian states are powerless to stop substandard drugs manufactured out-of-state. Centralising the licensing system can reduce the number of substandard drugs in the market and hold all states accountable to licensing approvals.



A HIGHLY EDUCATED INDIA

NEELANJANA GUPTA

India has seen a rapid expansion in the higher education sector since 2001. There has been a dramatic rise in the number of higher education institutions (HEI) and enrolment has increased four-fold. The Indian higher education system is now one of the largest in the world with 49,964 institutions. Despite the increased access to higher education in India, challenges remain: low employability of graduates, poor quality of education, and complex regulatory norms continue to plague the sector. India's gross enrolment ratio (GER) in 2017-18 was 25.8% but it is still far from meeting the Ministry of Human Resource Development's target of achieving 30% GER by 2020.

As the global economy is undergoing structural transformation, there will be a shift in labour market requirements. India will require workers in newer and more diverse job roles: sophisticated researchers, innovators, and knowledge workers. Institutions have failed to identify the true potential of a higher education system that provides necessary skills. Systemic issues will need to be addressed to create globally relevant and competitive institutions that can produce employable graduates.

1 ENHANCE POSTGRADUATE CAPACITY

There is close to 80% enrolment in HEIs at the undergraduate level. While postgraduate enrolments have more than doubled since 2009-10, there remains a disparity in undergraduate and postgraduate enrolment due to a lack of capacity. Postgraduate education is a unique avenue to achieve specialised training and allows for improved employability. But apart from Masters of Arts, Science, and Commerce degrees, only MBA has become a popular degree due to the bright employment prospects it offers. Research degrees account for a very small proportion of enrolments, and the proportion of PhDs awarded has fallen in the last decade. Only 36.7% HEIs run postgraduate programs, and merely 3.6% run PhD programs. A direct consequence of low enrolment in postgraduate programs is the shortage of qualified teachers in the higher education system.

The government must lead the effort in expanding postgraduate capacity sufficiently. Private institutions do not find it commercially feasible to run post-graduate programs, other than in courses like management and engineering. Mandating all HEIs to have postgraduate departments in fields where there is a paucity of postgraduates and teachers can help bridge the gap. Incentivising postgraduate education and awarding fellowships in all subject areas will be significant motivation. Providing students with greater access to postgraduate education will position India well to cater to the changing requirements of the labour market by delivering a highly skilled and job-ready workforce.

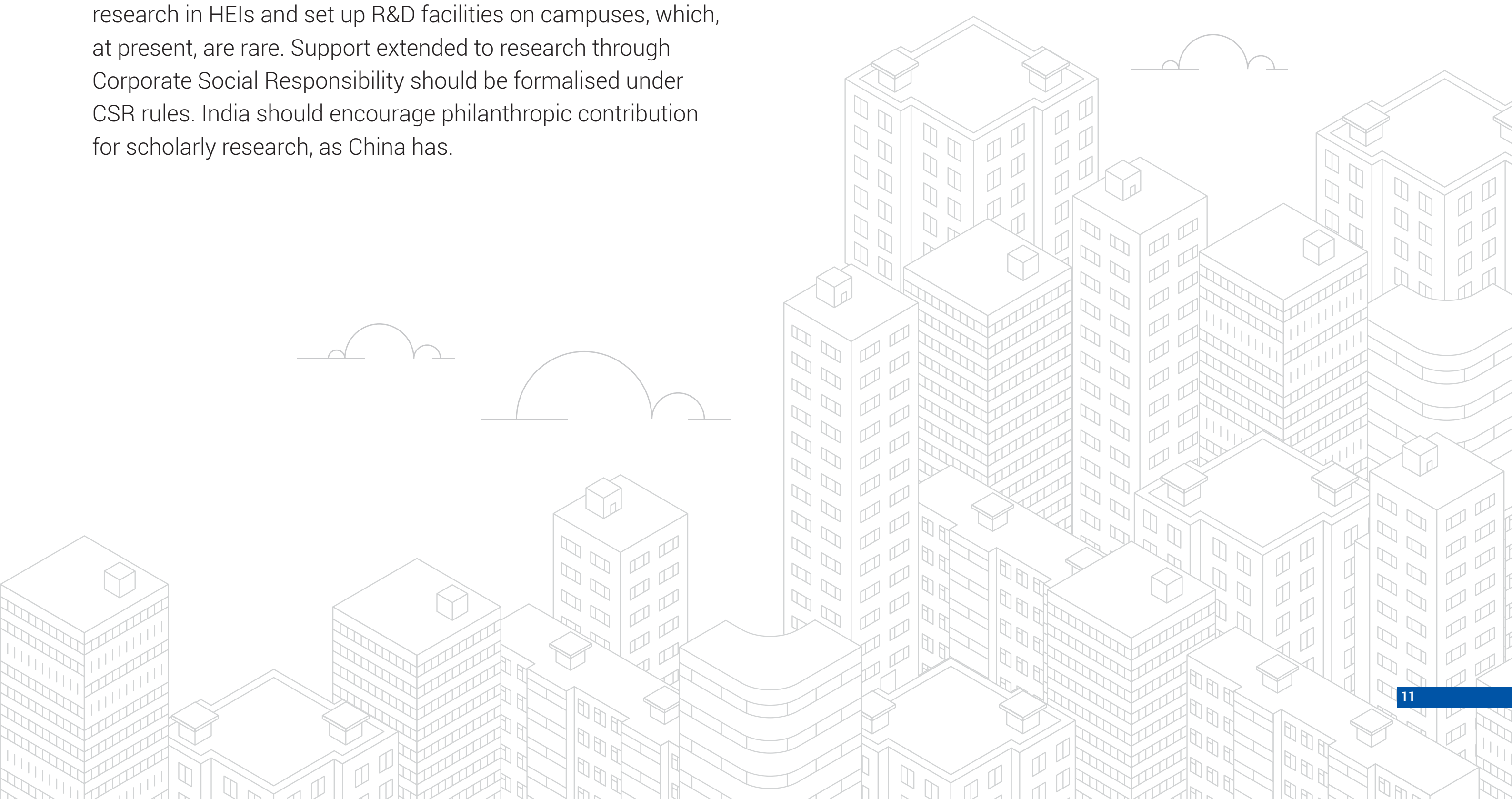
2 BUILD RESEARCH-FOCUSED INSTITUTIONS

Research in HEIs in India is not viewed as a primary and vital function. Institutions view teaching and examining masses as their core function. HEIs have failed to recognise that teaching and research are complementary and mutually supportive activities. Basic fundamental research, funded by the government, takes place in academic settings. India's gross expenditure on research & development (GERD), as a proportion of GDP, has declined since 2001 and is now lower (0.62%) than it was in 1996 (0.65%). This decline is reflected in India's poor research capacity as well as inadequate research output and impact when compared to countries like China.

Two decades ago, China's GERD was lower than India's. It has quadrupled since then. In addition to increased investment, China has built research-focused institutions by incentivising research and innovation. More than two dozen research agencies are actively involved in higher education policymaking in China; these are absent in India. Policy reforms have fostered world standards among Chinese HEIs. It is leading the way in publications, patents and has, by some measures, four of the top ten-ranking academic institutions globally. China's transformation into a knowledge-based economy suggests that funding, primarily from the private sector, is key to producing top-class research. There are limited sustainable market solutions to support research. Applied research has to be industry-driven, for its use. Currently, Indian HEIs are poorly connected to corporate entities.
The government must facilitate university-industry linkage to transfer knowledge from academic to applied settings. Corporate endowments can help build sound infrastructure for research in HEIs and set up R&D facilities on campuses, which, at present, are rare. Support extended to research through Corporate Social Responsibility should be formalised under CSR rules. India should encourage philanthropic contribution for scholarly research, as China has.

3 RELAX COMPLEX REGULATORY NORMS

For far too long, India has subjected itself to a challenging regulatory environment with a centralised control mechanism. Multiple agencies (state governments, professional councils, affiliating universities, etc.), their overlapping functions, and stringent rules have resulted in fragmentation of the higher education system. The University Grants Commission (UGC) has not been able to successfully monitor the quality of HEIs and implement standards. Limited capacity of accreditation agencies to assess all HEIs has resulted in failure to recognise and reward high performing institutions. Further, an 'affiliation' setup between colleges and universities has weakened the potential of institutions that could have otherwise excelled. While recent reforms such as granting graded autonomy to HEIs have promoted academic freedom, more must be done to ease the regulatory environment. A UGC overhaul is expected soon. The new apex regulator should solely aim to promote quality in academic instruction. Accreditation, by empanelled quality assurance agencies with specialised focus areas, should be made mandatory for all HEIs. The move will also improve accreditation coverage. Then, the next step should be to ensure that assessments are made actionable. Decisions of recognition, autonomy, and affiliation can be linked to accreditation results. Grant disbursal to HEIs should be handled independently, on the basis of merit. This will ensure accountability among regulators and accreditation bodies and transparency of the funders.



AN URBAN INDIA

SAHIL GANDHI

It is now widely recognised that India's future will be urban. According to estimates by the United Nations' World Urbanisation Prospects, India will see the highest increase in urban population in absolute numbers of any country. By 2050, it will add more people to its cities than are currently residing in them. This presents considerable challenges in terms of effective service delivery and livable conditions for urban residents. It must be noted here that as land and local self-government are the responsibilities of individual states, many crucial reforms are outside the mandate of India's central government. With that caveat, the central government could still undertake a number of important policy measures.

1 EMPOWER METROPOLITAN BODIES

Metropolitan regions are major growth drivers of the economy and hence worthy of policy attention and nurturing. However, metropolitan governance in India currently suffers from serious problems, including a lack of coordination among different organisations for provision of services such as solid waste management, transit, and mitigating pollution. Regional growth and its concomitant problems may also traverse state boundaries creating additional challenges of coordination among different state agencies.

Article 243ZE of the 74th Constitutional Amendment Act specifies that every metropolitan area in India should have a Metropolitan Planning Committee (MPC). The idea behind proposing an MPC was to create a coordinating body comprising ministers from state governments, locally elected councillors, and other professionals on metropolitan issues and for preparing regional plans. MPCs, where they have been constituted, have not been successful in discharging this role largely due to lack of finances and functionaries. Instead, metropolitan development authorities, which are state-controlled, are playing a significant role. The existing set-up needs to be restructured with a more empowered metropolitan body replacing both the MPC and development authority. This two-tier (city and metropolitan level) set-up should have a clear delineation of functions at the local and regional level along with revenue allocations. There is precedent for this kind of restructuring; metropolitan regions like London and Toronto have experimented extensively in order to improve outcomes at the metropolitan level. Restructuring metropolitan governance will require amending the 74th Constitutional Amendment Act.

2 IMPLEMENT A RENTAL HOUSING VOUCHER SCHEME

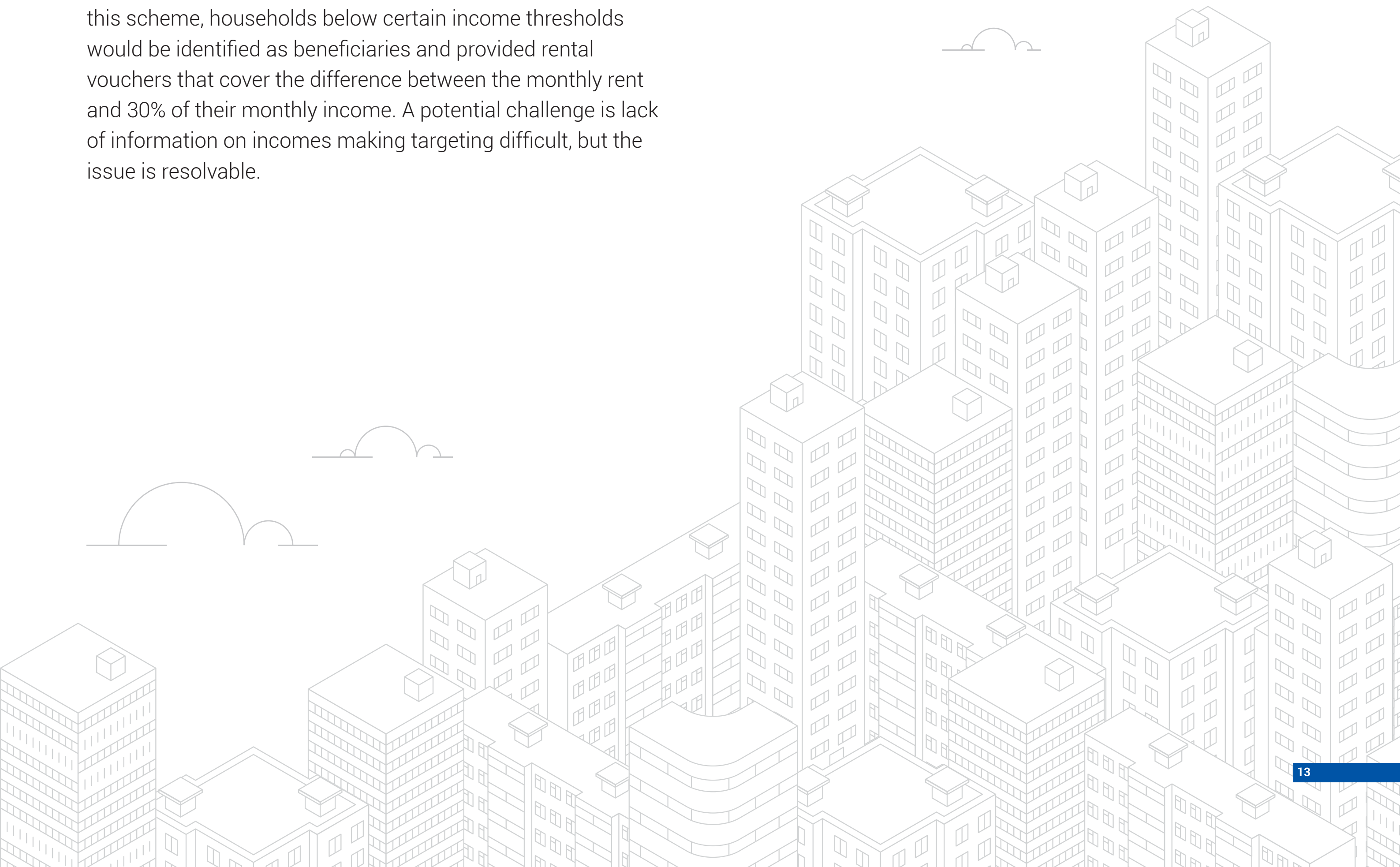
The situation of affordable housing supply in cities continues to be dire despite policy efforts by central and state governments. Direct provision of public housing has not succeeded in meeting its targets. To make matters worse, governments often implement land use regulations and controls such as restricting Floor Space Index or building heights that choke supply and drive up house prices. Given the vast number of households that do not have access to formal housing, the issue cannot be successfully resolved with a policy focus on creating a stock of ownership housing alone and requires rental housing to thrive. In urban India, the share of rental housing to total housing fell from 54% in the year 1961 to 28% in 2011.

Boosting rental housing must become the primary component of a comprehensive affordable housing policy. This involves addressing both supply side and demand side issues with regard to rental housing. Due to the fear of stringent rent control laws and extremely low rental yields, homeowners often prefer to keep houses vacant rather than renting them. Supply side reform will require state governments to amend rent control laws along the lines of the Centre's Draft Model Tenancy Act 2015. The Centre can use the levers of grant finance and add a clause that states need to do this in order to get access to funds under different centrally sponsored schemes. On the demand side, the focus should be on creating and implementing a targeted rental housing voucher scheme. Under this scheme, households below certain income thresholds would be identified as beneficiaries and provided rental vouchers that cover the difference between the monthly rent and 30% of their monthly income. A potential challenge is lack of information on incomes making targeting difficult, but the issue is resolvable.

3 TRANSFER REVENUE TO URBAN LOCAL BODIES

Urban local bodies have to undertake a wide range of functions mandated by the 74th Constitutional Amendment Act. However, many do not have requisite revenue sources for fulfilling their responsibilities. There is a clear mismatch between the functions they have to undertake and their revenue streams. In the absence of reliable and autonomous revenue sources, a crucial way to provide predictable fund flows is through fiscal transfers directly to the third tier of government. Economist and former chief of Finance Commission, Vijay Kelkar, has proposed that both the state and the centre can share part of the GST revenues with urban local bodies —this will require a constitutional amendment. These revenues will be in the form of untied grants with local bodies free to utilise them in any form. Such an arrangement is also justifiable on the grounds that it gives taxpayers a stronger say in how revenues generated from GST may be utilised.

While these reforms may not seem to be very radical, they will be instrumental in improving the lives of millions. The new government needs to be willing to undertake these for the sake of ensuring a smooth urban transition.



AN INFORMED INDIA

PRERNA SHARMA

For years, governments, policymakers, and philanthropists have contributed funds for the delivery of social programs to achieve specific goals and development outcomes. These funds have been used to tackle poverty, hunger, malnutrition, and other critical policy issues. But while necessary, they have met varying degrees of success. Each year the government spends crores on social service programs, but mostly without focused outcome assessments. It has, therefore, become impossible to assess the effectiveness of this spending. Measurements tend to focus on inputs and access, rather than on the achievement of output and outcomes. This makes it challenging for governments and private players to make informed, evidence-based choices about their investments and spending.

Take education, for example. Despite the Indian government's commitment to education and a right to education act, India has some of the worst education indicators in the world. According to the ASER 2018 report, only slightly over half of all children enrolled in standard 5 could read at least a standard 2 level text and only 28.1% of standard 3 children could subtract. In rural parts of certain states, Rajasthan for example, a girl is more than twice as likely to be out of school compared to a boy.

Policies and programmes in India are often riddled with inefficiencies and neither established institutional norms nor public discourse have sufficiently demanded evidentiary support for decisions that have wide-ranging consequences. This enables governments and bureaucratic organisations to carry on with the status quo. Hence, demands for sound policies backed by evidence are the need of the hour.

1 CROSS-MATCH MULTIPLE DATA PLATFORMS

Going forward, high-quality data and information management before, throughout, and after a development program or intervention will prove to be crucial. Building this data infrastructure – whether from the top-down or the bottom-up — will be a fundamental requirement for a sustainable and responsive policy framework. Data availability instead of data existence also appears to be the great challenge in India, where a variety of government institutions – such as the Ministry of Statistics and Program Implementation and others – collect vast amounts of data but there is limited coordination or alignment on data-access policies. In addition, quality and reliability of data appears to be a challenge, in particular regarding individual-level information. One of the greatest challenges continues to be different data systems and platforms within government, which are not set up to be cross-referenced. This creates data silos and significantly impacts the reliability of information, as government institutions apply different assumptions and models to a social problem, cutting across various agencies. A possible remedy is hiring data analysts and technical coders who are able to cross-match multiple platforms. Faster cross-matching can move the needle from collection to analysis.

In addition, Indian government institutions engage only in a limited way within the private or the non-profit sector in terms of data collection despite the massive scale and reach of civil society in India. Social service providers and private research institutions gather large volumes of proprietary information (for example, through surveys or focus groups) that have great potential to complement government databases. The institutionalisation of data-sharing policies can contribute to creating a more open data culture, in which both public and private actors share information top-down as well as bottom-up.

2 LEVERAGE PRIVATE ACTORS FOR IMPACT EVALUATIONS

Bridging the gap between sound data analysis and the operational, legal, ethical and political issues that bureaucrats and politicians are confronted with on a daily basis requires critical analysis – this is where research meets policy. Ultimately, what matters in evidence-based policy is not just evidence but understanding. This becomes the most important use of collected data, to cumulatively understand and combine evidence with context to make informed choices.

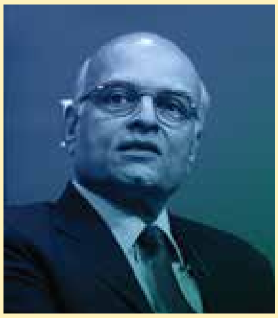
On one hand, there remains a vast amount of meaningful research which can directly inform and enrich policymaking and implementation, but researchers often do not tailor their work to answer or solve particular policy questions. On the other hand, there is a dearth of ideas and analysis on niche and sector-specific issues, where policy planners and bureaucrats who implement crucial programs daily could use help.

While it is important to link evidence to policy, investments must be made in building the capacity of policy planners to leverage what is already available. Going forward, data and evidence must be clearly analysed, as this lays the ground for future impact modelling. Knowledge and resources of academic institutions must leverage the process of building impact evaluation capacity.

As governments continue to search for the best ways to achieve real impact, certain provider participant relationships can be incentivised such that they inform the design of government programs. These include Pay-For-Success programs and instruments such as Social and Development Bonds. When implemented effectively, payment structures based on successfully meeting agreed social outcomes can increase efficiency, lower costs, and have a profound impact on program success.

Given the early stage development of such techniques, measurement and evaluation must be given importance. This will prove effective in not only establishing a data culture within governments, but in highlighting the importance of informed policymaking based on rigorous quantification.

A SECURE INDIA



SHIVSHANKAR
MENON

If we wish to secure the continued transformation of India, we must be prepared for the new situation and threats that we face. At a minimum, that requires urgent defence reform, foreign policy reform, and the reform of our security structures and practices.

1 UPDATE NATIONAL SECURITY STRUCTURES

We have had twenty years of experience with the National Security Council system and its workings. But it is time to place the National Security Council, the National Security Adviser, and their subsidiary bodies on a proper statutory basis, specifying their authorities and functions, as other parliamentary democracies have done. India also often relies on 19th century legal and administrative instruments to deal with 21st century threats, such as to the country's cyber security and citizens' data privacy. Sufficient capability, regulation, and legal authorities need to be provided. India also needs to train manpower––which is in such short supply–– for these tasks in the cyber domain, and to start on the longer-term task of building hardware capabilities necessary to secure itself. Finally, police reform is essential if India is to cope with the rise in social and communal violence since 2012 and to apply the balm of political healing to our society in Jammu and Kashmir and elsewhere.

2 IMPLEMENT DEFENCE REFORMS

It is time that India built 21st century armed forces. Its defence reform must be capability driven, enabling it to deal with hybrid warfare, to deter potential adversaries, and to project power to pacify its periphery when necessary. Without a defence production industry of its own, India will never be secure. The solutions are known and have been recommended by successive governmental bodies. The time has come now for implementation.

3 INTEGRATE FOREIGN POLICY

The foreign policy apparatus needs to be strengthened in numbers, quality, and in its linkages within our own society. Additionally, India's foreign economic policy needs to be brought in line with its political ambitions and outreach and needs to be integrated with our foreign policy institutionally and in practice. And while maintaining strategic autonomy, India needs to work out new frameworks for its relationships with China and the United States; reconnect with its extended neighbourhood and the subcontinent and build issue-based coalitions with partners to secure itself and the peace that will be required for India's transformation.

A GLOBAL INDIA

DHRUVA JAISHANKAR

The next Indian government faces a world that looks very different from the way it did five – and certainly 10 or 20 – years ago. The global economy is facing headwinds: stagnant trade, disruptive technologies, and growing protectionism concerning agricultural and manufactured goods, key services, technology transfers, and labour mobility. U.S. President Donald Trump is rewriting the rules on trade, alliances, and multilateralism, some of which could well outlive his presidency. As its economic growth decelerates, China has become more assertive and less sensitive to the concerns of other countries, including India. This extends to the bilateral boundary dispute, the Belt and Road Initiative (including the China-Pakistan Economic Corridor and the securitisation of the Indian Ocean), economic and trade differences, and positions at various international institutions. India faces a periphery – Bhutan, Nepal, Bangladesh, Myanmar, Sri Lanka, and the Maldives – that is democratising, creating new opportunities and long-term stability but also new challenges to integration and security. Pakistan continues to pursue a revisionist agenda against India – including through the support of terrorist proxies under the nuclear umbrella – even as its economic fundamentals weaken further. Afghanistan's future remains uncertain, and tensions remain high across the Persian Gulf and between the West and Russia. Amid this backdrop, what should be the priorities for the next Indian government until 2024?

1 PRIORITISE TRADE AND DEFENCE INDIGENISATION

Commerce is increasingly a strategic tool, and India's growing market is evolving into a potent point of leverage with other actors. However, India's trade policy has traditionally been dominated by domestic priorities. Identifying areas of Indian comparative advantage, liberalising selectively, and coordinating trade policy between ministries – including through the creation of a special trade representative's office – are vital. On issues such as the Regional Comprehensive Economic Partnership (RCEP), India faces imminent and difficult choices. Joining RCEP will adversely affect certain sectors of the Indian economy; but not joining will also have costs, and will exclude India from the next generation of regional trade norms. Efforts must be made now in framing trade policy and prioritising certain multilateral and bilateral negotiations so as to avoid having to take such difficult decisions in the future.

Defence self-reliance remains another urgent priority. Despite India having the fifth largest defence budget and hosting a large defence industry, it remains the world's largest defence importer while its exports are still negligible. Indigenisation of defence production will require: integrating budgetary, technological, industrial, and export factors into the military services' qualitative requirements (QR), ensuring steady disbursal of funds by the Finance Ministry, and enhancing competition for contracts and innovation within the defence public and private sectors. Many of these policies will require top-down leadership decisions, often against staunch vested interests in the Indian bureaucracy and businesses, and despite very real constraints of time, financial resources, expertise, and political capital. But the absence of decision-making in these areas will severely constrain India's rise as a global power.

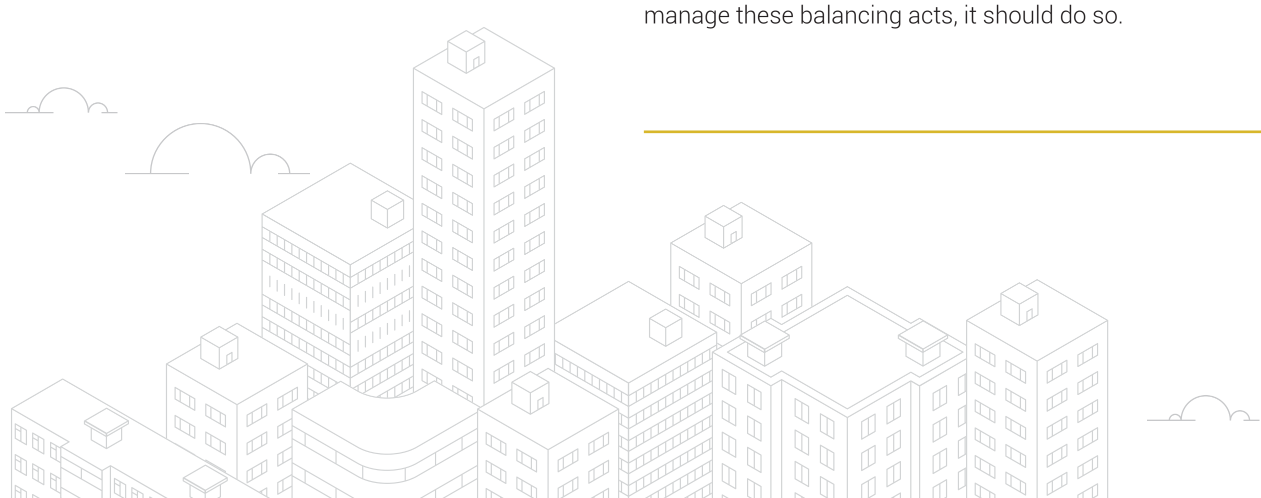
2 FOCUS ON THE NEIGHBOURHOOD AND INDO-PACIFIC

The biggest external strategic challenge facing India concerns the manner of China's rise and its increased assertiveness. This is impinging on a number of vital Indian interests through the militarisation of the Himalayan border region and the Indian Ocean; the deepening Chinese relationship with Pakistan; the undermining of India's ties with the likes of Russia, Nepal, and the Maldives; non-market economic practices resulting in dumping, trade barriers, and competitive disadvantages; and India's entry into international institutions such as the UN Security Council and Nuclear Suppliers Group. Addressing this challenge will require the next government to focus laser-like on improving relations with the neighbourhood, including devoting diplomatic attention, providing assistance, improving connectivity, and recasting regional institutions in a positive light. Furthermore, India must continue to implement an active Act East Policy in the Indo-Pacific. This will require, first, working to secure the Indian Ocean region from further militarisation. Second, India should connect politically, economically, militarily, and socially with Southeast Asia. Third, New Delhi must deepen security partnerships with balancing powers such as the United States, Japan, Australia, Russia, and France. And fourth, it should manage differences with Beijing through sustained engagement.

3 CONTAIN PAKISTAN & BALANCE EURASIA

While policy in the near-abroad and to its east is less a question of vision and more one of implementation, a trickier balancing act will be required to India's west and north. Much will centre on the immediate problem of Pakistan. From 1989 to 2016, India was stuck in a cycle of talks with Pakistan punctuated by disruptions caused by Pakistani military and terrorist provocations. Engagement served a useful purpose at times in mitigating international opprobrium, deflecting attempts at third-party mediation, and managing escalation. However, this experience also makes it clear that positive engagement has done little to alter Pakistani behaviour. The growing international frustration with Pakistan – whether its continued support for terrorist groups, its adverse civil-military relations, its non-proliferation record, or its involvement in Afghanistan – presents an opportunity for India to relentlessly press its advantages, within the confines presented by both countries' nuclear weapons. Although Pakistan will continue to resist coercive behaviour, with likely support from China, the sustained isolation of Pakistan – even if unilateral and initially inadequate – is more likely to result in behavioural changes as the power disparity grows further in India's favour than a return to the cycle of talks and disruptions.

More delicate balancing acts will have to be executed in West Asia and Eurasia. India's partnerships with many centres of global and regional power are increasingly positive and broad, and have assumed a logic of their own. This extends to the United States, Europe, Japan, South Korea, Southeast Asia, Australia, Canada, the United Arab Emirates, Saudi Arabia, and Israel. These will remain India's most important relationships. But as these ties improve, India will face tough balancing acts in preserving mutually-beneficial relations with Russia and Iran. Russia is more important and complicated, given India's continued dependence on Russian military hardware, spares, and maintenance; close technological cooperation; and concerns about Russia's relations with China. Engaging with Moscow will occasionally imperil relations with the United States and Europe, but this will require a series of clear-headed cost-benefit analyses. Iran is a more manageable issue, given leaner relations, but cooperation on connectivity and Afghanistan will remain important. To the extent that India can manage these balancing acts, it should do so.



A NEIGHBOURLY INDIA

CONSTANTINO XAVIER

The South Asian neighbourhood has become a new foreign policy priority in recent years, mostly in reaction to China's expanding footprint. In 2014, New Delhi shifted gears with its "Neighbourhood First" policy and focused more on the region than most preceding governments. However, these efforts were far too late and too little to correct decades of neglect. Beyond the "connectivity" buzzword, New Delhi's focus on the neighbourhood has exposed tremendous capacity constraints to implement its vision on the ground. This is where India has often disappointed its neighbours and, in some cases, even paved the way for China to make further inroads. To address this competitive regional context, India should focus on the following three priorities until 2024.

1 REDUCE THE IMPLEMENTATION GAP

Whether it's Neighbourhood First, Act East, or any other policy focused on regional connectivity, India will continue to under-deliver until it expands its capacity to implement. More commitments from the political leadership will further stress the already overwhelmed bureaucracy and increase the implementation gap. Nowhere was this more apparent than in 2016, when Prime Minister Narendra Modi announced BIMSTEC as a priority even as it took two years to depute an Indian director to the organisation's secretariat. India's failure to follow up and deliver on commitments has begun to affect its reputation. Such assessments are a liability because they perversely incentivise countries to further embrace China as an alternative.

To reduce this implementation gap in the neighbourhood, the government should first expand the Indian Foreign Service's annual intake. It should also increase opportunities for lateral entry and outside experts to offer inputs into policymaking on economic, security and strategic affairs relating to the neighbourhood. Secondly, it should incentivise coordination and cross-posting of officials between the Ministry of External Affairs (MEA) and other ministries invested in regional connectivity. MEA's role as an international gatekeeper and its discretion to veto international engagement by other ministries, the armed forces and state governments should be reduced. Third, the Prime Minister should appoint a cabinet-ranked Special Envoy on regional connectivity, with political clout to reach out directly to heads of government and key political actors in neighbouring countries. This envoy should not override, but complement bureaucratic inputs and formal bilateral channels. Finally, the government should implement the Special Purpose Vehicle/Facility (announced in 2014) to accelerate regional infrastructure projects. It should reduce dependency on public sector unit (PSU) adjudication to implement projects and, instead, privilege open-tender processes for Indian and international private companies.

2 LEAD BY EXAMPLE AND ASYMMETRY

As the subcontinent's predominant power, India's investment in regional connectivity will only succeed if it leads by example and opens up first to its smaller neighbours. Such asymmetric advantages, popularly coined as the "Gujral doctrine" in the 1990s, should not be seen as a mere expression of altruism or generosity. As Prime Minister Manmohan Singh emphasised in 2010, India should engage its neighbours "without looking at reciprocity, [but] in our own enlightened interest." The pursuit of India's domestic interests hinges increasingly on greater regional interdependence.

India's investment in connectivity requires a dual focus at home and abroad. Internally, greater openness will require skill to convince (or coerce) domestic opposition groups and absorb the political costs of asymmetric advantages to neighbouring countries. Externally, greater connectivity will also require skill to assuage neighbouring countries' fears about excessive reliance on India, or being overwhelmed by its economic and demographic pressures. Tactical concessions to neighbours will pay off in the long-term by generating trust through non-reciprocal openings.

This requires the following steps based on positive discrimination. First, India should eliminate all forms of bureaucratic, tariff, security and any other barriers to land-based trade and transportation between Nepal, Bhutan, and Bangladesh through Indian territory. Second, it should offer neighbours duty-free access to Indian railways and ports, as well as new air transport corridors to fly to/across Indian airspace. It should also revise visa policies to offer citizens from neighbouring countries privileged access to India. It makes little sense that an American or Chinese finds it easier to visit India than a citizen from neighbouring Bangladesh or Myanmar. Third, it should modernise border control infrastructure and facilitate cross-border flows through further expansion of Integrated Check Posts. This would benefit from the creation of a smart identification system that formalises border crossings between India and Nepal, as requested by Kathmandu. Finally, India should gradually eliminate all goods remaining on its sensitive trade lists in South Asia, while also supporting Bangladesh and Nepal's demands to remain in the "least developed" category at multilateral trade and lending organisations.

3 REGAIN THE INITIATIVE

China is now a resident power in South Asia and has ended India's quasi-monopoly of influence in the region. China is now one of the main players in supporting infrastructure modernisation and developmental initiatives in India's periphery – whether its optic fibre or rail links connecting Nepal across the Himalayas; the 99-year lease of the Hambantota port in Sri Lanka; or its shareholding in the Dhaka Stock Exchange. Students, journalists, and even government or military officials from across the region now actively look to China for professional or training opportunities. Naturally, this entanglement has also increased Beijing's strategic leverage to influence the domestic politics and foreign policy of these countries despite their "India first" proclamations.

While adjusting to this new reality, India has sometimes oscillated between the extremes of complacency (hopeful inaction, waiting for Chinese initiative to fizzle out) and overreaction (obsessive obstruction of Chinese initiatives as security threats). Beyond such short-termism, New Delhi must invest in ways that can shape neighbouring countries' long-term incentive structures to favour India. This will require more focus on grants and loans for infrastructure development towards capacity-building programs (through the Development Partnership Administration and Indian Technical and Economic Cooperation) that increase technical self-sufficiency and institutional resilience in neighbouring countries. Let China pay for hard connectivity, and instead, India can explore its comparative advantage in soft connectivity and democratic governance. Secondly, India should increase resources for public diplomacy and outreach initiatives that target the new generation of political leaders, entrepreneurs, and scholars in neighbouring countries. Increasingly lured to Shanghai or New York, they need to find greater exposure and opportunities to also grow in New Delhi or Mumbai. Third, India should consolidate the variety of new trilateral connectivity and infrastructure initiatives by focusing on sequencing and flagship projects. One finalised India-Japan third-country project in Sri Lanka, for example, will be better than twelve under completion. Finally, India should de-hyphenate its Pakistan and SAARC policies. It should sustain a variety of regional cooperation initiatives, including BIMSTEC and BBIN, but also recommit to SAARC.

AN INTERDEPENDENT CHINA AND INDIA

ANANTH KRISHNAN

China today looms large in India's consciousness, with implications for India's neighbourhood and connectivity initiatives, trade policy, and incoming investment. The next government will need to focus on certain priorities.

1 IMPROVE AID DELIVERY

Offering a credible alternative to the deepening Chinese economic presence in the neighbourhood remains a pressing challenge. While India has taken the first steps in this regard through a new willingness to work together with other countries, including Japan and the United States, constraints in capacity to deliver projects on time is a considerable obstacle. Limitations on funding is another. Working within these constraints could work to New Delhi's advantage, rather than attempting to replicate the China model, which is running into its own problems, a result of a lack of due diligence on projects, cost-overruns and debt burdens foisted on host countries. Instead, India should work towards providing an efficient, transparent and financially-sustainable alternative. As a start, beefing up the Developmental Partnership Administration at the Ministry of External Affairs, which was conceived as the nodal body for overseas development projects, would serve in improving the capacity to deliver.

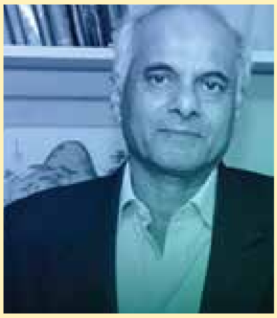
2 ASSESS TRADE DEPENDENCE

India's trade deficit with its biggest trading partner, China, has risen from $38 billion in 2014 to $58 billion in 2018. A lack of competitiveness in manufacturing, continued dependence on Chinese machinery and equipment, and market access problems in China for Indian companies, particularly in pharmaceuticals and information technology sectors, have all contributed to an increasingly unsustainable trade relationship. What has not helped is the absence of a coherent policy in dealing with China, a consequence of a diffused approach to both trade and investment regulation. As a start, the next government needs to undertake a comprehensive cross-sector study analysing sector-wise dependence on China, particularly in sensitive sectors such as active pharmaceutical ingredients (APIs), where there is near-complete dependence on Chinese imports. The next step will be formulating long-term strategies to build self-sufficiency in critical sectors, starting with APIs.

3 ENCOURAGE BUT SCREEN INVESTMENTS

Keeping up growth in foreign direct investment (FDI) and ensuring a credible and transparent regulatory regime are both equally important immediate challenges. FDI growth plateaued last year, at $60.97 billion in 2017-18 compared to $60.22 billion in the previous year. While FDI restrictions in many sectors have eased, regulation remains a challenge, with the responsibility for approval shared between the Reserve Bank of India (RBI) through the automatic FDI route, and the Department of Industrial Policy and Promotion (DIPP) and individual ministries for other investments. This follows the abolishing of the Foreign Investment Promotion Board with the aim of streamlining approvals. With an increasing share of FDI flowing towards India's services sector, including foreign acquisitions of Indian start-ups, regulation remains a challenge, especially with the new, diffused approvals process. A first step towards addressing it would be creating a fair and credible regulatory regime, for instance along the lines of the Committee on Foreign Investment in the United States. A credible and predictable regulatory mechanism would not only make approvals more transparent, but also better regulate investments in emerging sensitive industries.

A GREEN INDIA



VIKRAM
SINGH MEHTA

India faces a variety of challenges related to energy and the environment. Here are several initiatives that the next government could contemplate early on in its term.

1 INTEGRATE ENERGY AND ENVIRONMENTAL POLICY

The various ministries currently engaged with energy and the environment should be collapsed into one omnibus Ministry of Energy and Environment. This will perforate the current siloed approach to energy policy and enable the new government to view the sector through an integrated and holistic lens. It could more easily track and evaluate the systemic implications of changes in any one or more component variable. Secondly, an "Energy and Environment Security Act" should be passed at the earliest possible opportunity. The objective of such an act should be to bring energy and environment into the national narrative; to set out the road map for managing and mitigating the emergent challenge of balancing economic development and energy demands with the goal of environmental protection; and to mobilise public support for the policy and regulatory changes required to hasten the transition to a non-fossil fuel based energy system. Finally, energy data is scattered across various government departments. This hinders policy and investment. The new government should establish an integrated energy data centre, whose data should be regularly updated and made available to all players on commercial terms.

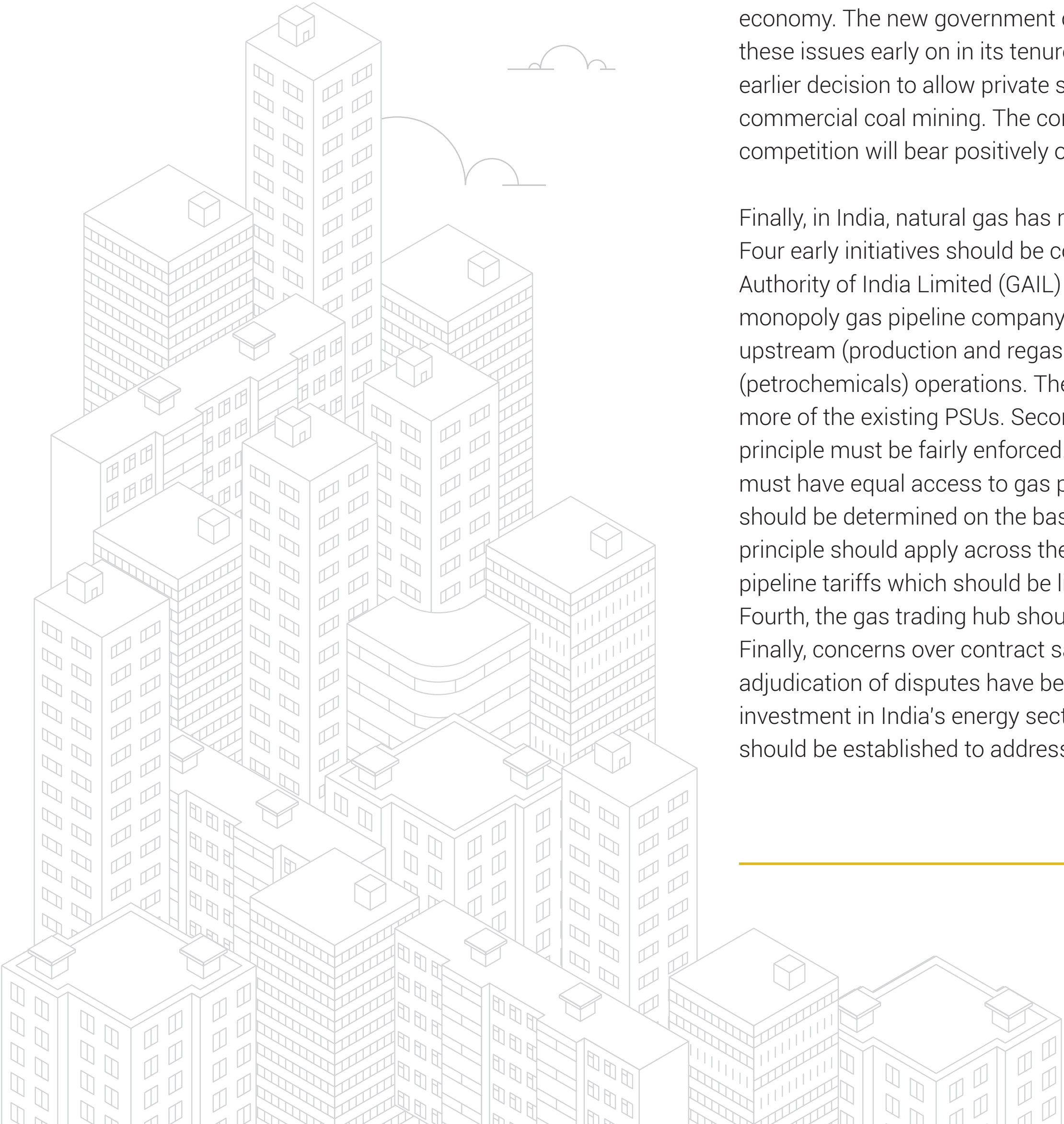
2 DECARBONISE

Decarbonisation, demand management, and efficiency should be the watchwords of the new government's energy policy. In this context, the focus should be on generating electricity from solar and wind,incentivising electric vehicles, curtailing diesel consumption in agriculture, enforcing standards and emission norms, redesigning buildings and factories to make them carbon neutral, and influencing behavioural change towards energy conservation. A multi-pronged thrust along these lines will weaken the current unhealthy relationship between economic growth, energy demand, and the environment.

Additionally, the "clean energy fund" is currently funded through a cess on coal production. It is also managed by the Ministry of Finance. The fund should be augmented through the issuance of "Green Bonds" and perhaps a clean energy tax. Its administration should be handed over to those with domain expertise. The reason for the former is to intensify research and development on clean energy technologies (e.g. battery storage, carbon capture and sequestration, hydrogen, coal gasification, modular nuclear reactors, etc.) and to fund the transmission and distribution infrastructure required for absorbing the flow of clean energy. The reason is to safeguard the funds from sequestration into the Consolidated Fund, to create the conditions for incubating innovation, and to forge international R&D and technology partnerships.

3 BETTER MANAGE RESOURCES

The levers of oil policy are today in the hands of autocratic leaders. This "personalisation" of oil politics would not have been an issue in the past when oil was traded mostly against long-term supply contracts. But today against the backdrop of an integrated, liquid, and fungible market characterised by short-term flexible deals, this is of relevance especially for import-dependent countries like India. The local actions of leaders now have global, supply-related ramifications. The new government should, therefore, look to develop a specialised cadre of "energy diplomats." It should contemplate lateral entrants at mid- and senior levels of government with relevant domain and international expertise. It should unshackle the energy public sector units from intrusive bureaucratic oversight to enable their management to respond with agility to unexpected market developments. And it should establish strong personal relations with the leaders of oil exporting states. At crunch time, the latter could well be the peg on which India's supply security hangs.



Close to home, India's unattractive geology is the reason why the various bidding rounds for private sector investment in oil and gas exploration have not been a success. The new government should not stop this effort but it should consider three changes to the current contract terms. One, it should replace the current revenue sharing model with a production sharing model for new exploration. Two, it should link investment in the marginal and smaller discovered fields with access to the domestic retail market and remove the condition that only companies that have invested Rs. 2000 crores will be eligible for a marketing license. Three, it should contemplate bidding out Mumbai High and other major producing oil and gas fields to international players with proven enhanced oil recovery technologies. The current recovery rates of production from these fields are well below the global average. Huge value add would accrue if our rates could be increased to global standards.

Coal represents another a major resource. Coal India Limited (CIL) is amajor producer of coal but faces huge legacy issues (labour unions, mafia, politics, and organisation) which constrain its ability to fully and efficiently harness the country's indigenous coal reserves. These issues cannot be addressed without first redrawing the contours of India's political economy. The new government cannot, understandably, tackle these issues early on in its tenure. It can, however, resurrect an earlier decision to allow private sector companies into commercial coal mining. The consequent pressure of competition will bear positively on the performance of CIL.

Finally, in India, natural gas has not realised its full potential. Four early initiatives should be contemplated. First, Gas Authority of India Limited (GAIL) should be unbundled into a monopoly gas pipeline company. It should be divested of its upstream (production and regasification) and downstream (petrochemicals) operations. These can be merged into one or more of the existing PSUs. Second, the "common access" principle must be fairly enforced. Every player, private or public, must have equal access to gas pipelines. Third, the price of gas should be determined on the basis of market principles. This principle should apply across the gas value chain, except pipeline tariffs which should be linked to return on capital. Fourth, the gas trading hub should be expeditiously established. Finally, concerns over contract sanctity and delays in the adjudication of disputes have been a major deterrent to investment in India's energy sector. Special energy courts should be established to address these concerns.

A SUSTAINABLE INDIA

RAHUL TONGIA

How things change in five years. We have seen many positive steps, some with effort, some part of broader global trends. Nearly all homes in India today have an electricity connection, and the prices of solar power have crashed to a level where newspapers talk of "grid parity." Carbon is a universal global concern, and India made a carbon reduction promise at the Paris Climate Summit that it is likely to keep.

Going forward, government policies must focus on all the three aspects of sustainability: economics, environment, and equity. Sustainability isn't just about "being green" or an elite construct, even laypersons want improved energy access and affordability, and pollution impacts them the most. While all countries grapple with sustainability, India is different given its starting point: a large base, growing demand, but still modest use of modern energy. Despite strides with schemes like Ujjwala, many rural homes still use biomass for cooking, and the per capita electricity consumption is still only a third the global average. While business as usual will keep improving, it will not be enough to meet the often conflicting goals of cheaper, faster, and better.

If years of under-supply and shortages of power are a thing of the past, then why are utilities not providing 24x7 power to all? Of course, the obvious challenges will need to be addressed, such as the reduction of distribution company (Discom) losses such as theft, and moving to better emissions standards for vehicles. But some challenges need a new direction and political will – we need to now focus not merely on yesterday's problems but tomorrow's.

1 IMPROVE ELECTRICITY SUPPLY

While no one is against the goal of 24x7 electricity supply how can it happen viably, and how can it be verified? Utilities and regulators must bite the bullet to buy sufficient power or those who are load shed more (the poor and rural users) end up worse off than urban dwellers, effectively a perverse reverse cross-subsidy. Furthermore, digitalisation of the infrastructure – starting with real-time feeder monitoring – is required to verify supply. This does not require smart meters per se, which are helpful but will take time. Through improved planning and building system resiliency, an immediate step would be to end scheduled load-shedding, a precursor to ending unscheduled load-shedding.

Part of the challenge is that this is not a generation problem anymore. Instead, what is required is to incentivise the right power generation at the right time at the right price. Not only is India relatively power surplus for now, the costs of renewable energy (RE) are quite low, especially compared to alternatives. However, RE, as used today, is the low-hanging fruit of variable renewable energy (VRE), and at some point in a few years, we will need sufficient storage to handle so much RE. Most demand remains in the evening peak. Thus, time of day pricing is necessary to ensure not just that supply matches demand but that demand matches available supply. Time of day pricing should start with wholesale purchases before addressing concerns about retail supply, which will require massive metering upgrades. In the long run, a higher RE system needs operational flexibility, which means more market mechanisms, instead of today's static if not rigid power purchase agreements.

2 ENHANCE EFFICIENCY

Cheap supply, even if from RE, is not as useful as lower demand, which also saves on infrastructure requirements, which is why efficiency matters. While there are star ratings for appliances, buildings are an obvious laggard, and the gap is not just in norms but in enforcement. Part of this is a supply problem. Although LED bulbs have been widely adopted, many efficient appliances are only sold as luxury or elite products. Lack of competitive and affordable choices is also why there is little clamour for electric vehicles: it is not just lack of charging infrastructure. In fact, the first significant users of electric vehicles in India are likely to be fleets and public transport, who can fend for themselves, or small vehicles that can manage with regular household charging, especially overnight. But without effort, that could mean more coal.

3 ELIMINATE DISTORTIONS THROUGH BETTER REGULATION

India must use the next few years to undertake structural change for superior regulation and stakeholder incentives. Traditional electricity was mostly regulated and costs-plus, with many distortions, including in fuel markets. It is now time to remove distortions and enable more market-oriented competition. The future will involve more digitally-enabled disruption from the edge: "Uberization" so to speak. Instead of fighting this, India should embrace more distributed generators and storage, and demand shifting by end-users and third parties. Many users do deserve support in the form of subsidies, but this should be applied judiciously only for lifeline usage, and technology can help enforce this. If support continues in the form of cheap prices, consumers have no incentive to save energy. Instead they can be given separate subsidies, perhaps through direct benefit transfers (DBT).

Sadly, we can't innovate ourselves out of our problems -- solar or smart meters can help but are not enough to address systems-level issues. With all the solar pumpsets being implemented to solve Discom woes, at what point would we run out of water before we run out of power?

4 PATH AHEAD

Operational improvements should be accompanied by amendments to the Electricity Act 2003. No-brainers include increasing the use of technology and ushering in new entrants. There is also an opportunity to fix or tweak issues that need more clarity or options, especially relating to markets, competition, and structural separation of wires and retail. Given the complexities and tradeoffs, the processes must draw in more stakeholders, especially states and cities, not to mention technology providers and consumers. We also need to embrace and take advantage of our heterogeneity – one size does not fit all. Forward-looking utilities should be supported for ambitious targets, and even taking greater risks.

When incrementalism isn't enough, we have to consider a big bang. We need clear measurable goals that are achievable but with effort. If a utility is truly failing, it should face consequences, and there should be external oversight of many operations. After all, entire cities in the west go into receivership when they fail.

Energy transitions take time, even though governments like to think in terms of five years. India has to play the long game. The good news is India is likely to surprise critics by a faster thrust towards digitalisation, de-centralisation, and de-carbonising. Smart grids and consumer engagement in the West are often viewed with indifference if not suspicion. In India, few people take electricity for granted. Citizens are likely to embrace change if it makes their lives better. We just need policies that can foster and accelerate positive change.

AN ENERGIZED INDIA

SWATI
DSOUZA

Providing affordable and accessible energy to every citizen while ensuring energy security has been the cornerstone of India's energy policy. Over the years, this policy has been shaped by numerous socio-economic and political factors including the dichotomy between a nationalised Indian energy sector (upstream and downstream) and a more 'liberated' economy; centre-state relations; a rising middle class and ending energy and economic poverty. In recent years, technological changes and global developments on climate change have also played a role. Compared to India, most large nations faced the pressure of climate mitigation very late in their development path, meaning there is no proven pathway for development in climate change and sustainability that India can follow. How then can India direct its energy sector towards a low-carbon economy?

1 MAKE CLEAR PLANS WHILE DEREGULATING

Since India junked the central planning model, the ministries dealing with energy have put out several contradictory or competing targets and policies. These include the scaling up of electric vehicles to 100% of new stock by 2030; expanding refinery capacity to 400 million tonnes by 2030; increasing coal production to one billion tonnes by 2020; and changing the Renewable Energy (RE) targets almost every year. The lack of clarity on decision making and coordination often led to backtracking of policies (like in the case of electric vehicles) or changing goal posts (like the case of rooftop solar installation). The central government needs to provide cues to the market in the form of constant, clear and concise policies and legislation within a multiple objectives framework. This will necessitate planning, preferably by one body that takes into account an energy-economy approach. Furthermore, environmental regulations need to be strengthened. At present levels of consumption and groundwater depletion, India is expected to become a water scarce country by 2030. Similarly, seven of the most polluted cities in the world are in India. India needs Right to Clean Air and Right to Clean Water Acts or a new policy on environmental issues that highlights their critical nature and treats them as national emergencies.

At the same time, the central government has to play the role of a decision maker – making policy, framing legislation and arbitrating – but step away from energy production and distribution activities. Currently, the central government ministries are involved in framing policies, administering them, adjudicating disputes, and implementing policies either directly or indirectly, using public sector units as a proxy in the coal, oil and gas and power sectors. However, continued government intervention despite the evolution of the energy sector and the economy has led to market distortions, promoted rent-seeking, and encouraged biases and inefficiency.

2 STRENGTHEN INDEPENDENT REGULATORS

Because a single institution makes laws, administers them, and also adjudicates disputes, certain sectors lack regulators (coal, railways, and the environment) while other areas are not empowered sufficiently (oil and gas). Even in cases like the power sector, where the regulatory commissions have extensive powers at the state and national level, their efficiency and track record are not very strong. On coal, the environment, or the railways, the process is controlled by the relevant ministries or nationalised corporations and there is no forum for quasi-judicial recourse. In the oil and gas sector, the Directorate of Hydrocarbons (DGH) that oversees upstream activities does not have financial independence, falls under the Ministry of Petroleum and Natural Gas, and is staffed by members who are on deputation from National Oil Companies (NOCs). In 2011, the Supreme Court of India noted that regulatory jobs are reserved for career bureaucrats. These factors impact governance of the sector as a whole and act as deterrent for competition. There is a need for an independent energy sector regulator in India, either for the entire sector or several regulators for issues like coal and the environment. Moreover, to ensure independence of these regulators (and empower existing ones), it is necessary that they retain control over their finances, organisation, and hiring process with minimal interference from ministries and the bureaucracy.

3 EMPOWER STATE GOVERNMENTS

In the energy sector, India has been moving away from the cooperative federalism model and has vested more powers in the central government. This move has resulted in policies that embody the principle of one-size-fits-all or a top-down method of policymaking. This approach has been detrimental since getting land, water, and environmental approvals require the buy-in of state governments. Further, this has also impacted the capacity and talent in state government bodies (ministries and independent bodies) to efficiently execute a plan of action. Given income and socio-economic disparity between states in the country, it becomes necessary to empower states beyond financial outlays. For example, in the natural gas sector, state governments are not interested parties in the infrastructure planning process and have different priorities. This makes acquiring land for laying pipelines or building CNG stations more difficult. Similarly, air pollution needs to be tackled by state governments with the Ministry of Environment, Forest and Climate Change (MoEFCC) only providing the adequate framework, incentives, and direction. The framework for the UDAY scheme becomes a viable case study where state governments were asked to act with appropriate directions and incentives from the central government, despite the legislative framework being drafted at the Ministry of Power.

A PRODUCTIVE INDIA

MOHD. SAHIL ALI

India's policy default in the energy sector has been a focus on infrastructure addition with the goal of sufficiency. This made sense based on the deficits it was facing after Independence, especially in the electricity sector. Reliable and assured energy is also a prerequisite for robust industrial and manufacturing growth. But now, India has reached a situation of aggregate electricity surplus, and barring occasional upheavals, aggregate fuel security for the industrial sector. The emerging challenges in energy pertain to allocation, efficiency, and resolution between the multiple goals and consequent stresses the energy sector should address. These require a revamp of the traditional approach to energy policy, which has viewed the system as supply-constrained as a starting point.

1 IMPROVE ENERGY PRODUCTIVITY AND VALUATION

Historically, the demand side of the Indian energy scenario has not received the attention it deserves. Instead, the political agenda of energy has been limited to two broad metrics: affordability and supply infrastructure addition. India continues to face the mammoth challenge of shifting much of its rural populace to modern cooking fuels, and providing affordable and meaningful electricity for the energy and income poor. This shift to commercial energy will increase India's energy and emissions profile such that the greenhouse gas emission intensity of India's energy portfolio will rise by over 10% by 2030, not with standing the ambitious domestic targets on renewable energy.

This means that the bulk of the onus of achieving emissions reductions (even beyond India's Nationally Determined Contribution) lies in energy productivity—enhancing the GDP per unit of emitted greenhouse gases over time. The next government faces a sizeable opportunity to shift the focus towards efficiency and service delivery. The task will also involve work towards changing public mindset towards efficient provision of affordable and reliable energy services. A good example of this process was the 'Give it Up' campaign on LPG subsidy that emphasised the role of the well-off sections of society in becoming conscientious stakeholders in national development.

However, currently, there are a number of gaps in valuing energy efficiency. A unit of energy saved will always be more valuable than a unit produced, due to technical losses. In industries and commercial enterprises where the energy prices are high enough to impact bottom-lines, energy efficiency investments are autonomous, yielding returns over shorter payback a period. For households, a combination of high sensitivity to front costs of appliances, coupled with unrepresentative pricing structures (especially for the densely consuming urban 'middle class') has resulted in only a very gradual uptake in energy efficiency. Even in agriculture, while most states decree free or one-time flat-rate based supply, the benefits are concentrated within the relatively well-to-do households owning sizeable farmland.

Related to the above is the absence of adequate signalling to end-users about power costs during peak and off-peak times. This is coupled with the lack of direct load shifting or demand response options, except in agriculture, where supply hours are traditionally fixed to off-peak early morning hours. With high Renewable Energy (RE) penetration, demand response is the most cost-effective option to ensure efficient utilisation of clean energy, and must be pursued on priority.

Therefore, the policy on energy valuation on users' end must provide mechanisms to signal or adapt to the following differentials: the value of a unit saved versus a unit generated; capacities and motivations among different end users to invest in energy efficiency; and peak and off-peak power.

2 EMPLOY MEANINGFUL TARGETS

Successive Indian governments have set highly optimistic energy sector-related targets. From RE, to electric vehicles to even natural gas, the policy ambitions set by this government should be understood as intention signalling rather than hard targets. Even so, the targets themselves need to be revisited to become more meaningful and service-oriented. On electricity access, for example, the conversation (and targets) must shift towards expanding energy provision from simply grid connections.

Even for schemes such as Ujjwala, a mere headcount of beneficiaries is no indicator of the quality of service or the scheme's success in causing rural customers to switch from non-commercial biomass to LPG. Deriving service-based targets that measure real and durable change is arguably much harder, as it requires a careful assessment of prevailing conditions or circumstances that act as enablers or otherwise. One such approach has been proposed by UN's 'sustainable energy for all' in the context of tiered measurement of electricity access. This allows for measuring granular improvements along the arc of time rather than mere headcount variables at different points of time. For example, a solid indicator of meaningful access is if the electricity consumption profile of a newly electrified village indicates progressively more sophisticated and productive uses beyond lighting, fans, and charging, or if the hours of supply (including peak hours) show improvement.

3 MANAGE MULTI-DIMENSIONAL PRIORITIES

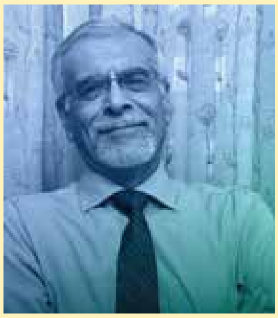
For every technology-policy choice, there is an alternative. Each alternative may impact several objectives in the energy sector differently: energy security, low-carbon, reliability, affordability, job creation, etc. When the government directly intervenes in picking a favourite option, how are these objectives accounted for? Top-down policies need a clear statement of vision and aims that can be evaluated against the stated rationale and expected outcomes. This helps to prevent a closing down of conversation related to alternate policy pathways that may score better on the multiple objectives.

As an example, high electric vehicle (EV) future and a marriage of EV and RE may be some way down the line, contingent on multiple developments, and even then may turn out to be expensive. In the interim, how do we step up engine and fuel efficiency, public transport, CNG availability, last-mile mobility and complementary measures that enhance the future of safe, affordable, and sustainable transport in India? The amount of government support by way of subsidies and incentives to such measures must, therefore, align with the quantum of benefits accrued on the multiple objectives.

Lastly, no sector is in greater need of smarter policies than thermal power plants reeling under the stressed asset build-up. So if the objectives are obtaining cleaner and flexible power at least cost, pollution norms should target aggregate outcomes rather than individual units. Similarly, curbing the growth of coal import share in thermal generation requires concrete steps towards enhancement of domestic coal quality, allocation, and linkages, than simply trying to mine more coal.

The grand challenges of the past are giving way to more nuanced and complex issues as India moves up the energy and development ladder. The incoming government faces a unique opportunity to ride on the ongoing transition, and change some of the archaic and arguably counter-productive notions and practices that have stalled energy policy in India. With the question of aggregate supply now largely resolved, issues of allocative efficiency and productivity should become the focus.

A CLEAN INDIA



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India continues to suffer from a number of systemic challenges, many dating back decades, when it comes to governance, the delivery of services, and financial sustainability. The next government should focus its efforts on a few areas.

1 CUT OUT MIDDLEMEN

Today, a major scourge on governance in India – including in the energy sector – is the widespread presence of middlemen providing facilitation for a fee. They are visible outside transportation license authorities, electricity supply distribution offices, housing board offices, hospitals, and offices for registration of legal documents relating to land, housing, and loans. Additionally, the cost of legal documents is artificially inflated. The agricultural sector features middlemen facilitating loans from rural and cooperative banks, or private lenders giving high interest rates to farmers for fertilizers, seeds, and pesticides. Local markets are controlled by powerful lobbies and intermediaries, further affecting farmers. This cycle needs to be broken.

A major reason is that application forms for many public services in India are formatted to British colonial-era designs and defy logic in terms of meaningless information and bewildering processes. Forms and documentation need to be simplified. Today, a range of disruptive technologies can eradicate the scourge of corruption and make daily life easier. The smart use of information technologies, data analytics, and artificial intelligence can now benefit from 4G mobile network connectivity, which enjoys wide reach.

2 REBOOT THE POWER DISTRIBUTION SECTOR

The Government at both the Central and State levels has over the decades initiated major schemes to improve the financial and operational health of electricity distribution companies (Discoms). They have had multiple objectives, such as improving operations and technology, financial & structural reforms, and enabling electricity access to villages, rural households, and families below the poverty line. The latest and most ambitious scheme is Uday, launched in 2015 with multiple objectives to achieve debt restructuring, operational efficiency, and the adoption of smart technologies. However, the trajectory of results over the last three years have not met expectations. There is a real danger that a large number of discoms will again require financial oxygen: or as some experts say, an Uday 2 scheme. With a payment backlog of nearly Rs. 3,600 billion by discoms to electricity generators, another crisis is on the horizon.

To address this recurring challenge, the government should legislate the Electricity (Amendment) Bill 2014 and proposed Electricity (Amendment) Act 2018. It should address delays of agriculture subsidy payments to discoms by State Governments by ensuring a mechanism of timely direct benefit transfers (DBT) to the consumers from the Finance Commission's state share. It should focus on checking and reducing losses due to theft of power, thus increasing revenues. Finally, it should integrate information and operations technologies, and create a Distribution Centre of Excellence at both the central and state level to ensure the implementation of the best practices drawn from entities that have a track record of excellent, consistent financial and operational performance results.

3 INVESTIGATE BANKRUPTCY AND NON-PERFORMING ASSETS

The last four to five years have seen a galaxy of examples – airlines, jewelry, pharmaceuticals, steel, power, shipping, and sugars – that have collapsed due to non-performing assets and the inability to pay back loans for various reasons. NPAs from the power generation sector alone comprise around 5.9% of the banking sector's total outstanding advances of Rs. 4.73 trillion, according to the Economic Survey 2016-17. There is a common thread. Public and institutional funds have been squandered, resulting in the financial loss and erosion of investor confidence and the slowing down of economic growth with banks unable to lend funds to stimulate growth.

It is in the public interest to understand how and why this came about, and why billions in taxpayer funds were put to such poor use. There are many reasons: pure business failures due to unforeseen or disruptive events, poor corporate governance and risk management practices, industry specific events, the mismanagement and diversion of funds, commodity cycle reversals, the adverse impact of central and state policy changes, trade conflicts between nations, and economic grouping re-alignments. The equation becomes very complex if one had to identify the combination, proportion, and relative importance of such reasons. A white paper would be beneficial in highlighting the inadequacies and remedies needed in certain areas, such as the role of due diligence by lending institutions, banks, auditors, and credit rating agencies; policy and operational oversight by the Reserve Bank of India and the central government; corporate governance; the adverse impact of policy changes; and uncontrollable 'black swan' events for which specific remedies may not be available. Finally, there should be an objective of establishing early warning systems at institutional and corporate levels so that failures are not repeated, but instead lessons can be learned.

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