



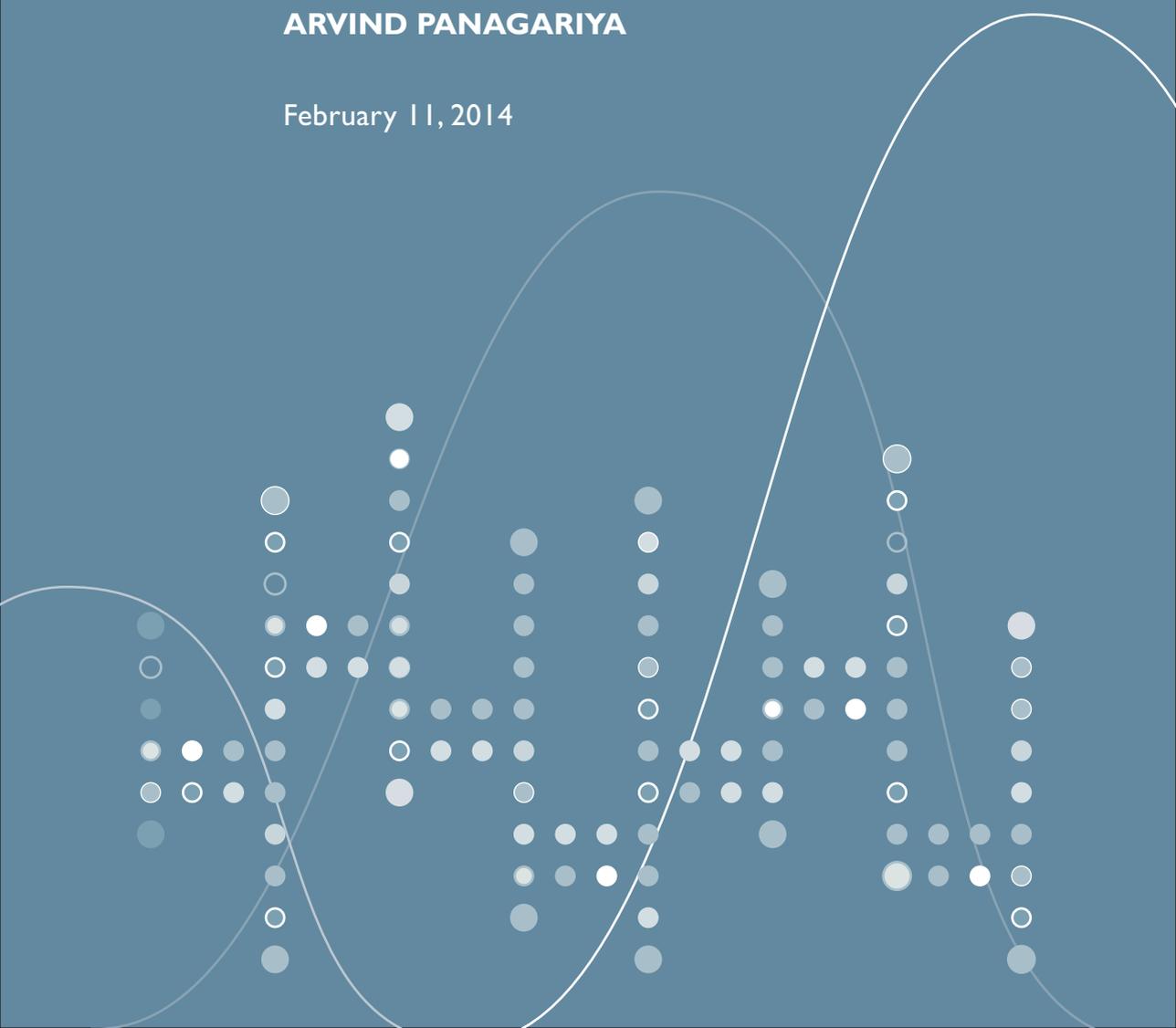
**NATIONAL COUNCIL
OF APPLIED ECONOMIC
RESEARCH**

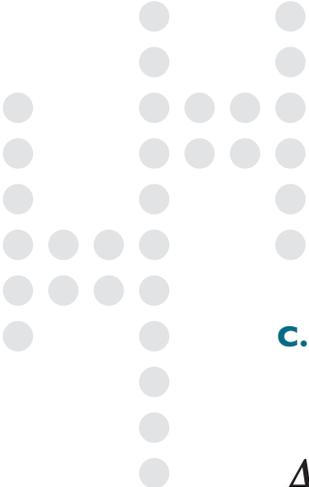
C. D. DESHMUKH MEMORIAL LECTURE 2014

*A Reform Agenda
for India's New Government*

ARVIND PANAGARIYA

February 11, 2014





C. D. DESHMUKH MEMORIAL LECTURE 2014

*A Reform Agenda
for India's New Government*

ARVIND PANAGARIYA

Columbia University

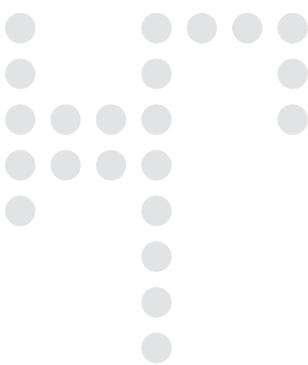
February 11, 2014

NATIONAL COUNCIL OF APPLIED ECONOMIC RESEARCH

Parisila Bhawan 11 Indraprastha Estate New Delhi 110 002 India

Tel: +91 11 2337 9861-63 Fax: +91 11 2337 0164 infor@ncaer.org www.ncaer.org

NCAER | Quality . Relevance . Impact



© National Council of Applied Economic Research, 2014

This work is the product of the invited speaker. The findings, interpretations, and conclusions expressed in the work do not necessarily reflect the views of the Governing Body of NCAER.

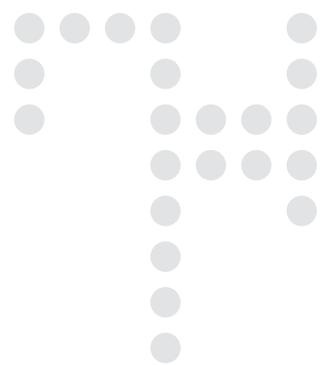
All rights reserved. The material in this publication is copyrighted. NCAER encourages the dissemination of its work and will normally grant permission to reproduce portions of the work promptly. For permission to photocopy or reprint any part of this work, please send a request with complete information to the publisher below.

Published by

Anil Kumar Sharma
Acting Secretary, NCAER
National Council of Applied Economic Research (NCAER)
Parisila Bhawan, 11, Indraprastha Estate, New Delhi-110 002
Email: aksharma@ncaer.org

Printed at

Archana
www.archanapress.com



Contents

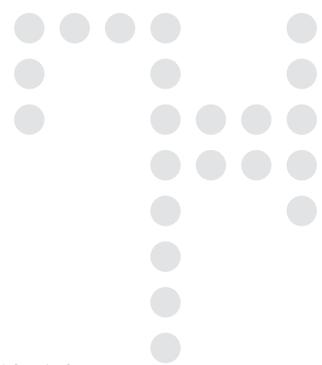
Foreword	v
About the C. D. Deshmukh Memorial Lectures at NCAER	vi
A Reform Agenda for India's New Government	1
Reform aims and objectives	3
Reforms along two tracks	5
The immediate imperative: restoring 8 percent growth	7
Track I reforms: accelerated and employment-intensive growth	8
Track II reforms: expanded and more effective social spending	19
A reform strategy: empowering the states	25
Concluding remarks	27
References	29
The C. D. Deshmukh Memorial Lectures at NCAER	30
About C. D. Deshmukh	Inside back cover
About Arvind Panagariya	Inside back cover



Figures

Figure 1: India's rapid growth since 1999–2000 has raised per-capita incomes sharply 6

Figure 2: Indian manufacturing share in GDP has stagnated despite a declining share of agriculture 12



Foreword

Unlike most memorial lectures in which a speaker is identified first and the topic second, there was no doubt in anyone's mind at NCAER what the topic of the second C D Deshmukh Memorial Lecture should be. When I discussed with my colleagues at NCAER late last year that the 2014 Deshmukh Lecture might deal with the speaker's ideas about a reform agenda for India's new government, expected to be in place in May 2014, there was universal support for it.

The question remained: who should NCAER invite to deliver such an ambitious lecture. Given the breadth of the reform agenda that we felt should be covered, we needed someone who had thought and written extensively about India's economic reforms. At the same time, we also needed someone who would be able to stand back and reflect on the priorities that India's new government would have to quickly establish in dealing with the challenges it would face on the economy, on social policy, on Centre-state relations, on the investment climate, and on governance.

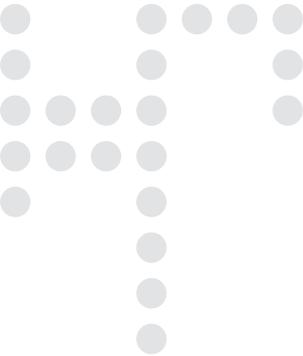
When we eventually chose and then invited Professor Arvind Panagariya at Columbia University to deliver the second C D Deshmukh Lecture, he readily agreed, much to our delight. Arvind is of course no stranger to NCAER. He has not only been a Non-resident senior fellow at NCAER for several years, but is also my co-editor on the annual *India Policy Forum* volume. We were doubly delighted when Dr Bimal Jalan, the previous president of NCAER's Governing Body and the former Governor of the Reserve Bank of India, agreed to be the chief guest at the Lecture. It is absolutely fitting that Dr Jalan presided over the Lecture, connected as he is to Deshmukh's legacy through both the Governing Body of NCAER and the Governorship of RBI.

The result in this volume is a provocative, insightful Deshmukh Lecture that Professor Panagariya delivered to a full house in the evening of February 11, 2014.

Given the timing of the Lecture—as I write this, India is about halfway through its six-week long general election process—I am immensely grateful to Arvind for turning his oration into a written lecture so quickly. This in turn is allowing NCAER to publish the 2014 C. D. Deshmukh Memorial Lecture well before India's new government—which this is addressed to—is sworn into office or announced.

April 17, 2014
New Delhi

Shekhar Shah
Director-General

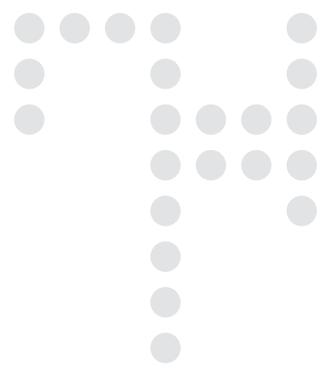


About the C. D. Deshmukh Memorial Lectures at NCAER

NCAER instituted the **C. D. Deshmukh Memorial Lecture** in January 2013 in memory of one of India's most eminent economists and a founding father of NCAER. Deshmukh was a member of its first Governing Body when NCAER was established in 1956. One of India's greatest institution builders, Deshmukh left his imprint on a range of public institutions besides NCAER, including the Reserve Bank of India as its first Indian Governor, a member of the first Indian Planning Commission, the first Indian on the Board of Governors of the IMF and the World Bank, the first Indian Finance Minister to serve for six years after Independence, and the first Chairman of the University Grants Commission.

NCAER is privileged to honour the memory of C. D. Deshmukh as a part of its own nearly six-decade long legacy.

For a list of the Lectures delivered so far, see page 30



A Reform Agenda for India's New Government

Arvind Panagariya*

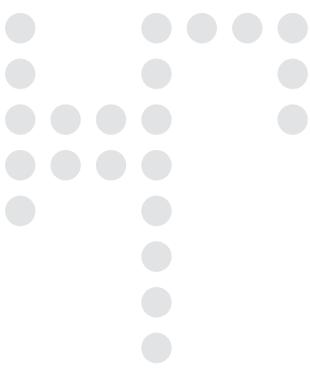
Mr Chairman and friends,

It is a real honour and privilege for me to be invited to deliver this Second Chintaman Dwarakanath Deshmukh Memorial Lecture hosted by the National Council of Applied Economic Research. Including this one, I have been able to track down four lecture series honouring the memory of Sir Chintaman. The other three are hosted by the India International Centre in New Delhi, the Reserve Bank of India in Mumbai, and the Council for Social Development in Hyderabad.

A cynic might say that in launching yet another series last year in memory of Sir Chintaman, NCAER may have overdone it. But she would be wrong. So numerous were the achievements of Sir Chintaman, so wide-ranging his contributions to intellectual life in India, and so deep his influence on the founding and building of key institutions during the formative years of India as a nation that adding even another half-a-dozen lecture series in his name would not do justice to his memory.

Shekhar has already described many of the achievements and contributions of Sir Chintaman. Yet, I cannot resist adding a few words of my own in his praise. Sir Chintaman topped the Matriculation Examination of the University of Bombay in 1912 and then the Indian Civil Service (ICS) Examination in 1918. After 21 years of distinguished service as an ICS officer, during which he also served as the Secretary to the Second Roundtable Conference in London and the ranking Indian on India's delegation to the July 1944 Bretton Woods Conference that led to the establishment of the World Bank and the IMF, he went on to help build numerous Indian public institutions. He became the first Indian to be appointed the RBI Governor,

* Delivered in New Delhi on February 11, 2014. The author is grateful to Shekhar Shah for numerous helpful suggestions.



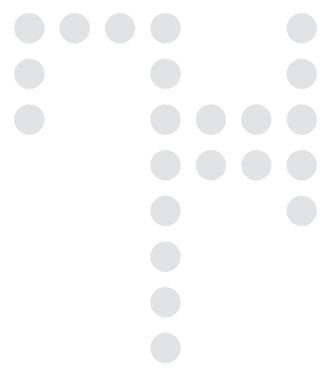
bridging the transition to an independent India (1943–50); one of the four initial members of the Indian Planning Commission at its inception on April 1, 1950; and the first Chairman of the University Grants Commission. He was the first Union Finance Minister of India to last as long as six years and that to, only because he chose to resign his position in protest against the formation of the State of Bombay.

Sir Chintaman did much to advance intellectual life in India. He was a founding father of NCAER—India’s first independent economic policy institute established in 1956—and a member of its first Governing body. He played a key role in establishing the India International Centre in 1959. He was the Vice Chancellor of Delhi University from 1962 to 1967 and the President of the Indian Statistical Institute and the Institute of Economic Growth in New Delhi during 1945–64 and 1965–74, respectively.

Last but not the least, a person is also judged by the company he keeps. On that score, I cannot resist mentioning that Sir Chintaman was married to Durgabai Deshmukh. A freedom fighter and a social reformer, Durgabai was the first woman to serve as a member of the Planning Commission. Sir Chintaman and Durgabai Deshmukh are the only Indian couple to be simultaneously honoured with the *Padma Vibhushan* by the President of India.

As a preface to the subject of the lecture today, let me begin by stating that arguably the forthcoming election is the third most important one in the post-independence history of India. Few would contest the proposition that the 1951–52 election, the first in independent India, remains the most important. This election brought the first democratic government into existence and laid down the foundations of the Indian democracy.

The second most important election was perhaps the one in 1977. Having been subjected to authoritarian rule for 21 months, in this election the Indian voter resoundingly defeated incumbent Prime Minister Indira Gandhi and thus affirmed his unwavering commitment to democracy over authoritarianism. Though the government that came to power proved too fragile to



serve its full term, the elections sent a clear signal to future rulers that the Indian electorate would not compromise its political freedom under any circumstances.¹

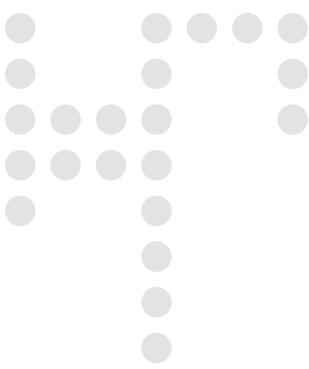
There are at least two reasons why the forthcoming election qualifies as the third most important one. First, just as the voter was confronted with the choice between two diametrically opposed forms of *political* systems in 1977—authoritarianism and democracy—she faces today a choice between two sharply different *economic* systems—a rights-based regime in which the government promises to provide all basic needs to citizens such as housing, food, education, employment and health, and a market-based system of governance in which growth and development are the primary vehicles of empowering people.

Second, for the first time in Indian history, the candidate of a leading political party, Chief Minister Narendra Modi, has had nearly all his training and experience as a leader in a state, and almost none at the federal level. Having been the Chief Minister of Gujarat, if asked to form the new government in New Delhi he promises to bring a very different perspective to the Centre than that enjoyed by past prime ministers. He is far more likely to be sympathetic to giving the states greater role in both fiscal and legislative matters. I will come back at the end of my talk to the importance of giving the states a greater role.

Reform aims and objectives

Against this background, let me now turn to the subject of the lecture today, the reform agenda for India's new government. The first point to make is that such an agenda cannot be outlined in a vacuum. We must first clearly set out the aims and objectives that the reforms are intended to pursue.

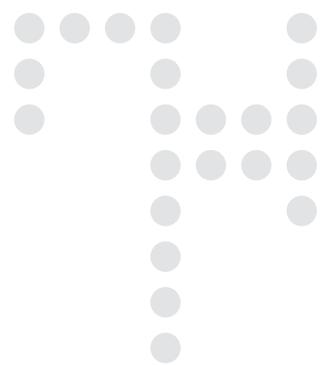
¹ In this context, it is interesting to quote Deshmukh from the 1956–57 Budget that he presented on 29 February 1956. As he comes to the end of the Budget speech, he states, “The objective we have set to ourselves is that primary and ineluctable duty of every modern Government, namely to raise the living standards of the people and to create in the process a progressive and equitable economic and social order. This objective, moreover, is to be attained by democratic means. ... Democracy is for us a means as well as an end. It defines our objective, and it indicates the approaches and techniques to be adopted for the fulfillment of the objective.”



This distinction between objectives and instruments is often confused in the policy discourse in India, but it is one that the early Indian planners fully understood and appreciated. India's first Prime Minister, Jawaharlal Nehru, drew the distinction sharply and explicitly when writing about the deliberations in the National Planning Committee of 1938 in his monumental work, *The Discovery of India*. Describing the deliberations in the Committee on how planning should proceed once independence was achieved, Nehru (1946, pp. 437–8) wrote, “Obviously we could not consider any problem, much less plan, without some definite aim and social objective. That aim was to be to ensure an adequate standard of living for the masses, in other words, to get rid of the appalling poverty of the people. ... To ... ensure an irreducible minimum standard for everybody the national income had to be greatly increased. ... We calculated that a really progressive standard of living would necessitate the increase of the national wealth by 500 or 600 percent. That was, however, too big a jump for us, and we aimed at a 200 to 300 percent increase within ten years.” Thus, the early planners saw poverty eradication as the principal objective and growth as the instrument.

The overarching objective of the reforms that a new government must target is to build a prosperous, strong and modern India. Underlying this objective should be more specific goals to be achieved within a reasonable timeframe. A suggestive, though by no means definitive or exhaustive, list of these goals might include:

- Near complete eradication of abject poverty in a decade
- Massive expansion of well-paid jobs
- Near-universal literacy and healthcare in fifteen years or less
- Around-the-clock supply of electricity and road connectivity for all within a decade
- Piped water and sanitation for all in fifteen years.

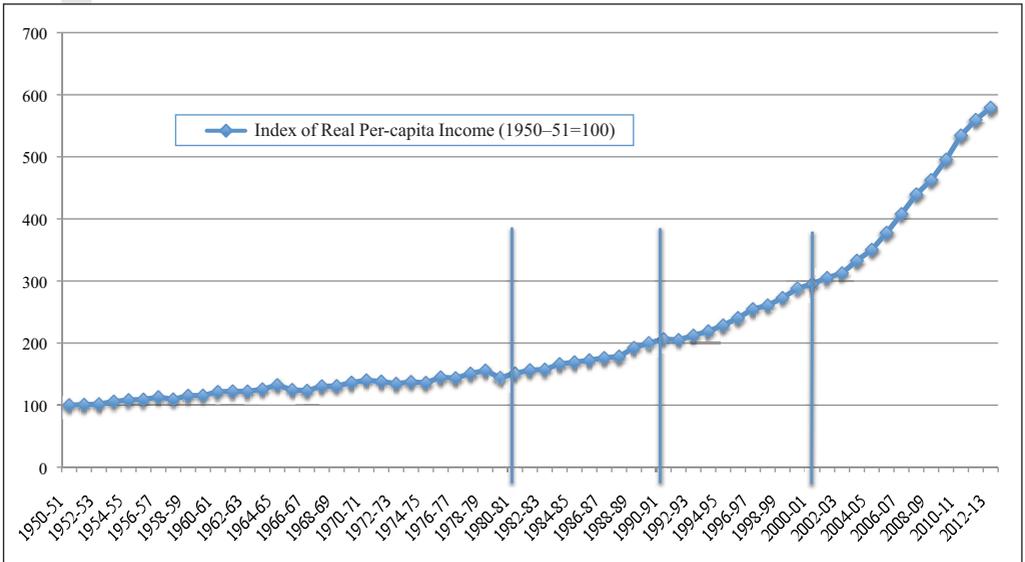


Reforms along two tracks

If unlimited resources were available, the objectives outlined above could be achieved relatively quickly by hiring the best companies in the world to open hundreds of thousands of schools to provide education for all, build the best hospitals in the world, construct highways and roads all around, wire the country for the universal provision of electricity, and arrange water and sanitation for all. But countries rarely, if ever, have the luxury of such unlimited resources. Therefore, we have to have a strategy and an approximate timeframe to go from here to there. Accordingly, following the framework Jagdish Bhagwati and I employed in our recent book (Bhagwati and Panagariya 2013), I will outline a strategy of reforms along two tracks in today's lecture.

- **Track I: Faster, employment-intensive growth.** The next prime minister must quickly restore economic growth to 8 percent, a level India achieved during the 2000s. He should then undertake reforms that would accelerate this growth further to 10 percent and make it more employment intensive. Thanks to the reforms undertaken by Prime Minister Narasimha Rao between 1991 and 1996 and by Prime Minister Atal Bihari Vajpayee from 1998 to 2004, India could grow rapidly in the new millennium. As 1 shows, rapid growth since 1999–2000 has allowed India to add to its per-capita income a staggering one and a half times what it added during the entire fifty preceding years. Such growth not only helps to bring poverty down, it also empowers households to access high-quality education and healthcare. To maximize this effect, growth must be qualitatively such that it generates vast numbers of well-paid jobs for low skilled workers who are currently employed in agriculture and unorganized or informal firms in industry and services sectors.

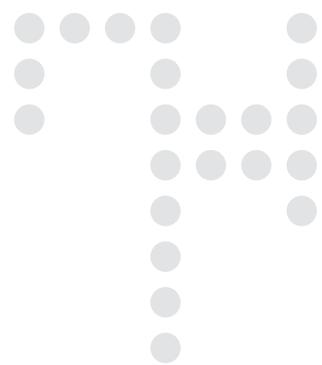
Figure 1: India's rapid growth since 1999–2000 has raised per-capita incomes sharply



Source: The author's construction based on the Central Statistical Office (CSO) data.

■ **Track II: Expanded and effective social spending.**

Accelerated growth in GDP leads to accelerated growth in government revenues even when their share in GDP is unchanged. Accelerated revenues translate into accelerated government spending. To illustrate what difference growth can make, observe that given a doubling of per-capita income between 1999–2000 and 2012–13, a per-capita expenditure on education achieved by allocating 4 percent of GDP to it in the latter year would have required the allocation of a whopping 8 percent of GDP to that sector in the former year. Therefore, the scope for expanding social spending rises rapidly with growth. But, it is important that this spending is effective in targeting the objective for which it is meant. Sadly, our existing social spending has been disproportionately failing in targeting its objectives. For example, according to a 2005 Planning Commission report, the Targeted Public Distribution System, which is designed to deliver subsidized food grain to the poor, spent a gigantic 3.65 rupees to transfer just one rupee worth of subsidy to the poor. There are similar problems with our other programs such as rural employment under the



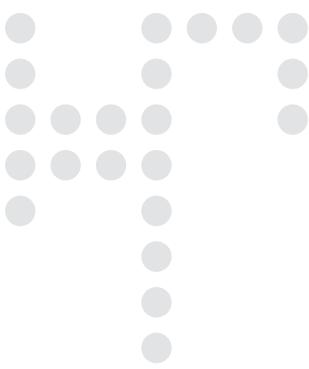
Mahatma Gandhi National Rural Employment Guarantee Act (MNREGA) and government delivery of health services. A large chunk of labour under MNREGA is wasted each year on projects that produce no tangible assets, public or private. Likewise, even in rural areas, nearly 80 percent of the population goes to private providers for outpatient care because the sub-centres and primary healthcare centres are often dysfunctional. With its limited revenue resources and the vast need for the provision of food, education and health, India can ill-afford such poor delivery of services. Reforms must help make the delivery more effective.

The immediate imperative: restoring 8 percent growth

The immediate task facing the next prime minister will be to return annual GDP growth to 8 percent, a rate that was achieved during the 2000s. This will require four major steps:

■ ***End the paralysis in decision-making at the Centre.***

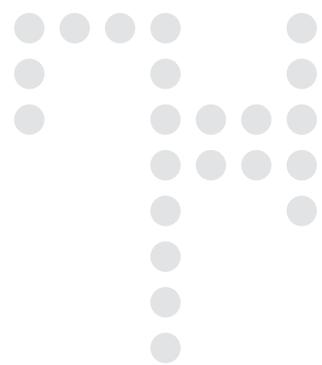
Today, the economy suffers from a high degree of unused capacity. For example, many power plants are operating at very low plant load factors because they are unable to access coal or gas. Corporate investment has been cut in half partially because the projects already in the pipeline are awaiting clearances from the central or state governments. The paralysis in decision-making responsible for this malaise must end. Upon assuming office, the next prime minister must immediately assure the bureaucracy that the responsibility for all their legitimate decisions rests with him. They can fearlessly take decisions they see in the interest of the nation. Equally important, he must ensure that there are no multiple power centres in government. Instead, the Cabinet will have to work in full cooperation and with collective accountability toward the common goal of advancing the interest of India. Today, some Cabinet members owe allegiance to the Prime Minister, others to the Congress President and still others to themselves. This complete lack of cohesion has greatly contributed to the paralysis in government.



- **Forge a partnership with the states.** All projects are located in some state and require land, electricity, water and other infrastructure facilities from that state government. The next Central government will need to quickly incentivize the states to speed up clearances for businesses.
- **Reassure investors.** The next government will also need to assure investors, both domestic and foreign, that their legitimate interests will be fully protected and that they need not fear measures such as retrospective taxation. An important condition for India to flourish is that entrepreneurs who risk their capital reap their rightful return rather than be subject to expropriation *ex poste*. There should be no room for lack of transparency, of which retrospective taxation is a symptom.
- **Restore the health of the banks.** According to official Reserve Bank of India data, non-performing and restructured loans account for 9 percent of total bank loans. For the Central Bank of India, this proportion is as high as 17.7 percent, and for the Punjab National Bank, 14.5 percent. As a result, the banking system is vulnerable, resulting in a slowdown in the issue of new credits. To ensure that credit begins to flow normally again and a crisis is avoided, the government will have to quickly move to restore the health of the banks. Two possible options are infusing new capital into the banks, which will be at the expense of the taxpayer, or allowing them to raise equity in the private market, thereby diluting the government stake below its current floor of 51 percent. My personal view is that the government should be bold and rely on the latter step, which will pave the way for future privatization of the banks.

Track I reforms: accelerated and employment-intensive growth

Policy paralysis and mismanagement are only the immediate causes of the current growth slowdown. The deeper

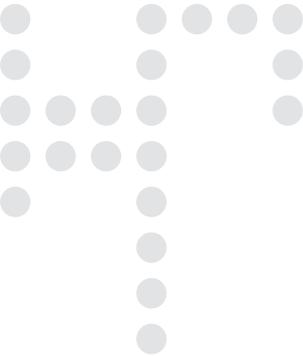


causes lie in the abandonment of the path of reforms that the Rao and Vajpayee governments had chartered. The outgoing government erroneously assumed that the economy was like the mythical *Kamadhenu* cow that would keep giving no matter what. Accelerated and employment-intensive growth that India needs to transform itself into a modern economy and to eliminate poverty, illiteracy and ill health will require work on many fronts over the next ten years. Therefore, I next turn to the key Track I reforms that the government must initiate.

■ ***Revival of agriculture.*** A little appreciated fact that Chand (2014) has pointed out recently is that after registering a trend growth rate of 1.9 percent between 1996–97 and 2004–05, agriculture, including forestry and fishing, has seen a turnaround. It grew at a trend rate of 3.75 per cent between 2004–05 and 2012–13. The latter period has also seen a decline in fluctuations, with the growth rate remaining strictly positive every single year.² Furthermore, growth has been broad based, with crops, livestock, fisheries and fruits, and vegetables all registering trend growth rates of 3 to 5 percent. Five states, including Rajasthan and Madhya Pradesh, have seen trend growth exceeding 5 percent, and another four exceeding 4 percent between 2004–05 and 2011–12. But there remains considerable scope for productivity growth, which agricultural growth could exploit to accelerate and sustain growth in the future. Some possible measures include:

■ ***Paying higher prices to farmers.*** To ensure that farmers get a larger share in the price of the produce paid by the consumer, the next government must complete the reform of the Agricultural Produce Marketing Committees Act in all areas, for all crops, and in all states. This requires giving greater play to the right to directly purchase and sell, facilitating the emergence of competing private marketing yards, expansion of contract farming, provision of cold storage facilities and the building of supply chains. It is also worth considering replacing

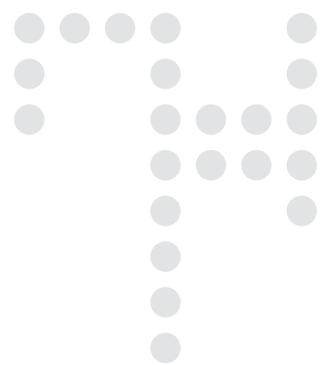
² Chand (2014) notes that in the past, each decade has seen negative growth during three or four years.



the Minimum Support Price (MSP), and its associated procurement, by the equivalent of deficiency payments in the United States. The latter involve cash payments to farmers whenever the average market price drops below a certain pre-specified threshold. An important advantage of such payments is that they do not require the government to procure food grain. Therefore, the benefits extend to all farmers rather than only the lucky few, often the rich ones, from whom the government procures at the MSP. Furthermore, with no procurement required, deficiency payments can be extended to any crop instead of only those the government wants to procure.³

- *Increasing public investment.* Public investment in agriculture remains low. At 0.5 percent of GDP, it is one-fifth of the private investment in the sector. The next government must think creatively about converting some of the existing subsidies into public investment and also using the instrumentality of MNREGA more effectively to create beneficial investment in agriculture.
- *Improving land sales and leasing markets.* Land sales and leasing markets are highly distorted in India. We need to bring the policies of those states where these markets are less distorted to those where they are more distorted. Even liberal leasing policies that allow the owner and the lessee to freely negotiate and write contracts would go a long way toward promoting the consolidation of land holdings, which would in turn facilitate mechanization and productivity-enhancing investments in land. We will also make large gains by fully digitizing land records and making them publicly available online. A handful of states have done this with positive results.

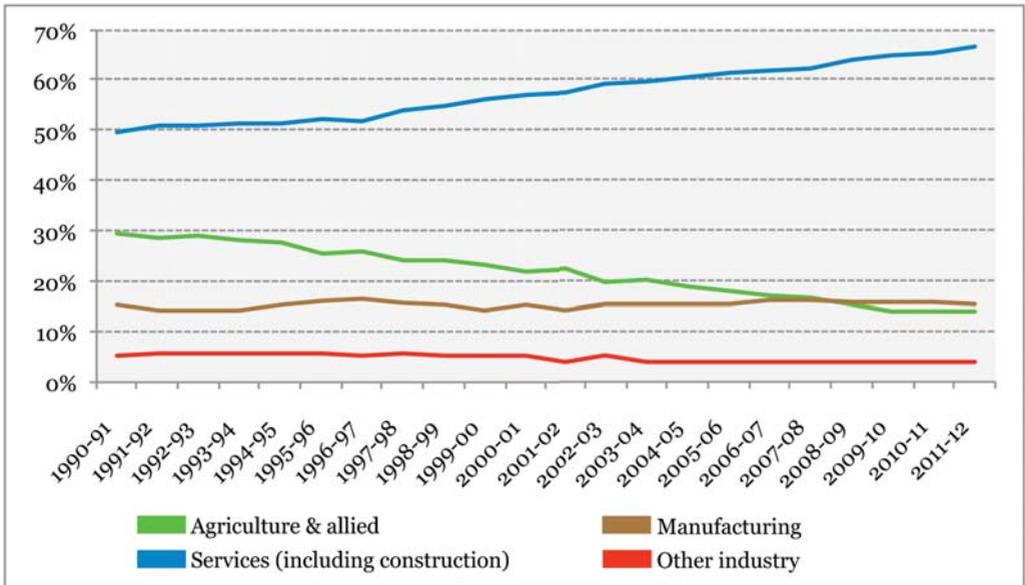
³ Without implicating him, I thank the distinguished agricultural economist Ramesh Chand for explaining to me how deficiency payments could be implemented in India. Briefly, farmers will register their land area and average annual outputs based on land area with the nearest APMC office. The APMC would monitor the price in the local market to determine the average market price. The deficiency payment would equal the difference between the pre-specified threshold price and the average market price multiplied by farm output.



- *Enhancing the use of technology.* The next government must also promote the application of new technology at all levels. Drip irrigation and other micro-irrigation methods, so successfully introduced in Punjab, Gujarat and elsewhere, can help raise productivity while also preserving water. We need to speed up research on high-yielding varieties of seeds that had formed the backbone of the Green revolution in the 1960s and 1970s. The recent resumption of trials on genetically modified seeds is an important positive step in this direction. As farm workers move progressively to industry and services, we need to pave the way for greater mechanization on the farm by facilitating consolidation of land holdings through improved land leasing and sales markets.
- *Promoting contract farming and food processing.* We must create an enabling environment for contract farming, which can improve technology while also giving our farmers lucrative prices for high quality and specialty produce. India lags far behind its peers in food processing, which can not only give remunerative prices to farmers but can also create vast numbers of good jobs. Contract farming can be the key vehicle for the promotion of food processing.
- *Providing electricity and roads.* Above all, we need to bring electricity and all-weather roads to all farms in the country. I will return to the subject of electricity in the context of infrastructure and social spending.
- ***Manufacturing revolution.*** The weakest link in India's growth has been the poor performance of manufacturing. The experience of virtually all miracle economies around the world, such as South Korea, Taiwan and Singapore in the 1960s and 1970s and China more recently, has been that fast growth in manufactures leads to economic transformation. The workforce moves out of agriculture and is gainfully employed in manufacturing. This process also leads to rapid urbanization and modernization. In India, this process has not worked. As Figure 2 shows, the share of manufacturing in GDP has hardly budged since 1990–91. Especially poor has been the performance of employment-

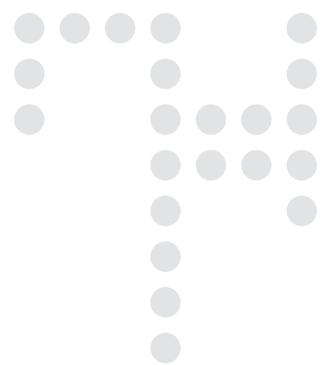
intensive manufacturing such as apparel, footwear, light consumer goods and processing and assembly activities in which China has been so successful. The handful of manufacturing industries that have done well in India—automobiles and auto parts, chemicals, engineering goods and petroleum refining—are all highly capital intensive with very few workers employed per unit of capital investment. Workers are predominantly employed in either agriculture or unorganized manufacturing or services. The organized sector, consisting of firms with ten or more workers, employs less than five percent of all workers. The only way to create good jobs for the vast and rapidly rising workforce is to create the enabling environment for the growth of employment-intensive manufacturing. How can this be done? Reforms are required on several fronts:

Figure 2: Indian manufacturing share in GDP has stagnated despite a declining share of agriculture



Source: Author's construction based on CSO data.

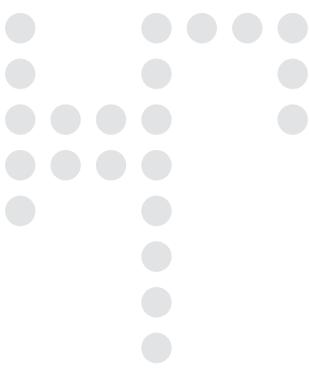
- *Infrastructure.* Improved infrastructure including roads, railways, ports and electricity is essential for manufacturing growth. Because profit margins per worker are low in sectors where labour costs are 80 percent or more of the total costs, it is important



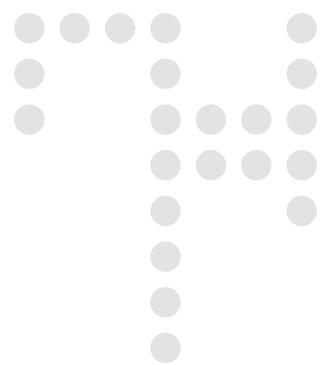
that transportation and electricity are available to entrepreneurs at competitive rates. I will return shortly to the subject of infrastructure in greater detail.

- *Labour market flexibility.* Myriad labours laws—52 of them at the Centre and three times those in the states—drive our entrepreneurs away from employment-intensive manufacturing sectors and also encourage them to opt for capital-intensive technologies in whatever manufacturing they do. Where a machine can do the job, they prefer not to employ workers. While we must protect the interest of our workers when employed, we also need to create millions of jobs for those toiling in the informal sector or who are without any job at all. Therefore, we must think of creative ways to introduce greater labour-market flexibility such that the interests of workers already employed and those seeking good jobs are balanced. Recognizing that labour is a concurrent subject in our Constitution, one way to do this is to give powers to states to amend central legislation. With 28 states (soon to be 29) in India, this could provide healthy competition as well as greater experimentation.
- *Apprentices.* Apprenticeship is a very important vehicle for skill creation. Yet, India has only 300,000 apprentices compared with 10 million in Japan. As Manish Sabharwal has written in a number of articles, the existing relevant legislation, the Apprenticeship Act of 1961, is highly constraining.⁴ It treats apprenticeship as employment and an associated stipend as salary, with all attendant regulations also applying to apprenticeships. Depending on the trade, the duration for apprenticeship can vary from 3 months to 3 years but the current legislation does not give this flexibility. A relatively uncontroversial reform of the Act can lead to a manifold expansion of apprentices. Many skills are learned on the job, so that an expansion of apprentices can serve to stimulate manufacturing and greatly improve the employability of the individuals receiving apprenticeships.

⁴ For example, see Sabharwal (2012).

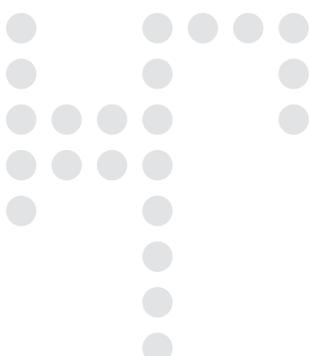


- *Land acquisition.* According to the best available reports, land acquisition came to a standstill the day the new Land Acquisition Act became a reality. A quick reform of this Act will be absolutely essential for the new government. Land being central to all activities including infrastructure, housing, manufacturing and services, a land acquisition law that is fair to those whose land is acquired but that also allows land acquisition at a reasonable price is critical to all economic transformation. There is no doubt that excesses had routinely happened under the antiquated 1894 Act that the new Act has replaced. But the 45 pages worth of regulations that the buyer acquiring land must satisfy make land acquisition for building even rural roads prohibitively expensive and long drawn. Once again, with land being a concurrent subject, the next government should consider allowing states greater flexibility in bringing about their own legislation to suit their local conditions. As mentioned, I shall return to this legislative decentralization in greater detail towards the end of the lecture.
- *Red tape and the Inspector Raj.* Red tape and the Inspector Raj remain major sources of costs and corruption facing small and medium firms. Larger firms are able to absorb these costs more easily. The next government must endeavour every way it can to cut this red tape and Inspector Raj to help small and medium size firms—if China can do it, so can we.
- *Exit policy.* Winding up business when losses persist year after year remains an arduous task in India. The average time to complete closure of a firm under the current Board of Industrial and Financial Restructuring and Sick Industrial Companies Act exceeds fifteen years. When exit is costly, businesses hesitate to take what is normal risk in other countries. They enter only those businesses where the chance of failure is near zero. They are particularly hesitant to enter employment-intensive sectors where political pressure against closure in order to preserve jobs is intense. We need an exit policy that



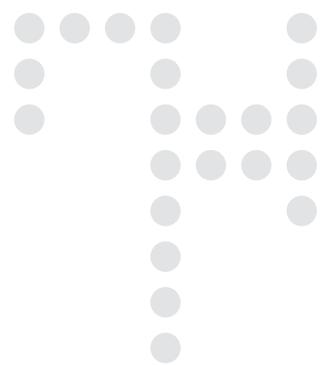
protects the interests of workers by ensuring adequate compensation upon exit, but also allows firms to close down transparently and within a reasonable time if they are incurring losses year after year.

- *Privatization.* Genuine privatization involving transfer of ownership rather than just disinvestment to raise government revenues, which had gathered some momentum under the NDA, has been at a standstill during the last ten years under the United Progressive Alliance (UPA) government. Careful work by Gupta (2012) shows that public sector units (PSUs) for which privatization involved the sale of majority stakes, and therefore resulted in the transfer of management and control to private hands, have exhibited vastly superior performance compared to PSUs for which such a transfer did not take place. To quote Gupta (p. 143), “Compared to partially privatized firms, sales and returns to sales increase by an average of 23 percent and 21 percent, respectively, when firms sell majority equity stakes and transfer management control to private owners. Moreover, the sale of majority equity stakes is not accompanied by layoffs. In fact, employment appears to increase significantly following privatization.” These are important gains suggesting that further privatization could make a significant contribution to manufacturing growth. According to Gupta (2012), even after the NDA privatizations, Central government-owned PSUs alone accounted for 11 percent of GDP in 2005. Therefore, there is considerable scope for the privatization of PSUs.
- *Manufacturing hubs and industrial zones.* While the Central and state governments can facilitate the creation of manufacturing hubs through the provision of infrastructure in specified zones, without appropriate policy reforms they will not fulfil their most important objective of creating good jobs for the low skilled. For example, creating new cities with such hubs under the auspices of the Delhi-Mumbai Industrial Corridor project is an excellent initiative, but their potential to



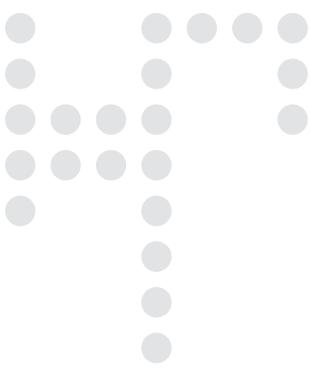
create good jobs will be determined by the overall policy regime. Without reform of labour and land markets, the hubs will remain homes to highly capital-intensive industries and mainly remain the vehicle for obtaining tax breaks that typically accompany such initiatives.

- **Infrastructure.** I briefly mentioned infrastructure as an important element in paving the way for the growth of manufacturing, but this a subject that requires separate consideration.
 - **Highways.** Highway construction, which had achieved great momentum under the NDA, fizzled out under the UPA. According to an affidavit filed in the Supreme Court by the UPA government on July 1, 2013, half of the national highways constructed in the preceding 32 years have been constructed under NDA rule. With growth having expanded the need for transportation, businesses as well as ordinary citizens find bottlenecks on highways everywhere. The next government will need to return to highway construction big time again. It will need to work toward widening the existing highways as well as building new expressways.
 - **Railways.** Railways offer a far cheaper mode of freight movement than road transportation. Good progress had been made during the tenure of the first UPA government but the focus shifted almost entirely to passenger trains and keeping fares low under UPA II. The next government must return to building railway transportation on an expanded scale.
 - **Ports.** India needs to cut the turnaround time at its ports to international levels to allow companies to take advantage of global markets. In today's world of just-in-time delivery, delay of even a few hours can cost a company its contract.
 - **Electricity.** This is by far the most important sector in need of attention. A measure of how far behind India has



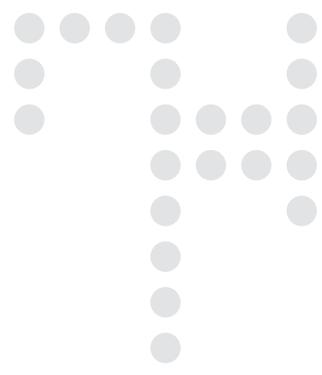
fallen in the provision of electricity is that in 2003, per-capita electricity consumption in India and Vietnam was equal but by 2008 the latter had pulled ahead by more than 40 percent. The gap today is probably larger. It is well known that according to the 2011 Census, one-third of Indian households lacked electricity. It is not possible for employment-intensive manufacturing to flourish without the steady flow of electricity at competitive prices. In 2003, the government had initiated a major reform of the electricity sector via the Electricity Act. Unfortunately, the reforms under this Act were never fully implemented, with some provisions reversed by the UPA government. The next government will need to return to completing those reforms. It will also need to ensure that bottlenecks in getting coal and gas to electricity generation companies are removed. Private companies must be given entry to mine coal with the eventual goal of privatizing coal mines.

- **Urban development.** Cities, large and small, are the ultimate symbol of transformation and modernization. They attract workers from the farm sector to industry and services in search of good jobs, as graphically illustrated by the experience of cities such as Delhi and Mumbai. But often industrialization itself turns rural areas into urban areas, as exemplified by Gurgaon. The government has an essential role to play in promoting healthy urban life and the facilitation of urbanization. India must rapidly build many more new cities and also improve the living conditions in the cities. The latter requires rapid transit in all large cities. But, India also needs to work on the provision of low-cost rental housing in urban areas so that it avoids the creation of new slums. As discussed in greater detail in Panagariya, Chakraborty and Rao (2014, chapter 7), this will require looking into laws governing the conversion of land from one use to another, a generous floor space index, reform of rental laws, and sales of unused land held by public bodies. The ability of local bodies to provide water, sanitation and



solid waste management services will need to be greatly strengthened. This will require some coordination across Central, state and local governments.

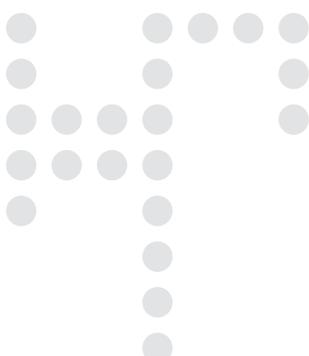
- **Higher education.** It is a sad comment on our times that India, which has had more than a two-millennia-long tradition of universities and had begun to build modern western-style universities as early as 1857, today lags behind comparator countries in the quantity as well as the quality of higher education. On quantity, the gross enrolment ratio in India is among the lowest and is growing at a snail's pace. China, which had completely destroyed its higher education system during the Cultural Revolution in the 1960s and started rebuilding it only in the 1980s, today boasts of a gross enrolment ratio several percentage points higher than India's. On quality, not even a single degree-giving institution, including the IITs, shows up on any global rankings of the top 100 degree-awarding institutions. While brilliant Indian students distinguish themselves in every field globally, Indian universities themselves can claim little credit for it. The next government must work to change this scenario. It will need to introduce wholesale reforms of the higher education system, beginning with an end to the monopoly of the University Grants Commission and various academic councils that act as gatekeepers and often do little more than collect under-the-table charges to fill the personal pockets of those in the running of these institutions. The new government will need to rapidly expand colleges, universities, medical colleges and institutions of higher learning in other specialty areas in both public and private sectors. There is no reason why there should be one-size-fits-all national norms such as the requirement of 25 acres of land to start a medical college. The door must be opened to states to make decisions in these matters according to local conditions. Entry must be freed to private institutions of higher learning, both domestic and foreign.



- **Tax reform.** The tax system in India remains complex and opaque and in need of major simplification. The direct tax system remains subject to an exemption raj of sorts, and the next government must work to bring horizontal equity in taxation through the elimination of these exemptions. This would also pave the way for bringing tax rates down. As for indirect taxes, the next government must quickly bridge the remaining gap among the states and introduce a national goods and services tax. It must also further promote the use of information technology to improve tax administration.
- **Governance.** Perhaps the greatest gains in efficiency will come from improved governance. This means not just a reduction in corruption but also speedy decision-making at all levels. The next government must make judicious and creative use of technology to provide as many services as possible online. But it must also improve enforcement. Those caught taking bribes must be speedily prosecuted and punished. The main thing that differentiates America and India in this respect is not that Americans are inherently more honest: after all, conviction rates among native-born Americans in America are higher than those among Indians living there. What distinguishes America is its ability to speedily bring the offenders to book. If you get caught stealing, chances that you would escape prosecution are slim. India can make large gains in cutting corruption and speeding up decision-making by improving enforcement.

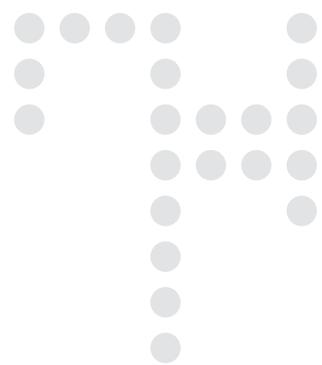
Track II reforms: expanded and more effective social spending

The policy framework I have outlined up to this point aims to catapult India into a 10 percent per annum growth orbit for the next two decades while rapidly expanding employment opportunities for the low skilled. But we must remember that growth is only one of the two legs on which we must walk toward the aims and objectives I outlined at the beginning of the lecture. The second leg is social spending. In the years to come,



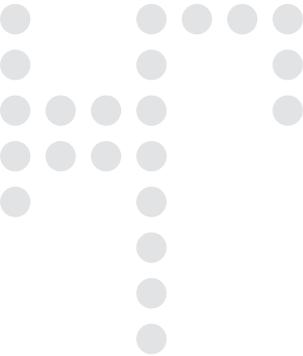
India will need to significantly expand social spending and also make it more effective. Here, I focus on six different areas, including the first two that overlap with the earlier discussion of infrastructure but are so important for human development that they bear repeating.

- **Electrification.** It is a matter of great disappointment that one-third of Indian homes still lack access to electricity. Even homes equipped with an electric connection lack its flow around the clock, seven days a week. The problem is of mega proportions in two states: Bihar and Uttar Pradesh (UP). As of 2011, only 16 percent of households in Bihar and 37 percent in UP had electricity. This contrasts with states such as Gujarat where electricity is available around the clock and reached 90 percent households in 2001. Other states such as Tamil Nadu, Andhra Pradesh, Punjab and Haryana have also achieved similar success. The next government must take electrification on war-footing bringing electricity to no less than 90 percent of the households in every state in ten years or less.
- **All-weather rural roads.** The NDA government had launched the *Prime Minister's Gram Sadak Yojana* with the aim of connecting every village to state and national highways through all-weather roads. Like electrification, the next government must give this program a new lease of life and substantially fulfil the promise of the scheme in five years.
- **Food and nutrition.** India recently passed the Food Security Act of 2013, which promises to provide rice, wheat and millets at highly subsidized prices to 75 percent of the rural and 50 percent of the urban population. But there remain three key weaknesses of this approach to solving the problem of nutrition.
 - *Proteins, not carbohydrates.* This approach is centred on carbohydrates but the far more serious problem that India faces is the lack of protein in people's diet. Cereal



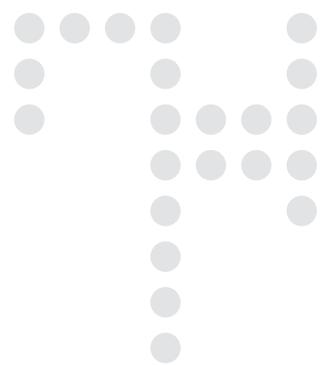
consumption at different levels of income does not vary at all in urban areas while it varies only by small margins in rural areas. But when it comes to milk, it varies between less than 1 kg per person per month among the bottom 5 percent to more than 10 kg per person per month among the top 5 percent of the households. This same discrepancy also applies to eggs and fruits and vegetables. So India needs to expand the white revolution while also taking steps to boost the production of fruits and vegetables. Above all, the country needs to boost the purchasing power of people to be able to afford these basic needs of ordinary citizens.

- *Information and awareness.* Unless people themselves understand and appreciate the importance of a nutritious diet, giving them cereals at subsidized prices will be insufficient to persuade them to consume more of them. Chhattisgarh state has a well-functioning public distribution system with near universal coverage and yet cereal consumption at all levels of income in the state mirrors the national average. Therefore, the next government must promote sustained information campaigns on nutrition through all possible media outlets, including advertisements featuring top sports and movie stars, doctors, and even the prime minister.
- *Public Distribution System or cash transfers.* Simple economics tells us that giving a part of the quantity of food grains consumed by households at subsidized prices has virtually no impact on the total quantity of their consumption of these grains. The experience of Chhattisgarh just mentioned testifies to this proposition. When we combine this observation with the massive leakages in the Public Distribution System—forty percent or more of grain provided by the Centre fails to reach the actual beneficiaries—the case for continuing this system is considerably weakened. The next government must seriously consider experimenting with direct cash transfers using all instrumentalities such as



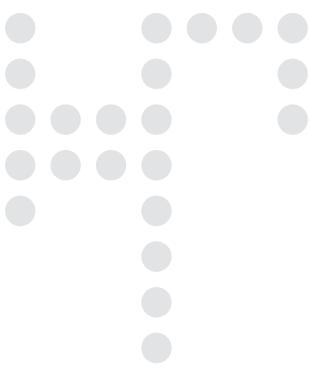
bank transfers, postal money orders and mobile phone technology. It should allow people a choice between cash and in-kind subsidies. This will empower people, who can decide whether they want cash and buy what they wish, and from whom they wish, or buy subsidized food from government shops.

- ***Employment Guarantee in rural areas.*** We now have MNREGA fully operational in all of rural India. While the scheme has put some purchasing power into the hands of poor households, the returns on it remain poor on many fronts. First, there has been little creation of public assets. This has meant that both the material and the labour used on projects have been largely wasted. Second, the scheme has seen far less success in providing employment in the poorer states than in the richer states. According to the Accountability Initiative at the Center for Policy Research in New Delhi, in 2010–11 UP state generated 13 percent of the total MGNREGA employment despite accounting for 20 percent of the below-poverty-line (BPL) rural population of India, while Andhra Pradesh and Tamil Nadu provided 23 percent of the total MGNREGA employment even though they together accounted for only 8 percent of the country's rural BPL households. Finally, MNREGA produces no skills. Indeed, it requires that employment be of the unskilled nature. My own recommendation would once again be to allow households a choice between cash transfers at the rate of 75 percent or less of the NREGA wages and employment at full wages. If the government finds this politically infeasible, it must try to forge a link between MNREGA and the building of houses and toilets for the poor in the village using the labour and materials made available under the scheme. Given that those employed are also predominantly poor, this approach would produce a coincidence of the interests of those doing the building work and those benefiting from it. Such a link may also bring about some checks to corruption in the existing public works programs.

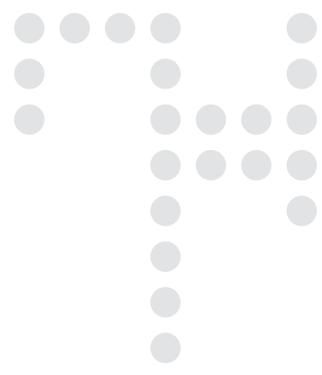


■ ***Elementary education.*** Like higher education, elementary education in India remains in crisis. Enrolments have steadily risen in the last decade to levels that now leave only a tiny proportion of children between 6 and 14 years out of school. In turn, this has made it feasible for the UPA II government to pass in 2009 legislation implementing a right to education. But, the quality of education in government schools as measured by student achievements is low and declining. We must consider at least two possible solutions:

- ***Priority given to performance in school evaluation criteria.*** In assessing schools for the purposes of recognition, the Right to Education (RTE) Act relies exclusively on input norms. Offering automatic promotions at all levels, it also does away with all board examinations. We need to revisit these provisions and perhaps consider giving the states greater room in deciding the norms. In Gujarat, the government has chosen to give 70 percent weight to academic achievements of students when evaluating a school for continuing recognition. In all likelihood, this practice does not conform to the RTE Act and may be challenged in the courts. This threat must be removed by empowering states to amend the RTE legislation to suit local conditions.
- ***Greater freedom in school choice.*** The RTE Act reserves 25 percent enrolment in unaided private schools for economically and socially disadvantaged students. The Act also commits the government to funding these students at the same level as the expense incurred per student in government schools. This provision can potentially serve as an instrument for expanding private school enrolments. But a more effective means of empowerment would be to give the parents vouchers in the amount the state spends per child on education and let them decide whether they wish to go to a private or government school.



- **Health.** India is in urgent need of a comprehensive health policy. Let me spell out some broad contours of what the next government must try to accomplish.
 - *Public health.* Today, public health is the weakest link in our health delivery system. By the same token, public health promises the highest social return on investment. Most states invest their meagre resources in curative care rather than public health services. The result has been the neglect of public health services such as drainage systems, supply of drinking water and sanitation. A bout of monsoon rains is often enough to clog drains and create swampy conditions conducive to the quick spread of communicable diseases. The next government must change this state of affairs. It must persuade states to create separate public health departments with their own budgets. In addition, it must take the provision of piped water and modern toilets on a war footing. It should be the goal of the next government to ensure that every house has piped water and a toilet within ten years. It must also work tirelessly to create greater awareness among citizens toward personal hygiene and sanitary conditions in the surrounding areas. Tolerance for unhygienic conditions in India remains high relative to other countries and this needs to be changed.
 - *Medical personnel.* India faces exceptional shortages of health related human resources—doctors, nurse practitioners, nurses, midwives and pharmacists. Unqualified providers dominate the private sector, especially in rural areas. Growing incomes, populations and efforts by the government to improve access to health services will magnify this shortage. Therefore, the next government will need to invest in improving the medical human-resource base in a major way. It must create one-year basic training programs for all rural medical providers through District Health Knowledge Institutes. It should also massively expand the number of qualified MBBS doctors. This requires loosening the

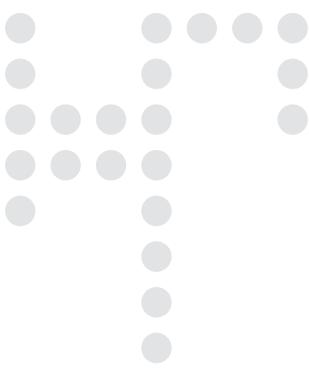


stranglehold of the Medical Council of India. In turn, this can be achieved by allowing each state to establish its own medical council that decides the norms for opening medical colleges and the norms of medical practice within the state.

- *Routine healthcare.* The next government should ensure that citizens have enough purchasing power to access routine healthcare services. While the government can offer these services at cost, it should let patients decide whether they wish to go to a government or private facility. This will promote efficiency. For example, many routine illnesses can be dealt with through home remedies so that citizens may sometimes wish to save the potential expense of the treatment of those illnesses for a rainy day.
- *Major illnesses.* Major illnesses result in a large expense per episode and often involve surgical procedures. Childbirth and maternity care also fall in this category. Here we need medical insurance. Several insurance schemes are currently in operation but it is time that we aim to expand them to achieve near universal coverage. The next government must consider covering the bottom half of the families for up to 50,000 rupees per year of medical expenses on major illnesses at its expense.

A reform strategy: empowering the states

There remains deep scepticism about the prospects for reform of the key labour and land legislations that are crucial to the success of manufacturing in general and employment-intensive sectors in particular. Most analysts contend that the removal of even the most draconian provisions in the Industrial Disputes Act of 1947 and the recent land acquisition act remains politically risky. How can we then expect the next government to undertake these reforms? Are Indian workers condemned to overwhelmingly remain in the low-productivity and low-wage jobs in unorganized industry and services?

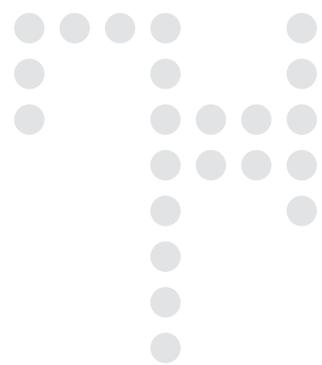


I have argued in Panagariya (2014) that the prospects for seemingly politically difficult reforms need not be as bleak as analysts often suggest. Most of the laws in urgent need of reforms relate to subjects on the Concurrent List of the Constitution. Both the Centre and states are empowered to legislate on these subjects but in the event of a conflict, the central law takes priority over the state law. But there is nothing in the Constitution that prevents the Centre from transferring this priority to the states. It could do this by inserting a clause in its legislation stating that if a state amended the law, the amended legislation shall prevail in that state. The clause could even spell out sections of the central law that it wishes to permit the state to amend. Once this is done, states will be free to amend the legislation as suitable for their local conditions.

This approach to reforms has two advantages. First, the Centre is spared the politically difficult task of reforming the legislation. In effect, it passes the buck to the states. If only a small number of states introduce reforms initially, as is likely, they are unlikely to meet political opposition. But once they have done so, their favourable experience will open the door to wider adoption of the reform. Second, different states are likely to take different approaches to reforms. This will allow for experimentation and competition among the states.

Because recent social laws also fall under the subjects on the Concurrent List, they too can be reformed through the empowerment of the states. For example, the Right to Education Act allows states to apply only input norms when deciding whether or not to grant recognition to a school. If the legislation was amended and states were empowered to adopt alternative criteria, some of them might opt for performance-based norms. Likewise, empowering states to amend MNREAGA and the food security Act may lead some states to opt for cash transfers or for linking the employment programs to building housing and toilets for the poor. We could thus unleash unlimited experimentation and competition among states.

A closely related reform concerns arresting and reversing the process of erosion of the fiscal space of the states.

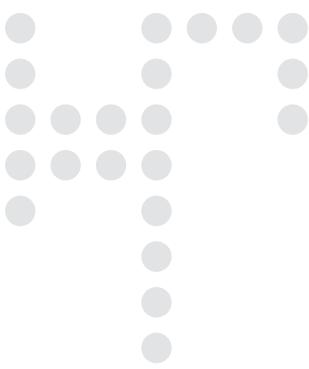


In recent years, expenditures under centrally sponsored schemes (CSS) such as MNREGA, the Public Distribution System, and *Sarva Shiksha Abhiyan* have expanded rapidly. On the one hand, these one-size-fits-all schemes have tended to straightjacket the states and, on the other, they have reduced the availability of finances for state-initiated development schemes as well as such important non-plan items as law and order and judiciary. The next government must work toward giving greater freedom of spending to the states. In part, this can be done through legislative reform that empowers states to decide how they want to implement the CSS. But it also requires restraining the CSS so that a larger volume of funds is available for transfer to the states as untied money.

If these reforms are undertaken, the artificial distinction between plan and non-plan expenditures that currently exists should be eliminated. It will then also pave the way for the closure of the Planning Commission, which has outlived its utility. In its place, the next government must consider the possibility of letting each Finance Commission stand until its successor commission has begun functioning. This will allow smoother implementation of the recommendations of the Finance Commission and also provide a neutral venue for the resolution of financial disputes between the Centre and the states. At present, with the Finance Commission disbanded soon after it has made its recommendations, the Centre arbitrates any disputes that arise afterwards, which is far from ideal since it also happens to be a party to the disputes.

Concluding remarks

Given the time and length constraints that a lecture such as this must respect, even while trying to be comprehensive, I have not been exhaustive in listing the reforms India needs to implement under the next government. For example, I have not gone into the reform of capital markets principally because they are already under way. Nor have I touched on macroeconomic reforms necessary to tackle debt and inflation. These reforms are necessary for macroeconomic stability, a *sine qua non* for the

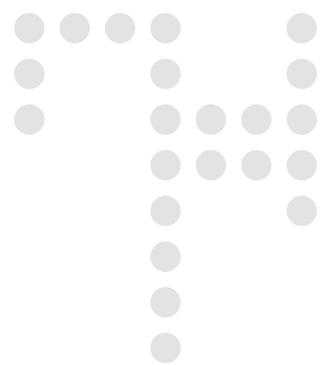


maximization of the gains from the reforms I have discussed in detail. Another important omission is the reform of civil service, the police, the judiciary and the election process.

In his parting budget speech, Finance Minister P. Chidambaram spoke about India becoming the third largest economy in the world in 30 years' time. This is far too long and, frankly, well below the true potential of India. With wages in China rising rapidly and its workforce shrinking massively, it has begun to quit the space it occupied in the global economy in many industries. This process will only accelerate over the next two decades. No other country except India has the potential to fill this space. India has a large and young workforce, a high saving rate and an industrious entrepreneurial class. If India returns to reforms, this happy configuration of circumstances positions it ideally to grow at 10 percent per year. At this rate, we can cross Japan and become the third largest economy in the world in less than twenty years, well within my own lifetime.

Friends, these are momentous times for India and we can ill afford to miss the opportunity that beckons us. I can scarcely resist ending this lecture with a passage from Shakespeare's play *Julius Caesar*, which beautifully captures the essence of this moment:

*There is a tide in the affairs of men
Which, taken at the flood, leads on to fortune;
Omitted, all the voyage of their life
Is bound in shallows and in miseries.
On such a full sea are we now afloat;
And we must take the current when it serves,
Or lose our ventures.*



References

Bhagwati, Jagdish and Arvind Panagariya. 2013. *Why Growth Matters*, New York: *Public Affairs*.

Chand, Ramesh. 2014. "From Slowdown to Fast Track: Indian Agriculture since 1995," Working Paper 01/2014, National Center for Agricultural Economics and Policy, Indian Council of Agricultural Research, New Delhi.

Gupta, Nandini. 2012. "Selling the Family Silver to Pay the Grocer's Bill? The Case for privatization in India," in Bhagwati, Jagdish and Arvind Panagariya, eds., *Reforms and Economic Transformation in India*, New York: Oxford University Press, pp. 141–67.

Nehru, Jawaharlal. 1946. *The Discovery of India*, 2004 Edition. New Delhi: Penguin India.

Panagariya, Arvind. 2014. "A game changing reform strategy," *Times of India*, 5 April, available at <http://timesofindia.indiatimes.com/home/opinion/edit-page/A-game-Changing-reform-strategy/articleshow/33248689.cms>

Panagariya, Arvind, Pinaki Chakraborty and Govinda Rao. 2014. *State Level Reforms, Growth, and Development in Indian States*, New York: Oxford University Press.

Sabharwal, Manish. 2012. "Strong apprentice system will bridge the gap between education and employability," *Economic Times*, 16 July. Available at http://articles.economictimes.indiatimes.com/2012-07-16/news/32698515_1_employability-apprenticeship-regime-apprenticeship-act (accessed on 5 April, 2014).



The C.D. Deshmukh Memorial Lectures at NCAER

2013: Inaugural Lecture

“Grassroots Welfare Schemes and
Macroeconomic Choices: India’s Dilemmas”
by Professor Kaushik Basu,
The World Bank and NCAER, January 4, 2013.



Scan to view lecture

2014

“A Reform Agenda for India’s New Government”
by Professor Arvind Panagariya, Columbia University
and NCAER, February 11, 2014.



Scan to view lecture

Lectures can also be downloaded from www.ncaer.org



Chintaman Dwarkanath Deshmukh (1896–1982) was born on January 14, 1896 in Nata, in Maharashtra. He was educated at Elphinstone College in Mumbai, and at Jesus College, Cambridge, winning the Frank Smart Prize in Botany in 1917 and graduating with a Natural Science Tripos. Sir Chintaman topped the Matriculation Examination of the University of Bombay in 1912 and then the Indian Civil Service (ICS) Examination in 1918.

After 21 years of distinguished service in the ICS, during which he was knighted by the British Government (1944), served as one of the two Indian Secretaries to the 1931 Second Roundtable Conference in London and was the ranking Indian on India's delegation to the July 1944 Bretton Woods Conference that led to the establishment of the World Bank and the IMF, he went on to help build numerous Indian public institutions.



Deshmukh with Jawaharlal Nehru at the foundation stone ceremony for NCAER's building, October 31, 1959.

He became the first Indian to be appointed the RBI Governor, bridging the transition to an independent India (1943–50); a member of the IMF and World Bank Board of Governors (1944–54); one of the four initial members of the Indian Planning Commission at its inception in 1950; and the first Chairman of the University Grants Commission (UGC, 1956–61). He was the first Union Finance Minister of India (1950–56) after Independence to last as long as six years until he resigned in protest against the Government's position on the linguistic problem of Bombay. "I have decided to resign on a particular issue," he said. "It is neither too tragic nor too heroic. It is just satisfying one's conscience . . . When I differ from the Government on some matter of principle, I feel I must resign." Sir Chintaman was asked soon after his resignation whether he was willing to have his name considered for the position of the Managing Director of the International Monetary Fund. Instead, he chose to serve his country as the UGC Chairman.

Sir Chintaman did much to advance intellectual life in India. He was a founding father of NCAER—India's first independent economic policy institute established in 1956—and a member of its first Governing body. He played a key role in establishing the India International Centre in 1959. He was the Vice Chancellor of Delhi University (1962–67), and the President of the Indian Statistical Institute (1945–64) and the Institute of Economic Growth (1965–74). Sir Chintaman and his wife Durgabai Deshmukh, a prominent social worker in her own right, were both honoured by the President of India with the *Padma Vibhushan*, India's second highest civilian award, in 1975.



Arvind Panagariya is Professor of Economics & Jagdish Bhagwati Professor of Indian Political Economy and Director of the Columbia Program on Indian Economic Policies at Columbia University. He is also a Nonresident Senior Fellow at NCAER. In 2012, the Government of India honoured Panagariya with the *Padma Bhushan* for his contributions in the field of economics and public policy. Panagariya has been the Chief Economist of the Asian Development Bank and Professor of Economics and Co-director of the Centre for International Economics at the University of Maryland, College Park. He has worked with the World Bank, IMF, WTO, and UNCTAD in various capacities.

Panagariya has written or edited more than a dozen books. His book *India: The Emerging Giant* (2008) was listed as a top pick of 2008 by *The Economist* magazine. *The Economist* has described his latest book (with J. Bhagwati) *Why Growth Matters* (2013) as "a manifesto for policymakers and analysts." He writes a monthly column in the *Times of India*. Panagariya is a co-editor of the *India Policy Forum*, the highest ranked economics journal out of India based on RePEc citation counts and published by NCAER jointly with Brookings.

NCAER | Quality . Relevance . Impact

NCAER, the National Council of Applied Economic Research, was set up in 1956 as part of Prime Minister Nehru's vision for independent institutions that a newly independent India needed. It is the nation's oldest and largest independent, non-profit, economic think-tank, informing policy choices for both the public and private sectors. Over nearly six decades, NCAER has served the nation with its rich offering of applied research, data, and policy inputs to central and state governments, corporate India, the media, and informed citizens. It is one of a few independent think-tanks globally that combine rigorous analysis and policy outreach with deep data collection capabilities, particularly for large-scale household and consumer surveys.

NCAER's work falls into four thematic areas:

- ***Growth, macro, trade, and economic policy***
- ***The investment climate, industry, infrastructure, labour, finance, and urban***
- ***Agriculture, rural development, natural resources, and the environment***
- ***Poverty, human development, equity, gender, and consumer behaviour***

NCAER is led by its Director-General, Dr Shekhar Shah, and governed by an independent Governing Body headed by its President, Mr Nandan M Nilekani, until recently the chairman of India's Unique Identity Authority. NCAER's Governing Body includes prominent persons from industry, research, and the government. NCAER's operating revenues comes from research commissioned by government and industry and its own research supported by multi-year research grants from international and domestic donors and income from NCAER's endowment.

For further details please visit www.ncaer.org



NATIONAL COUNCIL OF APPLIED ECONOMIC RESEARCH

Parisila Bhawan 11 Indraprastha Estate New Delhi 110 002 India

Tel: +91 11 2337 9861-63 Fax: +91 11 2337 0164 infor@ncaer.org www.ncaer.org