



# INDIA 2039

**An affluent  
society  
in one  
generation**

Prepared for  
the Emerging Markets Forum



Copyright © 2009  
Asian Development Bank  
6 ADB Avenue, 1550 Mandaluyong City, Metro Manila, Philippines

This overview report and related papers are part of a study financed by a grant from the Asian Development Bank.

The findings and recommendations of the report and related papers are solely the responsibility of the authors and the Centennial Group.

The findings and recommendations are for discussion at the Emerging Markets Forum meeting in Mumbai hosted by the Mumbai Chamber of Commerce, with logistics support from the staff of the Infrastructure Development and Finance Company Ltd., prior to presentation to senior political leaders and policymakers in New Delhi.

Editing and typesetting by Communications Development Incorporated, Washington, DC. Design by Peter Grundy, London, UK.

# Contents

Page  
number

**v Foreword**

**vii Acknowledgements**

**1 Introduction**

**3 Part 1. The promise: an affluent society by 2039**

- 4 Three basic conclusions
- 5 Three assumptions
- 5 Key results and findings
- 9 Cost of getting caught in the middle income trap

**13 Part 2. Delivering on the promise: priorities for becoming a determined marathoner**

- 14 Enormous challenge of managing three simultaneous transformations
- 15 Imperatives for realizing the promise
- 17 Profound change in perspective and mindset
- 18 Central intergenerational issues

**19 Part 3. Transforming the Indian economy and society: overarching issues of governance**

- 20 Create a smarter, more focused, agile and more credible government
- 23 Retool the civil service to meet the needs of today and tomorrow
- 24 Focus on the long term and open the public-private dialogue
- 26 Support competitive markets and prevent capture of state organs
- 26 Inculcate a code of self-discipline and ethical behaviour within the business community
- 28 Implement priorities, monitor results, ensure transparency and enforce accountability
- 30 Reverse the deterioration in political governance

**33 Part 4. Realizing the potential: seven intergenerational issues requiring an immediate start**

- 34 Intergenerational issue 1. Tackle disparities and achieve inclusive growth
- 38 Intergenerational issue 2. Dramatically improve the quality of the environment
- 40 Intergenerational issue 3. Eliminate infrastructure bottlenecks—Create a competitive edge
- 43 Intergenerational issue 4. Improve the delivery of public services—Create functioning cities for sustaining growth
- 46 Intergenerational issue 5. Renew the focus on education, technological development and innovation—Keys to sustaining improvements in competitiveness
- 49 Intergenerational issue 6. Launch a revolution in energy—Ensure security and competitiveness
- 52 Intergenerational issue 7. Foster a prosperous South Asia and become a responsible global citizen—India, its neighbourhood and the world

Page  
number

Boxes

10	1. What is the middle income trap, and how did some East Asian countries avoid it?
14	2. Historic nature of India's promising rise
23	3. Judiciary, police and other internal security institutions
27	4. Oligarchic or competitive capitalism?
29	5. Accountable government

Figures

6	1. India's growth trajectory tracks Asian experience
7	2. India is following in China's footsteps, 10 years later
8	3. India's middle class could expand by well over one billion by 2039
17	4. Societal considerations have so far trumped the economic and the global
18	5. Balancing society, economy and global citizenship
35	6. The reported net worth of India's billionaires relative to India's GDP rose spectacularly
43	7. As in China, urban population is on the rise in India

Tables

16	1. Achieving Korea's social and economic indicators
36	2. Household expenditure per capita of groups as a share of the national average (percent)
49	3. Energy and the future: India's business as usual and sustainable scenarios
52	4. Population growth in other South Asian countries (thousands)

# Foreword

Do we need yet another report on India? A valid question, given that there is no dearth of reports on India. Indeed, with the reports regularly produced by the plethora of committees and blue ribbon panels, multinational institutions, private financial institutions and think tanks, there is no shortage of analysis or recommendations.

So, what makes this report different? First, while any number of reports on major issues bear on the future prospects of Indian society and economy, they are mostly vertical. They treat a topic in depth but on its own, with limited or no attempt to relate it to other equally important—and perhaps even more fundamental—related topics that have a bearing on possible solutions. This report tries to connect the dots between the key issues that in our view could decide the future of Indian society. Second, multigenerational issues have received rather short shrift in these reports and in the policy debate. This report takes a much longer 30-year perspective, with a corresponding emphasis on challenges that require long gestation to address. Third, the report offers a projection not of what will be but of what India's potential is.

The point of departure is a perspective on where India could be in 30 years and the “promise” that holds for its people. If India maintains anything close to recent economic growth rates—which Japan, South Korea and now China have done in their long growth spurts—it could be one of the top three global economic powers. More important, its people could achieve the living standards of an affluent society.

This is not a preordained state of affairs. But it can happen, and that “can happen” comes with a long list of imperatives. The report also presents the alternative scenario of an India caught in the “middle income trap” if these imperatives are not fulfilled.

The report's other distinguishing features:

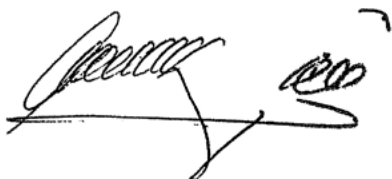
- It is put together by a highly experienced international team that has no institutional or policy agenda—private, multinational or civil.

- During its preparation, the authors consulted widely with policymakers, private sector executives and political leaders at the centre and in key states.
- It combines path-breaking analytical work on the lessons from other middle income countries—such as Argentina, Brazil, China, Japan, South Korea, Mexico and the Philippines—with the best work that already exists on India on many topics.
- It puts forth a framework that transcends the traditional ideological debates and gives equal priority to three overarching prerequisites for realizing the promise: maintaining social cohesion; continuously enhancing economic competitiveness; and achieving greater influence and shouldering more responsibility in global fora.
- The report focuses on issues that require long lead times and success in addressing them will critically determine whether India can deliver on its promise.

A final word on the recommendations and the tone of this report. In our recommendations we draw heavily on the experience of other countries. In doing so we were not oblivious to the fact that India's size, diversity, political system, culture and history make it different. Each country has its own claim to uniqueness. Uniqueness, however, is not a justification for inertia. So each country, while learning from the successes and failures of others, has to devise solutions and take actions that fit its particular circumstances.

The tone of our report is candid and forthright. At the risk of giving unintended offense we deliberately wanted to provoke discussion and hopefully concordance among the major stakeholders on the complex set of multigenerational issues. This is particularly timely and urgent given the verdict of the electorate in the recent elections. An historic opportunity for bold and far sighted

action could be easily frittered away if the momentum is not seized. If the report serves to engage civil society, the press and the private sector in a vigorous ongoing debate with the government—centre, state and local—on the need to act decisively on significant multi-generational issues, it will have served its purpose.



Gautam S. Kaji  
Chairman, Centennial Group  
Chairman, Advisory Board,  
Emerging Markets Forum

# Acknowledgements



This project was coordinated and managed by Harinder S. Kohli, under the overall guidance of Gautam Kaji.

Harinder Kohli is also the principal author of the overview report. Other members of the core team, in alphabetical order, are Richard Ackerman (land, water, agriculture and climate change); Vinod K. Goel and R. A. Mashelkar (tertiary education, technology development and innovation); Homi Kharas (evolution of global economy and India through 2039—the promise); Hossein Razavi (energy revolution); Anil Sood (overall project and report coordination); Inder Sud (livable cities and governance); Ashutosh Varshney (politics and economic transformation); C.M. Vasudev, Hariharan Ramachandran and Vivek K. Agnihotri (civil service reform); and Michael Walton (tackling inequities and creating contestable markets). Pavan Ahluwalia contributed a stimulating perspective on the concerns and expectations of a subset of the younger generation. Harpaul Alberto Kohli provided data analysis and support.

The report gained greatly from advice and counsel from members of the Advisory Group: Kemal Dervis, Bill Emmott, Rajat Gupta, Bimal Jalan, Rajiv Lall, Johannes Linn, Bindu Lohani, Rajat Nag, Prabhakar Narvekar, Andrew Sheng, Arun Shourie and Vinod Thomas.

The final report reflects valuable comments and critique offered by a large number of people within and outside India. For practical reasons, we can name only a few: Surjit Bhalla, Manu Bhaskaran, Prem Garg, Claudio Loser, Srinivasa Madhur, Keshub Mahindra, Jayant Menon, Nitin Paranjpe, Bruce Ross-Larson and Arvind Virmani.

Yanbei Yao oversaw the research and logistics support. Under Bruce Ross-Larson's leadership, Allison Kerns and her colleagues at Communications Development patiently prepared a succession of presentations used throughout our extensive consultative process. Joseph Caponio provided production assistance, Meta de Coquereaumont and Christopher Trott edited the reports and coordinated production, and Elaine Wilson created the graphics and typeset the reports.

The project team is grateful for the inspiration and encouragement provided—and insistence on intellectual rigor demanded—by Mr. Montek Singh Ahluwalia, Deputy Chairman, Planning Commission of India, and Mr. Haruhiko Kuroda, President of the Asian Development Bank.



# Introduction



India now has the second fastest growing large economy in the world, surpassed only by China. Its per capita income approached \$1,000 in 2007, when the economy exceeded \$1 trillion for the first time. While still home to the largest number of absolute poor and with average per capita incomes only a ninth of the global average, India has just been classified as a lower middle income country, a far cry from the 1970s, when it was still one of the world's poorest countries. India today is home to many world-class corporations that enjoy global brand recognition and are busy expanding overseas as top global companies.

The economic successes are due primarily to India's dynamic and competitive private sector and to the newly found can-do spirit of the newly confident middle class (and youth)—despite significant failures of government on many fronts. As an op-ed article in the January 2, 2009, *New York Times* put it, “Both the Chinese and the Indians are convinced that their prosperity will only increase in the 21st century. In China it will be induced by the state; in India's case, it may well happen despite the state.”

India enjoys strong fundamentals, the basic ingredients for driving economic growth over a long period, potentially making India a rich country within a generation—fulfilling Pandit Nehru's dream of “India's tryst with destiny.” The fundamentals:

- In the next 30 years growth in Asia will likely dominate the world economy, and Asian economies will benefit from neighbourhood effects—the fastest growing markets in the world (in East Asia) will be closer to home.
- India's domestic savings and investment rates have reached East Asian levels that, along with prudent macroeconomic policies, could drive productivity improvements and fuel rapid economic growth.
- The growth of manufacturing has finally started to pick up, broadening growth beyond its vaunted information technology sector.
- India's forthcoming “demographic dividend” and urbanization should fuel further growth.

- The shift in values to those typical of the middle class in higher income countries that generally underpin the political economy of reform— independent thinking, self-reliance, hard work, entrepreneurial spirit—appears to be now well under way in India. The rapid increase in the size of India's emerging middle class would promote entrepreneurship and boost consumption.

But these strong fundamentals are hampered by some major handicaps—including infrastructure bottlenecks, abject rural poverty, poor education and healthcare systems, an unstable regional neighbourhood and, above all, significant government failures, outdated bureaucracy and poor governance. The big unknown about future performance is whether India can address these handicaps fast enough to allow strong fundamentals to drive economic and social progress over the longer term—or whether these handicaps will overwhelm the fundamentals and ultimately drive down the growth rates closer to the “Hindu rate of growth” seen until the 1970s.

The lessons of experience from some other middle income countries—such as Argentina, Brazil, Mexico and the Philippines—are sobering. They became mired in low or even negligible growth rates for extended periods after enjoying a period of high growth that enabled them to reach middle income status. In addition to addressing its own unique internal constraints, both real and perceived, India would also need to avoid this “middle income trap”—successfully avoided by many countries in East Asia and a handful of countries in Europe (Hong Kong, Japan, Singapore, South Korea, Taiwan, Ireland and Spain)—for it to enjoy sustained economic success that otherwise appears tantalizingly within its grasp.

Indeed, there is a greater than even chance that India may get mired in the middle income trap unless there is a fundamental change in its mindset, unless governance is improved dramatically and unless concrete actions, as opposed to mere grand pronouncements, are taken soon on the issues highlighted in the report.

Despite India's recent success, the political and economic debate appears to be held hostage to the

issues that the country struggled with in an environment of low growth and mass poverty. Propelled by the first generation of macroeconomic reforms launched around 1990, which plucked the low hanging fruit, India has been able to jumpstart growth. But it is still reliant on the basic institutional structures, practices and mindsets inherited from the British Raj. Major policy and institutional reforms seemingly are taken on only in times of crisis and under duress, not as part of a long-term strategy that anticipates and promotes change. Those structures and mindsets—basically intact under successive governments comprising political parties of all economic and social philosophies—need to change rapidly for the economy to maintain high growth and to mature. Indeed, a paradigm shift is long overdue.

The time has come to ground the policy debate in a longer term vision of where the country could be one generation from today and to consider how to start transforming the country's institutional, administrative and governance systems at all levels to meet the needs of a vast, dynamic, rapidly growing and young society that must wrestle with being rich and poor at the same time, sophisticated and yet backward, and a prospective global economic heavyweight but without political and military muscle.

To stimulate such debate, the report presents a longer term vision of India's economy. It presents India's promise as a "determined marathoner" that overcomes

the challenges and sustains recent growth rates. The alternative scenario is that of a "sporadic sprinter" that periodically puts out a burst of reforming zeal when prodded by crisis. The payoff to the marathoner is huge: a per capita income of over \$20,000 by 2039, four times what the sporadic sprinter can expect to achieve.

Rather than get bogged down in a spurious debate over the feasibility of specific numbers, the report focuses on what bold and ambitious strategy and actions will be required to achieve an outcome proximate to this vision. This approach brings into greater relief the major structural changes that the society and economy would have to undergo to sustain the past decade's growth over the next three decades.

The report identifies the key prerequisites for staying on the marathoner route. It also points out new challenges that will arise from success. Much higher expectations of the public as citizens of a rich and democratic country. Massive appetites for natural resources (including energy). Huge disparities of incomes and living standards with its immediate neighbours (making it a magnet for immigration for hundreds of millions). Much greater scrutiny from the international community as India's global footprint expands. Finally, the report emphasizes fundamental changes in the basic mindset—to an unyielding fixation on implementation, results and accountability—which can only come about by transforming governance in all its facets.



---

# INDIA 2039

---

---

## PART 1

---

**The promise:  
an affluent  
society  
by 2039**

---

India's per capita GDP in 2007 was \$940 (at market exchange rates). Based on this performance, the World Bank reclassified it from a low income country to a lower middle income country in 2008. In 2007, the least rich "advanced economy" on the International Monetary Fund's (IMF) list was Taiwan, with a GDP per capita of \$16,768. Although the IMF uses other criteria as well as income to determine when an economy should be classified as "advanced," income is a good proxy. Our analysis suggests that on this criterion, India could become an advanced economy by 2039. In other words, India has the potential to go from a relatively poor, developing country to an advanced (affluent) economy within 30 years—a single generation. This is India's "Promise."

The Indian economy passed another milestone in 2007—\$1 trillion in gross output. That made it the world's 12th largest. If India becomes affluent, it might be the world's second largest economy before 2039, second only to China and surpassing the United States. In other words, India has the potential to overtake the United States within a generation, even though it is only one-fourteenth the size of the U.S. economy today.

The central questions here: If India could fulfil its potential, what would such a trajectory look like? What would be the shape of a world with a dynamic India in its midst? Should policymakers take such a scenario seriously? And what would it take to push India along such a path?

To answer these questions, this report uses a global model to provide a sense of the economic trajectory of different country groups. Like all long-run models, the purpose is illustrative, to foster debate rather than to predict the future. The purpose is to indicate the contours of the global economy over the next three decades.

### Three basic conclusions

First, while the numbers and preconditions for India to become affluent in 30 years are plausible, the task is daunting. Very few countries have sustained growth at the required rate over such extended periods. India's record of rapid growth is still fairly short, and its reforms

so far have been fairly easy—reaping the benefits of plucking low hanging fruit. The next generation of reforms will be harder. Domestic institutions must be rebuilt to address infrastructure, higher education, urban management, technological development and innovation, and the bureaucracy—and to lay the deep legal, social and political foundations for sustaining sound policymaking with a long-term horizon. The dilemma is that such reforms generate benefits only in the long term, making them hard for policymakers with short time horizons to set as priorities. Yet without them, policy measures to support sustained economic growth will become less and less effective.

Second, India's fortunes will become—as recent events have vividly demonstrated—more closely linked to the world's economic fortunes. For the past decade India benefited from faster global growth. Exports, foreign investments, nonresident Indians' deposits and remittances—ingredients in India's economic success—are linked to global growth. But as its global footprint expands, India will have to bear the responsibilities of preserving the global economic commons—whether for stability of the global financial system, climate change or free trade. It can no longer be a spectator in global economic management. Nor can it narrowly define its interests to include only short-term economic costs and benefits. From a practical perspective India will need to develop a strategy for using its seat at the global table—whether the G-20, the UN Security Council, the BRIC forum, the post-Kyoto negotiations, the UN General Assembly or other bodies—and to be perceived as a fair, inclusive and constructive leader in those fora.

Third, India is easier to visualize as an affluent, buoyant economy if the other countries in South Asia are also developing and stable. But instability surrounds it today. Five of the seven countries that border it are on the *Foreign Policy* 2008 list of failed states—Bangladesh, Myanmar, Nepal, Pakistan and Sri Lanka. Preventing spillovers—of terrorism, immigrants seeking better livelihood, refugees from climate disasters, water conflicts or

**“ India’s record of rapid growth is still fairly short, and its reforms so far have been fairly easy. The next generation of reforms will be harder**

regional political factionalism—will become even harder without greater stability and economic growth across the region. India, because of its prospects for rapid growth, stands to benefit the most from regional stability and lose the most from instability. If current trends continue—with India growing much faster than the rest of South Asia—the disparities in per capita income with its neighbours could be a factor of between 7 and 14 (similar to those between the United States and Central America and between Europe and North Africa). Such disparities would make India a magnet for immigration for up to 500 million South Asians, perhaps producing major social and political upheaval.

Only India has the size and clout to lead regional cooperation and promote regionwide prosperity. This will not be easy because South Asia today is the least integrated of any region in the world and because differences between India and its neighbours have deep and sometimes violent roots. But the European Union and North-East Asia have demonstrated the potential for expanding economic ties between erstwhile enemies. And if India is to become affluent, it will surely need to lead cooperative approaches to regional development.

### Three assumptions

Three assumptions underpin the affluent scenario. First, the world is indeed in the midst of a historic restructuring—with the relative economic weight of developing countries in general and Asia in particular, set to become much larger—and this restructuring can continue to proceed peacefully. Second, the current financial turmoil, painful as it is, is being managed, and global growth will resume within the next one to two years. Third, the difficulties that many middle income economies have had in becoming advanced are due to deficiencies in their policies and strategies—and are not structural. The economic destiny of India lies largely in its own hands. In other words, it will be up to India to avoid the middle income trap (see page 9). If India were to fall into this trap, it would be only because of its own acts of commission and, equally important, omission.

### Key results and findings

The global economy in 2009 may approach \$62 trillion, measured at market exchange rates, dominated by the United States, with a \$14.3 trillion economy, just under one-quarter of the global total. India became the world’s 12th largest economy in 2007, with a GDP exceeding \$1 trillion, or 2 percent of the world, just surpassing South Korea. Of course, South Korea has only 49 million people, less than a twentieth of India’s 1.1 billion. India’s relatively high ranking amongst global economies is a result of the huge size of its population and not its prosperity.

### *By 2039, 30 years from now, the global economy may be \$200 trillion*

Under our scenario, 2039 would have a world very different from the one we see today. It would be significantly wealthier, with per capita incomes averaging \$23,400 in 2007 dollars, nearly three times the \$8,500 today. The economic centre of gravity would shift to Asia, which today accounts for 21 percent of global activity, but by 2039 could account for more than half. Three giant economies, China, India and Japan, would lead Asia’s resurgence. But other large countries like Indonesia and Vietnam would also have significant economic mass. Malaysia and Thailand could have economies larger than Spain’s today.

The rise of Asia would not be unprecedented. Indeed, it would bring Asia’s economic share in line with its population share and restore the balance of global economic activity to that in the 18th and early 19th centuries, before the Industrial Revolution led to the great divergence of incomes across countries.

The converse of Asia’s rise would be a fall in the share of the G-7 economies. Their global income share has fallen from an average of around 65 percent to new post-World War II lows of about 53 percent, and by 2039 it could be just over 30 percent.

### *An economy 19 times today’s*

India had consistent annual growth of 3.5 percent during 1950–79, the “Hindu rate of growth”. In the ensuing

two decades, annual growth increased to 5.5 percent. There is still considerable controversy about the role of economic reforms in this acceleration. Some argue that growth preceded reforms. Others point to much higher growth rates in 1994–97, coinciding with the major post-reform period. Regardless, it took most observers by surprise when India's growth accelerated sharply to 8.5 percent a year between 2003 and 2007. These episodes of "structural" changes in India's growth suggest that the past is not prologue. Any estimation of growth potential based on historical growth rates would have missed two turning points, one in the early 1980s and one in 2003.

Our model suggests that India could accelerate its real GDP growth over the next 30 years to around 9.5 percent a year. At this rate the Indian economy would increase by a factor of 19, to reach \$20 trillion in real terms.

Even that underestimates India's global footprint. Because of real exchange rate appreciation, India's actual economic size by 2039 could be more than \$36 trillion in 2007 dollars or a sixth of global output then, about the same proportion as its population.

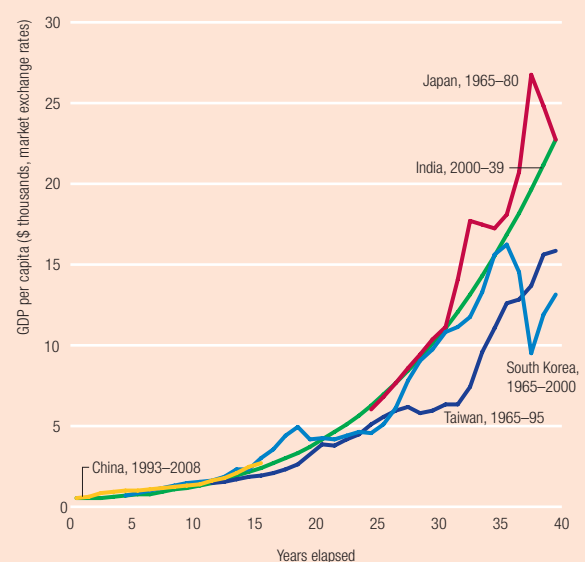
In other words, India would no longer be a poor country with a small global economic footprint—it would become an average economy, with a large global footprint. And with the world rich on average by 2039, India too would be rich. Its per capita income in 2039 could exceed \$22,000, adjusted for inflation and real exchange rate movements. In other words, India could go from poverty to affluence in one generation!

It helps to compare India's projected growth with growth spurts in Taiwan, China, South Korea and Japan (figure 1):

- Taiwan had a per capita GDP of \$1,442 in 1965 (the earliest point in our data sample). Thirty years later, in 1995, its GDP per capita was \$17,500. The average annual growth rate over these 30 years was 8.7 percent.
- China's recent economic reforms, traced to 1979, picked up momentum in 1993, the year after Deng Xiaoping's "Tour through the South."

**“ India could accelerate its real GDP growth over the next 30 years to around 9.5 percent a year and go from poverty to affluence in one generation**

**Figure 1 | India's growth trajectory tracks Asian experience**



Note: To show the comparison with India, we start each country's growth spurt in the year India would have the same starting income.

This is also the year when most prices were liberalized and the third plenum of the 14th Party Congress officially committed to move towards a "socialist market economy". In 1993 China's income per capita was \$530, in 2008 around \$2,720, with average annual growth at 11.5 percent.

- South Korea began its reforms in the early 1960s. In 1965 its income level was around \$700. By 1996, just before the Asian crisis, its income had risen to \$16,230, thanks to average annual growth of 10.7 percent over 31 years.
- Japan was a much more advanced economy than India in 1965. It already had a per capita income of \$6,050, a level we do not expect India to reach until 2024. For the next 15 years, 1965–80, Japan's income grew at 9.2 percent, and in 1980 it reached \$22,700, almost exactly the same as the income we believe India could reach in 2039.

## India is following in China's footsteps, 10 years later

### Following in China's footsteps

India has already started down the track of repeating other Asian growth experiences. Comparing India's per capita income for 1991–2008 shows it has closely tracked China's experience with a 10-year lag (figure 2). If that history repeats itself, and if India then goes on to track the experiences of Japan, South Korea and Taiwan, it will realize the promise of becoming affluent within a generation.

To understand the effect of the shift of global economic mass towards Asia, consider India-China trade, growing at more than 50 percent a year since 2002, to reach about \$37 billion in 2007. While overall trade in both countries was growing rapidly, the growth of bilateral India-China trade was twice the average growth in total exports by either country. China is already India's top trading partner. After adjusting for partner GDP, the propensity to trade between China and India is also higher than for any other major trading partners. There has also been a start of important acquisitions by Indian companies in China and vice-versa. As these business

ties deepen, the underpinnings of future trade growth will become stronger.

In other words, India's proximity to China, and by extension to the whole of East Asia, is a factor in its projected growth acceleration.

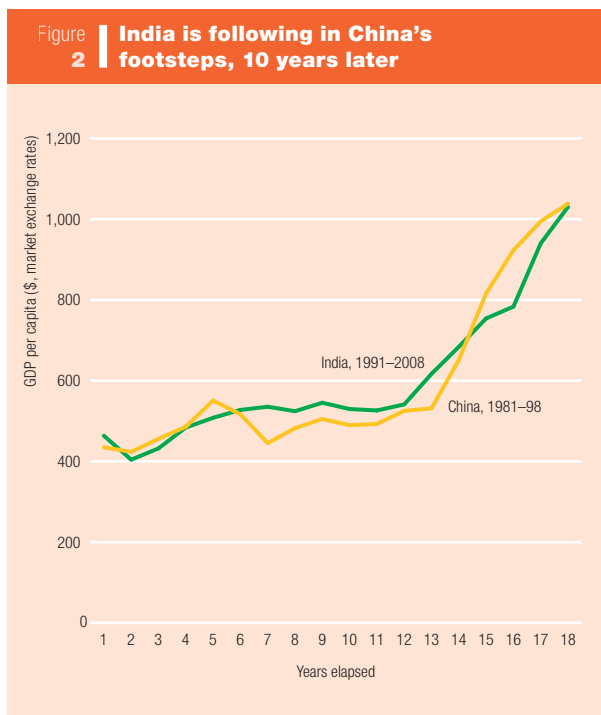
### Faster manufacturing growth

Many reasons have been given for India's faster manufacturing growth in recent years. Some emphasize reforms and an outward orientation. Others point to low inflation, a depreciated rupee and low real interest rates. Doubtless all have played a role. What is important is that it is no longer necessary to question whether India can be unique in achieving rapid growth without passing through a phase of rapid manufacturing growth. The Indian model of service-led growth is giving way to a more traditional development model where industry and manufacturing drive growth and job creation.

### Coming demographic dividend

India is set to reap a demographic dividend. Its labour force should grow by more than 1.7 percent a year over the next 30 years, with population growth at just over 1.2 percent. So, the ratio of working-age population to total population is on the upswing. In addition, India still has a fairly low labour force participation rate of 61 percent, partly because most women still do not work regularly. As the population becomes more urban, rich and educated and as more women join the labour force, participation rates are likely to rise.

Goldman Sachs, noting that 10 of the world's fastest growing 30 urban areas are in India, forecasts that 500 million people will be added to India's cities by 2039. To see the impact of demographics and urbanization on labour force participation, look at China, which has a labour force participation rate of 82 percent and a labour force of more than 800 million, compared with India's 516 million. There is a possibility that higher labour force participation could add another full percentage point to India's labour force growth rate over the next 20 years—to 2.7 percent.



The demographic dividend takes many forms. It provides for a rapid reduction in poverty as the dependency ratio shrinks. It gives families the means to save, accumulate and invest in their own well-being. Perhaps most important, it permits greater investment in children and human capital—the foundation for Indian growth for the next generation.

### **An emerging middle class**

It is typical in development that the demographic dividend coincides with the emergence of a middle class and a younger, more motivated population. Some recent studies have highlighted the boost to growth that comes from a large middle class. Political economy arguments suggest that a middle class base raises the importance of economic growth in policymaking. Others emphasize the economic aspects of the middle class, providing the source of domestic demand, especially for consumer durables—cars, motorcycles, televisions, air conditioners, mobile phones and refrigerators. The middle class also demands housing, shopping malls and infrastructure,

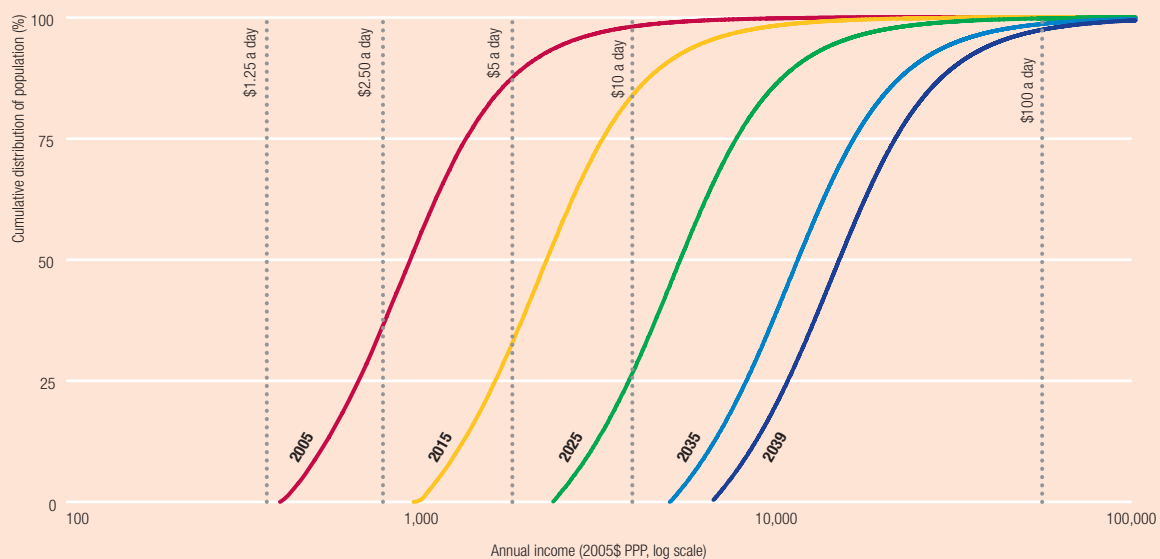
**“The Indian model of service-led growth is giving way to a more traditional development model where industry and manufacturing drive growth and job creation**

and can afford to take longer vacations, boosting services. And it saves for retirement, for housing and for children's education, providing the resources for fixed capital formation, especially when there are two-income families. Because of these factors, most country examples of rapid sustained economic growth coincide with the development and expansion of the middle class.

India could witness a dramatic expansion of its middle class, from 10–20 percent of its population today to 90 percent in 30 years. With a population of 1.6 billion forecast for 2039, India could add well over a billion people to its middle class by 2039 (figure 3).

Others have also highlighted India's burgeoning middle class. According to the McKinsey Global Institute, in a 2007 report, this middle class comprises government officials, college graduates, rich farmers, traders, business people and professionals. These groups choose what they will consume, rather than be driven by the necessities of life. Such discretionary choices, reflecting the tastes of the new Indian middle class, will dominate consumption patterns.

Figure 3 | **India's middle class could expand by well over one billion by 2039**



**“ The immediate priority needs to be to protect India from the global recession, and that requires an aggressive fiscal stimulus and monetary easing.**

Most analysts think about the middle class in terms of values as well as incomes. The World Values Survey provides some information on how Indian society is changing. It confirms that the values of the Indian society are decisively moving closer to those of the middle classes in developed countries: self reliance, independence, entrepreneurship, hard work, demand for quality public services and responsive government, and consumption.

#### **A cautionary note**

In the midst of the world's worst economic crisis in perhaps 70 years, it may appear odd to be discussing long-term institutional issues that India may have to confront to grow rapidly in a sustained fashion. The immediate priority needs to be to protect India from the global recession, and that requires an aggressive fiscal stimulus and monetary easing, taking account of the deficit and debt situation. Most analysts are forecasting a slowdown in 2008/09 to between 5–6 percent and then rising to perhaps between 7–8 percent for 2009/2010. But the range of forecasts is high and depends on the timing and effectiveness of implementation of expected macroeconomic policy adjustments, such as further interest rate cuts and a stronger fiscal stimulus package. India's leading economic indicators suggest that the current downturn could bottom out in the second half of 2009.

Perhaps the most remarkable aspect of these short-term forecasts is that few analysts are predicting a major slowdown to growth below 5–6 percent in 2009/10. That augurs well for the future. If indeed the deepest low-growth point is near 5 or 6 percent, the likelihood of attaining sustained, rapid, long-term growth of 9.5 percent is boosted. Our analysis suggests there is no a priori reason why India should not grow rapidly in the long term. It goes further and suggests that India's potential growth can indeed accelerate further.

The current global crisis does highlight the critical importance of three fundamental global public goods: market confidence and economic stability, a well functioning financial system, and an open trading regime.

For India's long-term growth it is in its self-interest to play an active role in ensuring that these three global public goods are indeed maintained, if not reinforced. Its credibility and influence in the global fora will require that its own internal policies in all these areas are consistent with its position in international discussions.

#### **Cost of getting caught in the middle income trap**

But we have also pointed out many examples where fast-growing countries suddenly found themselves in growth doldrums, unable to move forward at the speed they were used to. These countries have seen income stagnate.

Consider Brazil, which grew at almost 6 percent for almost a century. In 1965 it was one of the wealthiest developing countries with a per capita income of \$1,700 (in 2007 dollars). It continued to grow until 1978, when it reached \$5,500 per capita, with average growth of almost 9.5 percent a year. But then Brazil entered a long period of decline and stagnation. It did not regain its 1978 per capita income until 1995 and then only briefly in the burst of activity that followed the end of hyperinflation and the beginning of stabilization. (Within four years, Brazil was again wracked by macroeconomic instability as it struggled to manage the aftermath of the East Asian crisis. It was only with the commodity boom in 2006 that Brazil again surpassed its 1978 income. But, the current global economic crisis and resulting drop in commodity prices has again blunted, though hopefully temporarily, this recent resurgence.)

In other words, after a century of growth, Brazil spent nearly 30 years without further improvement in its average living standards (box 1). Although recent growth has been better, Brazil has still not demonstrated a track record of sustained fast growth that would allow it to converge rapidly with advanced economies.

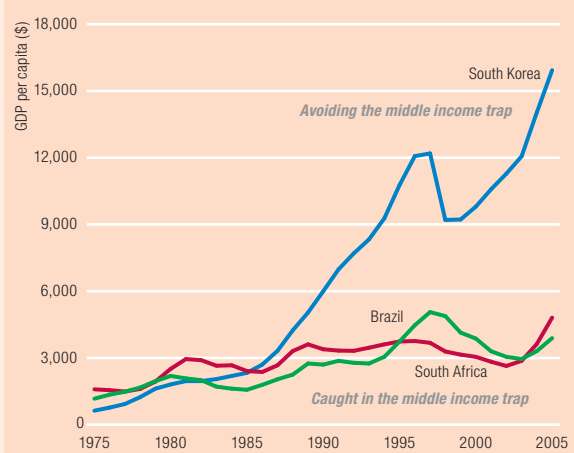
Some East Asian countries, like South Korea, have managed three critical transitions to avoid the trap: from diversification to specialization in production, from physical accumulation of factors to productivity-led growth, and from centralized to decentralized economic management.

### Box 1 What is the middle income trap, and how did some East Asian countries avoid it?

The middle income trap refers to countries stagnating and not growing to advanced country levels. This is illustrated in the figure, which plots the income per capita of three middle income countries between 1975 and 2005. In a steadily growing country, the line would be continuously rising over time (positive growth), that is towards higher income levels. That is the experience of South Korea.

But many middle income countries do not follow this pattern. Instead, they have short periods of growth offset by periods of decline. Rather than steadily moving up over time, their GDP per capita simply moves up and down. That is the middle income trap—unable to compete with low income, low wage economies in manufacturing exports and unable to compete with advanced economies in high skill innovations.

Figure 1 Up and down in the middle income trap



Specialization allows middle income countries to reap economies of scale and offset the cost disadvantages of higher wages. It also promotes rapid innovation and the introduction of new products and processes based on the capabilities of firms. The policy challenge is to understand how the public sector can facilitate this process, sometimes through managing geographically concentrated production. In Asia, there has been tremendous specialization in electronics, for example.

An emphasis on total factor productivity growth requires major changes in education, from primary and secondary schooling to tertiary education. It also requires the right blend of competition and public support for promising new areas—in what has been called “discovery”. The knowledge economy has proven to be a source of major technological progress. Tertiary education and the knowledge economy have progressed much faster in East Asia than in Latin America.

Modern economies tend to be complex, requiring speedy decisionmaking. Policymakers require large amounts of information. They also need to address local issues of opportunity and distribution. That is hard to do

with a centralized system. Yet the challenge of decentralization is enormous. Local governments, at least initially, can be more easily captured by special interests and have more limited capabilities than central administrations. The decentralization of power can happen faster than the decentralization of effective institutions. Japan and South Korea both decentralized successfully.

The three transitions require leadership and the ability to sustain long-term changes. They also require high-quality interaction with the private sector. And they require a focus on results, outcomes and implementation effectiveness. That in turn means that the approach has to be pragmatic versus doctrinaire. These ingredients were present in each of the East Asian countries that successfully avoided the middle income trap.

Imagine that India were caught in the same middle income trap. It might reach the \$5,500 per capita income that Brazil attained in 1978 by 2023, in 15 years. But if it then followed Brazil's trajectory, it would still have a per capita income of around \$5,500 in 2039 (instead of \$22,000). Rather than a \$36 trillion economy, it would have an \$8.8 trillion economy.

“For India's long-term growth it is in its self-interest to maintain three global public goods: market confidence and economic stability, a well functioning financial system, and an open trading regime

**“ If India can develop along the affluent scenario indicated here, it can eliminate poverty within 15 years**

Put another way, if India can develop along the affluent scenario indicated here, it can eliminate poverty within 15 years, under the World Bank \$1 a day poverty figure of 456 million poor in 2005 or the Indian government figure of 310 million. If India sustains rapid income growth at 8.5 percent, some 30 million people a year could be lifted out of poverty. Moreover, because so many of India's poor still live with consumption below \$2 a day—a number estimated by the World Bank at almost 850 million in 2005—sustained growth over the long term is essential to make a substantial dent in that broader concept of poverty.

***A determined marathoner not a sporadic sprinter***

The marathoner economies reap the rewards because they consistently and steadily pursue their objective over the long haul; the sporadic sprinter economies on the other hand are less dependable because they react to external stimuli rather than to internal drive. But once growth slows, it becomes hard to revive. Marathoners,

by contrast, build the momentum to grow through the middle income trap.

India can be a growth marathoner, but it must understand the world it is operating in and the changing shape of its economic footprint. It must start to put in place the institutions and policy frameworks consistent with a move from poverty to affluence in one generation. Few countries have achieved this, so the challenge is enormous. But no country has achieved it without serious deliberations over the ingredients for sustained growth.

The main distinction between marathoners and sprinters is the single-minded pursuit of their economic and social objectives spanning the terms of several governments. The marathoners did this by creating the institutional capabilities to develop and periodically re-evaluate long-term strategies, set targets, monitor achievements and adjust policies and implementation as necessary. They never lost sight of what they wished to ultimately achieve by improving their governance and building their implementation capabilities to execute their strategies.







# INDIA 2039

## PART 2

**Delivering  
on the  
promise:  
priorities for  
becoming a  
determined  
marathoner**

Managing the transformation of any economy, especially a giant like India's, is a daunting task. Over the next 30 years, India will almost certainly see an initial worsening of its income distribution, as parts of the economy benefit from integration with the global economy while other parts are left behind. It will also face pressures from other developing economies for a share of world exports. Its service exports have rapidly grown to global scale, but it has been much less successful in its manufacturing exports. Unlike China, Japan and South Korea in the past, India's march to prosperity must take place in a different world. And its sheer size makes its evolution different from the path of other emerging economies except China (box 2).

### Enormous challenge of managing three simultaneous transformations

If India is to be a growth marathoner, it must manage three simultaneous transformations. First is becoming a

more cohesive society. This will require a sustained focus on tackling disparities and achieving inclusive growth. Within one generation India could be transformed from a poor and mainly rural society to an upper middle income and urban society, as its per capita income rises rapidly and millions of people move from villages to urban centres. Today a large number of people still depend on traditional agriculture—not integrated into the mainstream economy and not participating in the current economic boom. As a result, India has an enormous backlog of poverty manifested in hunger, lack of education, high infant and child mortality and limited access to water, sanitation, power and health services. As incomes rise, demands for quality services in each of these areas will also rise, perhaps faster than incomes, given India's open democracy and the communications revolution.

So if India is to truly become affluent in the next 30 years, it will have to solve the problems of rural society

#### Box 2 | Historic nature of India's promising rise

The forthcoming rise of India will make history in at least four aspects:

1. *Size and speed.* The Indian economy's share of global GDP (at market exchange rates) would jump from about 2 percent in 2007 to almost 18 percent in 2039. This compares with the hundred years it took Europe to its increase share of GDP to 20.5 percent before the Industrial Revolution to 1900, and the United States 93 years to go from about 1.8 percent of global GDP in 1820 to 18.9 percent in 1913. Japan went from 3.0 percent in 1950 to 8.6 percent in 1990.
2. *A continental economy—and a diverse and democratic society.* There is validity to the argument that the challenges facing India cannot be compared with the experiences of Hong Kong, Singapore, Taiwan or even South Korea. Europe's rise occurred when it comprised a large number of individual and independent nations. Indeed, India can be compared with only two continental nations—China and the United States. And in the diversity of its people and democratic political system, only the United States is comparable.
3. *No traditional levers of power.* India cannot rely on military power or a particular ideology to expand its global footprint. Historically, western countries expanded their global economic and political footprints either through military might or by leading an ideology. They often secured access to cheap resources needed by their home economies through dominant military power or through political alliances. India must manage its expansion in the global marketplace without these traditional levers of power. It must play by the rules of the global economy and become more competitive than others.
4. *A more competitive and global economy.* The international economic environment facing India during the next 30 years will be much more competitive, and natural resources much more scarce, than even for Germany and Japan after World War II. Indeed, India will be striving to increase its share of the global economy not only in competition with other large emerging markets such as China but also as large western economies become much more concerned about their own jobs and prosperity.

**“If India is to be a growth marathoner, it must manage three simultaneous transformations: becoming a more cohesive society, becoming a globally competitive economy, and becoming a responsible global citizen**

and deliver services to a massive population. This task will be made slightly easier by the fact that India's population will be on the move to cities. An unprecedented migration from rural to urban areas is under way. It will put tremendous premium on the speed and effectiveness of local city governments in delivering adequate (and quality) services. Further, even as the per capita income of the country rises significantly and mass poverty is eradicated, disparities in incomes and access to public services and economic opportunities will need attention to maintain social cohesion. For this India must tackle much more aggressively problems of structural inequities.

Second is becoming a globally competitive economy. For India to continue converging with technologically more advanced economies, it must continue to enhance its competitiveness. Its current growth is mainly based on productivity gains from a shift in the labour force from low to higher productivity activities, as people move from farms to service firms. This strategy helped India move from a low income to a middle income economy. But it will not sustain the long-term growth that will permit India to become affluent. To do that requires support for a highly skilled workforce, innovation, technological upgrading and ultimately new technology development to continue the climb up the global technology ladder, as Japan and South Korea have done in the past 50 years. For this to happen, quality and merit-based education for the entire population will be a must. India's infrastructure deficiencies are well known and must be resolved. Finally, as demonstrated by recent events, availability of a well functioning and stable financial sector is a key global and national public good, essential for the real economy to develop and prosper. The solutions in all these areas require making choices that have long-term consequences: rail or road transport, coastal or inland development, coal or renewable (including nuclear) energy and whether or not to develop Mumbai into a well-functioning modern city capable of hosting a global financial centre.

Third is becoming a responsible global citizen. India's footprint in the global economy and resource base would expand dramatically, by a factor of nine, as its share of global economy jumps from 2 percent now to almost 18 percent by 2039. India's sheer global size implies that it must take a different path to sustain development. Its use of water and energy is wasteful, and it seems clear that India must develop a competitive economy that is much less resource intensive than today. The size of India's economy also means it must concern itself with global economic citizenship—in the G-20, in the World Trade Organization, in its relations with China and Japan, in the Association of Southeast Asian Nations and in other global groupings.

To become a global economic and political powerhouse India will also need to transform its position and relations within the subcontinent. Despite considerable progress in most other economic areas, South Asia remains dead last in regional cooperation. There is a limit on how far India and the other South Asian economies can go without cooperating as other world regions have done. For example, the countries share many regional public commons that cannot be effectively tackled in isolation—such as environmental degradation and climate change, water resource management, and security and terrorism. Can India learn from China's recent strategy to “extend” its growing economic prosperity to its neighbours and nurture closer relations with them despite past tensions?

For India to meet its promise for 2039, it will need to achieve social indicators and measures of economic competitiveness similar to those of South Korea today (table 1).

### **Imperatives for realizing the promise**

Managing these three transformations simultaneously will be an enormous challenge. To do so, India must anticipate and adapt to the changes wrought by each of these transformations individually and collectively. Most of all, it will require a fundamental change in the focus and basic mindset of the policymakers to meet the:

**“Managing three transformations simultaneously will be an enormous challenge. To do so, India must anticipate and adapt to the changes wrought by each of these transformations individually and collectively**

Table 1 | **Achieving Korea’s social and economic indicators**

Indicator	India today	Korea today
School enrolment, tertiary (% of relevant age group)	11.8	91
Literacy rate, adult total (% of people ages 15 and older)	61	na
Hospital beds (per 1,000 people)	0.9	7.1
Physicians (per 1,000 people)	0.6	1.6
Urban population (% of total population)	29	81
Population in urban agglomerations > 1 million (% of total population)	12	51
Improved sanitation facilities (% of population with access)	33	na
Electrical outages (days)	67.00	0.04
Electric power transmission and distribution losses (% of output)	25.0	3.5
Mobile phone subscribers (per 100 people)	15	83
Broadband subscribers (per 100 people)	0.2	29.0
Clean energy consumption (% of total)	2.4	18.0
Carbon dioxide emissions (kilogrammes per 2005 PPP \$ of GDP)	0.60	0.47
PM10, country level (air pollution: particulate matter, micrograms per cubic metre)	68	37
Water productivity (2000 \$ GDP per cubic metre of total freshwater withdrawal)	1	31
Research and development expenditure (% of GDP)	0.9	3.2
Scientific and technical journal articles (per million people)	13	341
Researchers in research and development (per million people)	119	3,723

na is not available.

Source: Centennial Group in-house database, 2009.

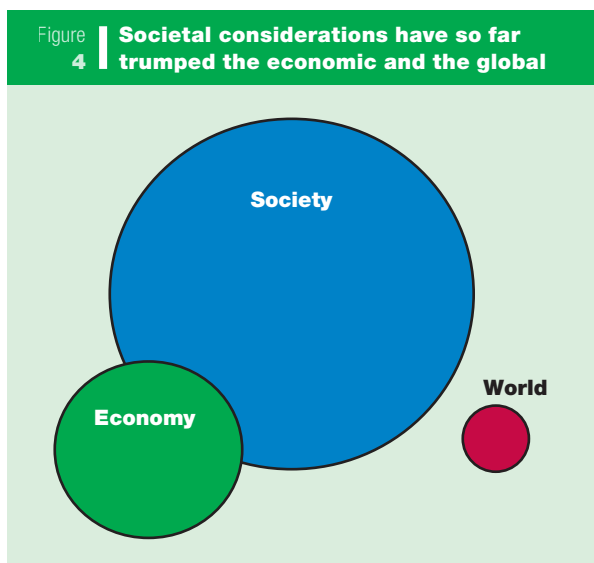
- Fast-evolving expectations of a younger, richer, more urban and more demanding Indian populace.
- Needs of more visible and more critically examined changing Indian economy as it continues to climb up the global competitiveness ladder.
- Obligations arising from India’s expanding global footprint on its interactions and relationships with the rest of the world—and take advantage of related opportunities.

Until now, the Indian polity and economic policymaking have paid primary attention to the needs of society (figure 4): how to reduce mass poverty and maintain social and political stability. Whenever there was a (real or perceived) tradeoff with the economy or India’s

relations with the world—more often than not the policy choices were populist, deemed to favour the common person. The repeated inability or perhaps unwillingness of successive governments of all political configurations to eliminate subsidies, open the economy faster or reform outdated labour laws are clear examples of these political compulsions and the populist policies to win electoral votes. While this may have been the right approach to decisionmaking when the country was still fighting mass poverty and trying to keep itself together, such a one-dimensional and doctrinaire mindset is no longer sufficient for India to become a much more prosperous society.

While societal considerations will obviously always remain important in India—large, diverse and

**“ The perspective and mindset for policymaking require profound change**



democratic—the economic and global considerations will steadily become more important, with all three becoming more intertwined as the Indian economy advances. As a result, India’s long-term prospects and growth will depend on its ability to balance all three dimensions as it makes policy decisions on almost every important issue.

### Profound change in perspective and mindset

The perspective and mindset for policymaking require profound change:

- *Society—moving from a poor society to a cohesive affluent society.* In many countries, initial development brings with it greater equality as labour moves from low to high productivity occupations. But once middle income status is achieved, the drivers of development change and inequality can rise. India is in the throes of a major urbanization, but the shift will be too slow to bring the large rural population into the modern economy. Rural development and mass service delivery in both rural areas and cities will be crucial for achieving and maintaining social cohesion. As the country moves towards being affluent, it will need to change the focus of its

social policy from alleviating poverty to maintaining social cohesion. Removal of structural inequities will remain a challenge even after mass poverty has been eradicated. This change has to start soon.

- *Economy—moving from a domestically oriented to a globally competitive economy.* Despite rapid growth, India has not built a foundation for a modern advanced economy. Its enterprise sector is highly fragmented, and the share of medium and large firms is very small by international standards, crimping the creation of formal sector jobs and the adoption of new technologies. The country needs to accelerate development of broad-based manufacturing capabilities, now hampered by notoriously poor infrastructure and outdated labour laws. It also has to look east, towards the new growth centres of the world. And it has to broaden its skills base beyond a few centres of excellence and foster innovation on a national scale. In short, it needs to create and enhance its globally competitive edge. Finally, pressing ahead with and indeed speeding up reforms to enhance financial sector efficiency and stability along with restoring fiscal balance are still of paramount importance. Hence the need to widen the focus of economic policies from achieving and maintaining high growth to enhancing global competitiveness and closing the gap with global best practices.
- *World—moving from a small player to a responsible global citizen.* India’s global economic footprint could jump by a factor of nine in a span of 30 years. Given the magnitude and speed of the expansion, it will be in India’s self-interest to improve relations with neighbours, to take responsibility for preserving a stable and well functioning global financial system and an open global trade and investment system, to use energy and natural resources carefully,

to accept appropriate global standards for efficiency and to care for the environment and minimize its carbon footprint. India's mindset and the goal of foreign policy need to shift from protecting India's narrow interests to becoming a trusted and respected co-leader of the global political and economic clubs.

The country—both government and business—has to strike a balance among all three dimensions if it is to stay on the marathoner route (figure 5). Effectiveness of institutions in shaping and implementing policies across the cross-cutting issues will be fundamental to becoming a marathoner.

Central intergenerational issues

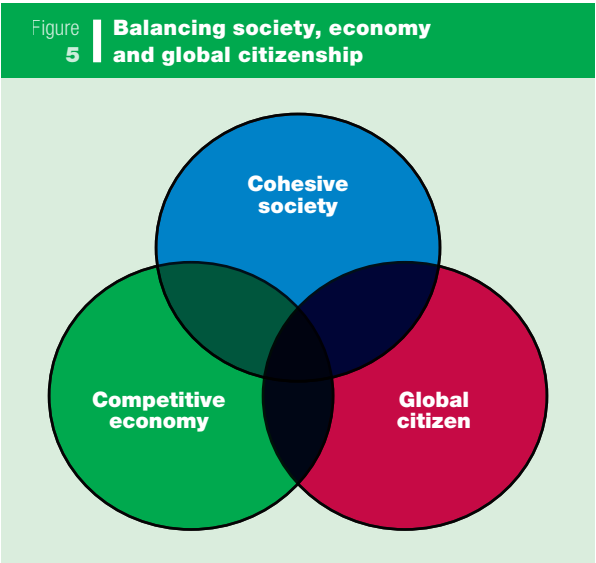
This report has deliberately focused on intergenerational issues that get short shrift in day-to-day political debates and policymaking under crisis. It identifies the following seven areas or issues that have a long gestation period but that require an immediate start in order to meet the

“ India’s long-term prospects and growth will depend on its ability to balance all three dimensions—society, economy and global citizenship—as it makes policy decisions

challenges as the country moves from a poor society to an affluent society. Successfully tackling these issues will be critical to India's ability to avoid the middle income trap (see part 4). Governance, accountability and implementation are overarching issues common to all:

- 1. Tackle disparities and achieve inclusive growth.
- 2. Dramatically improve the quality of the environment.
- 3. Eliminate infrastructure bottlenecks—Create a competitive edge.
- 4. Improve the delivery of public services—Create functioning cities for sustaining growth.
- 5. Renew the focus on education, technological development and innovation—Keys to sustaining improvements in competitiveness.
- 6. Launch a revolution in energy—Ensure security and competitiveness.
- 7. Foster a prosperous South Asia and become a responsible global citizen—India, its neighbourhood and the world.

In a desperately poor society, people traditionally look to their rulers for solutions to life's hardships, the foundation of the “mai-bap” relationship between India's government and its people. But an affluent and dynamic economy is based on a different approach to governance, one where government is not the decisionmaker and implementer of all economic decisions but only a facilitator and regulator to ensure competition, safety and environmental compliance. An affluent India (with its economy driven by private enterprise) will need a very different approach from its government—smart, focused on results and outcomes, pragmatic and willing to revisit laws, regulations, institutions and targets that have proven unrealistic, and inculcating a culture where politicians and bureaucrats see themselves as engaged in “public service” and accountable to citizens.





---

# INDIA 2039

---

---

## PART 3

---

**Transforming  
the Indian  
economy  
and society:  
overarching  
issues of  
governance**

---

What is striking about the basic intergenerational issues is that their solutions are invariably rooted in one or more aspects of governance. Seven facets of governance must change to transform the Indian economy and society:

- Create a smarter, more focused, agile and more credible government.
- Retool the civil service to meet the needs of today and tomorrow.
- Focus on the long term and open the public-private dialogue.
- Support competitive markets and prevent capture of state organs.
- Inculcate a code of self-discipline and ethical behaviour within the business community.
- Implement priorities, monitor results, ensure transparency and enforce accountability.
- Reverse the deterioration in political governance..

Identifying practical solutions requires appreciation of all these facets that are closely intertwined like the pieces of a jigsaw puzzle.

Consider a simple example. If delivery of quality basic education to all Indians is the stated national objective, one facet is making sure that the state and local governments actually give education the requisite priority and resources. Another is that mechanisms are in place to recruit enough fully qualified teachers—and post them to schools serving all segments of the society. Another is that teachers turn up at school every single day. And yet another is that someone monitors actual results and that individuals and units are held accountable for addressing shortcomings and delivering results. All are part of governance.

Governance of the education system thus comprises clarifying the role of governments at all three levels—centre, state and local—executing agreed policies by various parties, setting incentives for the behaviour of teachers (civil servants), focusing the system on the long-term implications of quality basic education and monitoring outcomes against agreed objectives.

India can certainly make do in the short term without fundamental changes. And the needed change—painful, contentious and certain to be resisted by the entrenched powers and vested interests—will require political courage. It will be thus very tempting to leave such actions to successive governments.

There is, however, a very long gestation period for such fundamental changes in the system. It will take at least a decade, if not longer, before the requisite changes are fully realized. By that time India may be exactly in the trough where most countries get mired in the “middle income trap”. So, despite the hurdles and the temptation to put it off to another day, procrastination is just not a responsible option; in fact the lead times required to make the cultural and institutional transitions permit little leeway.

Actions on each of the facets could be regarded as immediate down payments and visible demonstrations of the Indian leadership’s commitment to build the foundations of an affluent nation.

### **Create a smarter, more focused, agile and more credible government**

Through the first generation of macroeconomic reforms launched around 1990, India has been able to jumpstart growth. But it still relies on the mindsets, institutional structures and practices inherited from the British Raj. While the values and attitudes of people and the private sector have changed dramatically since the 1990 reforms, the government’s reach, structures, processes and centre-state-local relations have remained essentially unchanged.

Today’s highly centralized government is overstretched and ineffective. The current model cannot be expected to work in one of the world’s biggest and most complex economies—1.1 billion people now (up from 350 million at Independence) and 26 states (about double the number in 1950), some larger than a majority of the world’s countries:

- The government is still trying to do too much, well beyond its capacity and capability. As a result, almost everything done by the

**“A refocused government is essential to facilitating dramatic transformations in the Indian economy and society. There is a need to rethink not only what the government does but also how it does it**

government is inadequate and inefficient, while many aspects critical for long-term success are being overlooked (such as the state of the education system, the large-scale shift from rural to urban areas, the plight of cities, international economic diplomacy to enhance energy security, threats from climate change and India’s role in global governance).

- Central government still performs functions better handled by state or local authorities, despite the federal structure anticipated in the constitution (central government programmes to provide basic education, improve urban management and provide power to rural areas).
- The role of the Indian civil service—with highly intelligent generalists—in both policymaking and public service delivery was a major strength during colonial times and immediately after Independence. But the system has become outdated and a barrier to change (see also next section on retooling the civil service).
- Until administrative fiat is significantly curtailed at the central, state and local levels, crony capitalism and petty corruption will continue to be a drag on the economy (the ongoing capture of regulatory organs and the access to public land and concessions by business houses and politicians).
- The continuation of a combination of weak and ineffective state and more powerful and creative big business houses will inevitably lead to large-scale misuse of market power and invite a massive backlash against a market-based economic system. While scaling back many current government activities, India urgently needs more self-regulation by industry as well as stronger and more vigilant independent state organs to ensure more ethical and transparent behaviour by the private sector.

A refocused government is thus essential to facilitating dramatic transformations in the Indian economy and

society. There is a need to rethink not only what the government does but also how it does it. Refocusing and curtailing some of the current functions will make more room for performing the remaining government functions well. It will also release space and senior leadership time to focus more on the new functions and activities of modern governments (periodic assessment and reformulation of broader economic strategy, stronger supervision of the markets—including financial markets—and an active and more coordinated role in various international fora).

India needs to fundamentally rethink and refocus the role of government at all three levels—centre, state and local—and create honest and well functioning institutions in all spheres of life. Tinkering at the margins will not do. Three interrelated changes are required:

- Rethink the role of the public sector relative to a growing role for the private sector and civic society in all aspects of the economy and society.
- Decentralize authority from the central government to state, municipal and local (panchayat) levels. Consistent application of the principle of subsidiarity—tested and proven worldwide (European Union, United States) and enshrined in India’s constitution—is the only long-term solution.
- Build high-quality and credible institutions accountable for delivering quality services across the public and private sectors and for overseeing private market players.

The primary role of government has to be to inspire, lead, coach and oversee the private sector and civil society, instead of being the primary decisionmaker and controller of the main economic and social activities. The shift will give greater space to the private sector to innovate, take risks and openly compete with others. At the same time, India must create room for strengthening government capacity for performing its basic functions and in addressing new areas critical for long-term success.

Another priority is simplifying administrative procedures and reducing the number of agencies, at different levels, providing clearances for undertaking any activity. For example, at least 30 clearances involving several agencies at the centre and the states are required for setting up even a modest-sized industrial factory. Except in selected areas (such as provision of power and water), it is desirable to cut through the elaborate red tape and rely primarily on self-certification. The government can lay down standards and norms (say, for environmental impact or safety), and the entity concerned may be required to self-certify at the highest levels of management that the notified procedures have been complied with. Government agencies can make random checks and if there are violations, appropriate penal action can be taken. Similarly, the complexity in regulations should be reduced drastically, as has been tried in some areas with success (for example, foreign exchange transactions).

Case studies of international experience in managing public services show that the objective of such programmes can be achieved better, and at less cost, if a distinction is made between the financing of these services (by the government) and the delivery of such services (by nongovernmental organizations and local enterprises). In such cases the public authorities retain the responsibility for regulating and monitoring the activities, providing subsidies where necessary and laying down distribution guidelines. In India two noteworthy examples of public-private collaboration in public services are the public call offices, which revolutionized the availability of telephone services all over the country in the 1990s, and the Sulabh Shauchalayas, which despite some problems are estimated to have provided sanitation facilities to 10 million people at very low cost.

The functions of government thus carefully defined once should be periodically updated to eliminate those that are no longer needed or that are beyond its capabilities. Periodic functional reviews should identify areas for the government to withdraw from through downward decentralization, privatization, outsourcing or simple

**“ Periodic functional reviews should identify areas for the government to withdraw from through downward decentralization, privatization, outsourcing or simple elimination**

elimination. Indeed, such periodic reviews and reassessments, a critical function of a modern government, deserve much more attention in India.

### *Immediate steps*

The required transformation in the role, focus and effectiveness of the government—and at all three levels—is a huge undertaking and will take a decade or more to bring about. But that is no reason to delay. Instead, it demands an immediate start with strong support from top political and business leaders alike.

We propose two major first steps as a demonstration of the change in mindset and the resolve of national leaders to build the foundations of an affluent India within one generation (a closely related proposal on the retooling of the civil service follows):

- *Refocus central government ministries.* To be credible, the move towards a smarter and more focused government has to be led by the central government reforming its own role and functions. A basic principle should be to fully separate strategy and policy functions from the execution of operational activities. Central ministries should focus on strategy, policy and monitoring, and delegate policy implementation to the states, independent public enterprises and the private sector. Enterprises retained under state ownership, currently under the purview of sector ministries, should become fully autonomous, with an independent state organ exercising normal ownership rights (including oversight). This will eliminate the current conflicts and duplication in policymaking, create a more level playing field for all competitors (public or private), severely reduce the workload on the line ministries (allowing them to focus on their core functions and perform them much better) and permit a major consolidation of the ministries.
- *Give full autonomy, with clear accountability, to cities over 1 million in population within the next*

**“An integral part of creating a smarter and a more credible government is a retooled bureaucracy**

10 years. This can be done by implementing the intent of 74th Constitutional Amendment, which acknowledges cities as a “third sphere” of government. As Gujarat and Kerala have demonstrated, delegating full autonomy to cities and having fully empowered elected mayors is feasible under current Indian laws and can dramatically improve the quality of city management and public life. The three main obstacles—none of them legal—are: the reluctance of state authorities to cede power, the perceived risks of increased corruption and the low institutional capacity at local levels. To overcome the first obstacle, the central government can deploy its considerable power of suasion and use financial incentives by modifying the Jawaharlal Nehru Urban Renewal Mission. The other two obstacles can be addressed by using public scorecards that measure service delivery, designing appropriate financial incentives, building capacity and “professionalizing” local administrative services. Colombia turned its cities around—Bogota is widely regarded as a model—through a local financial accountability act.

### **Retool the civil service to meet the needs of today and tomorrow**

Effective, professional and credible bureaucracies are a hallmark of all successful Asian economies and the United States. At Independence, they were also a major strength of the Indian state. An integral part of creating a smarter and a more credible government is a retooled bureaucracy aligned with the future needs of a large, complex economy, with the expectations of a more demanding affluent society and with the changing values and capacity of a dynamic private sector. Unfortunately, the Indian bureaucracy, despite its illustrious past, is far removed from meeting these criteria, and a major hurdle to implementing the government’s strategy and policies.

Numerous administrative reform commissions have recommended fundamental change—but there has been no follow-through. We do not need to go further than the recent report of the Second Administrative Reform Commission, which stated quite categorically: “It is ironical that there has been no sincere attempt to restructure the civil service although more than six hundred committees and commissions have looked into different aspects of public administration in the country”. The report went on to conclude: “Civil service has to change, not in the incrementalist manner that barely

#### **Box 3 | Judiciary, police and other internal security institutions**

A strong, independent, efficient and credible judicial system as well as law enforcement machinery is critical to any nation’s well being. This is even more the case for India given its vast size and huge religious and cultural diversity. An aspiring affluent Indian nation needs (and its citizens will demand) these institutions to be functioning well.

The problems in the Indian judiciary, police and internal security apparatus are well known. The judicial system is plagued with vast under capacity resulting in huge backlogs of cases and very long delays in resolving cases as well as elements of corruption, especially at lower levels (but also in higher courts).

At the same time, the judiciary is increasingly getting involved in certain aspects that are clearly in the domain of the executive branch of the government. The police apparatus also has its own problems: poor equipment, facilities and training; lack of full integrity and transparency in the recruitment at Thana levels; corruption; and poor accountability, to name a few. The November 2008 events in Mumbai have also highlighted the nation’s vulnerability to such attacks and exposed weaknesses in its internal security.

These deficiencies have persisted despite continuous pronouncements by successive governments. A crash programme is required to overcome them.

touches the basic structure. It has to be a total change, a thorough transformation, a metamorphosis.”

### **Immediate steps**

Accountability to the people should become the guiding principle of the civil service at all levels. This would require a major attitudinal shift among the civil servants, too few of whom see themselves as serving the people. It would also require a new structure for the civil service, consistent with the general thrust of decentralization. This should be the starting point for a retooled civil service.

The first major step would be to replace the current national Indian Administrative Service, comprising generalists, with officials specialized at state and functional level. The Indian Administrative Service as a national civil service should be replaced by general civil service recruitment unique to central and state levels of government. Selection should continue to be competitive and transparent. All professional employees should be recruited through the civil service at the relevant level of government, with competitive progression from one level to the next based on merit, not pre-ordained for an elite group of officers. Top managers should be allowed to select key members of their teams, based on merit and a transparent selection process.

The insularity of the senior civil service should be broken by recruiting senior professionals with an outstanding record in business, science or academia for the top 15–30 percent of positions while encouraging promising young civil servants to obtain experience outside the government. The current system of perks, particularly housing, reinforces the image of civil servants as “rulers” and should be abolished, with its value monetized in the salaries. The key here would be to inculcate the spirit of public service, re-create integrity and introduce accountability. The new national service could be named the “Indian Public Service”.

Permanent civil services in Japan and the United States are structured along these lines, with some variance to reflect their political systems.

**“ The key to overhauling the civil service would be to inculcate the spirit of public service, re-create integrity and introduce accountability**

Another powerful instrument for improving the transparency, responsiveness and credibility of all branches of government is strong support by the top political and civil service officials for the full and genuine implementation of the Right to Information Act. We discuss this aspect further later in this report.

### **Focus on the long term and open the public-private dialogue**

A major distinguishing feature between the success of East Asian economies in raising incomes and the difficulties Brazil and Mexico have had in achieving middle income status—is a sustained long-term focus in all policy deliberations, to anticipate change, to constantly rethink strategy and to make timely strategic and institutional changes.

This focus on the long term differs fundamentally from the traditional concept of central planning. It involves forging a shared long-term vision and goals for the country, and then using all available tools to achieve that vision. It requires motivating all economic agents, developing a concrete and realistic strategy that is periodically refreshed to reflect changed circumstances, forging strong partnership between public and private sectors, creating appropriate policies and incentives and constantly reinventing the related institutions. The basic challenge is to maintain a long-term focus within a country’s political and social setting.

Indian democracy precludes single-party dominance, as in China, Malaysia and Singapore. India’s weakened bureaucracy precludes following the French (or Japanese) model. And given the recent era of coalition governments and India’s size, it is not realistic to expect a single national leader to emulate Malaysia or Singapore.

In this respect, other distinguishing features in East Asia were the close interactions and partnerships between government and private sector. Their absence has been a negative factor in Latin America. Hong Kong, Japan, South Korea and the United States have forged a consensus among policymakers, academia and

**“ India needs to learn from East Asia, recognizing the mistakes in earlier years and not allowing powerful business interests to capture the state**

business on major economic policy and strategy issues as a result of regular interactions (formal and informal), mutual respect and recognition of joint interests.

In India having closer and more open interactions between the three, while equally important, will be a much bigger challenge. As in many former British colonies the basic mindset is still mutual distrust. The Indian Administrative Service disdains the “impurity and vulgarity” of the private sector and the “ivory tower” mentality of academia, so they really do not talk to each other. Yet in today’s world they must.

India needs to learn from East Asia, recognizing the mistakes in earlier years and not allowing powerful business interests to capture the state (see the section on contestable markets). The private sector and public leaders have to work hard to eliminate widespread suspicion and distrust of the business community among many intellectuals and the bureaucracy, a remnant from the British Raj.

The United States, while not a perfect match, comes closest to India in its diversity, its politics and its intellectual capacity. Like the United States, India must find ways to maintain a long-term focus beyond the term of individual governments. In our view, in the absence of any obvious alternatives, India should look to the U.S. think tank model. Across several administrations of both parties, the Council for Foreign Relations has shaped foreign policymaking and long-term strategy formulation, the Rand Corporation defence policy, and the Centre for Strategic International Studies international security. While it will take much time and effort to replicate the United States model in India, we believe this is the best, if not the only practical, way to go.

The think tanks would also promote public-private sector dialogue by following the example of how the United States forges this consensus through the interchange between academia, business and the civil service, so that there is a constant flow of ideas and exchange of expertise and experience between the three. In the U.K. model, there is less of this, but certainly much more porosity than the current colonial

models in the Commonwealth. So, building think tanks that bridge all three is the key to “selling” the national vision. Such think tanks will inevitably move towards different party affiliations due to different points of view.

India already has numerous think tanks. Under our proposal, however, there will be three major differences: much less reliance on government funding and on government-sponsored projects; much greater specialization, combined with a critical mass of specialized professionals; and leadership by recognized professional experts in the field of specialization of the think tank.

### Immediate steps

India should create a network of independent think tanks— independent of government, individual parties, advocacy groups and business houses—focusing on and specializing in longer term issues of great national interest. These think tanks should avoid becoming all-purpose general research houses. Instead, they should each focus on one major critical issue and seek to become the very best source of ideas and national strategies on that issue. The issues identified in this report could provide the starting point for the selection of the issues to be covered by the network of think tanks. In addition to domestic issues such as education, energy and cities, an early priority would be to facilitate work on two topics not yet on government’s core agenda. First is India’s role in the long-term political stability and economic prosperity of its immediate neighbourhood in South Asia. Second is India’s long-term relationship with the global economic community and the major multilateral institutions.

The effectiveness of the think tanks will be highly dependent on their having a critical mass of dedicated and well qualified staff led by highly respected leaders with demonstrated track records and widespread credibility in their functional area. To ensure quality, independence and professionalism, their core financing must be long term, preferably in endowments. Relations with the government in office should be at arms-length.



### **Support competitive markets and prevent capture of state organs**

Effective competition policy combined with significant self-regulation is the hallmark of the United States and the successful Asian economies.

Corporate wealth in India has soared in the past two decades. By early 2008 India had almost 50 billionaires. The ratio of their net worth to GDP was over 20 percent, way above Latin American countries such as Brazil or Mexico, and even Russia. A handful of Indians reportedly own more than 80 percent of stock market capitalization. While the expansion of corporate wealth was part of the pro-business policies that helped support growth, there is now a growing risk that parts of the corporate sector will wield excessive influence over the state. Indeed, some of the biggest fortunes have been earned in “rent-thick” activities that offer opportunities from privileged access to land, natural resources and government contracts. This concentration of wealth and influence could be a hidden time bomb under India’s social fabric.

The emergence (or consolidation) of oligarchic capitalism can slow long-term development through its adverse impact on incentives for structural change and through the reduced autonomy of the state (box 4). Laying the institutional bases for competitive and effectively regulated markets will thus be an essential ingredient of India’s long-term social cohesion and economic competitiveness.

#### **Immediate steps**

The country must build open transparent markets to enable the easy exit and entry of the private sector in all aspects of the economy—including infrastructure—to generate economic growth and serve the needs of society.

The public sector should give the highest priority to making the long dormant Competition Commission effective and credible. And it should focus on creating genuinely independent regulatory bodies to eliminate the ongoing “capture” of regulatory bodies by big business and politicians. Political leaders and policymakers should

**“Laying the institutional bases for competitive and effectively regulated markets will be an essential ingredient of India’s long-term social cohesion and economic competitiveness**

not only allow the regulators but also encourage them to use whatever authority they have to maximize competition and protect consumer interests.

### **Inculcate a code of self-discipline and ethical behaviour within the business community**

While stronger, more effective and independent regulatory bodies are a must in a market economy, they cannot and are not a substitute for market discipline. The business community must accept its responsibility for adopting and adhering to more ethical behaviour and self-discipline.

The dangers posed by the continuations over the longer term of today’s combination of weak state organs and a more powerful, assertive and at times unethical business community are enormous. Already, there are mounting concerns about the regulatory capture by big business and politicians (witness the failure of state electric regulatory commissions to carry out their fundamental responsibilities to protect consumer interests) and the state capture by large business houses on public policy (undue influence of policy, access to scarce land and mineral resources, award of large government contracts).

Recent events in developed countries have highlighted the enormous economic cost of privatizing profits and socializing losses. In many respects India’s chronic fiscal deficits are part of this syndrome. Populist policies designed to win votes over the short term not only use public funds for gains by individual political parties or leaders, but also give priority to consumption today over investment in the future.

The private sector must recognize that many current practices that allow a few powerful business houses to thrive are ultimately against the long-term interests of the business community as a whole. Not only is the current model not sustainable, it is potentially disastrous, as it could bring into disrepute the entire system and launch a popular backlash that will be difficult to contain.

Accordingly, the business community must take steps to inculcate a new sense of ethics, morality and self-discipline and to consider innovative business ideas

**“ India must build open transparent markets to enable the easy exit and entry of the private sector in all aspects of the economy**

that are profitable and that would help solve some of the intergenerational issues discussed here. In addition, it should support efforts by progressive political leaders to snap the country out of the current state of affairs as well as efforts by civic society and media to act as honest watchdogs of the system.

### Immediate steps

The major business associations and chambers—including the Bombay Chamber—should voluntarily promulgate a strong code of ethics and full disclosure, putting in place measures to ensure that their members adhere to it. The private sector should develop new

### Box 4 | Oligarchic or competitive capitalism?

India’s corporate sector has been a major source of dynamism in the period of rapid growth. Many Indian firms now have global recognition and reach. This has led to a large-scale expansion in productive capacity—and also generated massive increases in wealth amongst India’s corporate billionaires. A common narrative is that India’s capitalism is in good shape, and it is only the creaking Indian state that is holding back long-term development and inclusion.

There is a large element of truth in this story. But there is a risk that India will evolve towards a condition of oligarchic capitalism, in which the market and political power of major corporations will become a drag on long-term growth and a source of distortion in policy design. India is vulnerable precisely because parts of the state are weak and so susceptible to influence, whether via political finance, the political need to get investment or outright corruption.

India’s development dynamic is not unusual. Many countries have experienced periods of rapid growth thanks to family-based corporations and then had to deal (or failed to deal) with the risk of oligarchic capitalism. U.S. dynamism in the late 19th century involved highly successful investors such as J.D. Rockefeller—known as “robber barons” by some—who formed immense conglomerates or “trusts”. Japan and South Korea also relied on family-based conglomerates. But all these countries then developed policies and institutions to check their power. Mexico’s recent history provides a warning. The development of corporations, controlled by wealthy business families, has in many sectors led to high-cost structures that are hurting growth prospects—and this despite an external opening that is deeper and broader than India’s. In Mexico’s case the problem is closely linked to the weakness of the judicial and

regulatory system, and a poorly informed legislature. The consolidation of oligarchic capitalism would lead India into the middle income trap.

Fostering competitive rather than oligarchic capitalism is a major issue of institutional design for India. This does not mean a return to a controlling state, but it does require a more effective and autonomous state in many areas. Specific domains for action include the effective implementation of the long-delayed new competition law assuring transparent and competitive mechanisms for award of concessions and independent regulation of public private partnership in infrastructure and getting greater transparency and openness into land allocation processes.

These will involve tackling the broader problem of links of power and money between politicians, the state and the private sector. The Right to Information Act and social watchdogs will be a necessary complement to accountability mechanisms within the state. Also central to competitive capitalism over the long run is the continued broadening of the financial system and the big issue of an effective judiciary. Policy design is not a once-off affair, but an ongoing challenge, as illustrated by the more recent experience of the United States, from Enron to the subprime crisis.

Equally important is the behaviour of the business sector itself: there is scope for establishing codes of conduct over independent directors and procurement behaviour. Established firms can work the system. But the business sector as a whole—especially actual and potential new entrants—has an interest in pressing for stronger checks and balances, working with the state and societal groups. Whether the business sector can organize itself to support such changes is one of the big questions India now faces.

business models that facilitate inclusive growth and are good long-term business propositions: models for affordable housing, higher environmental standards and green projects, and low-cost delivery of quality health and education services.

Two important groups must accept and carry out special responsibilities. The professional service entities—for example, the chartered accountants, auditors, corporate lawyers and credit rating agencies—must accept their special role and responsibilities in ensuring that their reports and activities are indeed independent, meet the highest ethical standards and fully adhere to the standards set by their professional bodies. This is essential to avoid repetition of episodes like Satyam and Enron. Second, independent directors of listed companies must recognize and perform the special role expected of them in corporate governance in market-based economies. The relevant professional bodies must impose severe and public penalties, without exception, on members who violate their standards.

In other words, all key players in the markets must fully recognize their respective roles and responsibilities and undergo a fundamental change in the mindset, just as we recommend for policymakers and the civil service.

### **Implement priorities, monitor results, ensure transparency and enforce accountability**

Another distinguishing feature of successful East Asia countries and China—and perhaps their biggest difference with India today—has been their single-minded focus on results. Consistent with this basic mindset, these countries set and agreed on specific and time-bound outcome targets, put great emphasis on monitoring results in real time and enforced accountability.

It is widely accepted that the biggest difference between China and India is China's far superior (political and administrative) ability to produce results on the ground, by effectively implementing agreed policies and programmes. A major reason for the difference is implementation and structural coherence in China because of the single party system. But that coherence comes from

**“ India has already adopted the appropriate policies and laudable—publicly announced—targets. But the country almost uniformly falls short in delivering on its intentions**

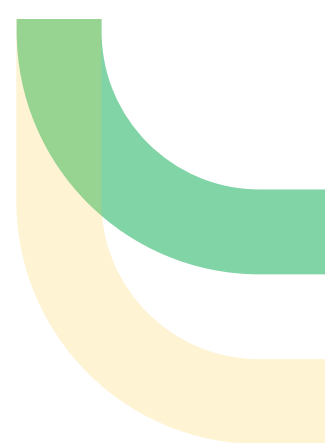
a consistent vision, a pragmatic approach to implementation and clear accountability.

The fundamental governance problem everywhere is how to align the vision (which the layman associates with globally sophisticated elite) with ground-level local politics. In this sense, how Meiji was able to forge a consensus among not just the intellectuals, but broad-based Japan is a telling lesson. Deng's Southern Sojourn had a historical precedent in the 18th century, when Kangxi made the same journey to signal the commitment to reform.

Our review of India's policy framework—be it in education, rural electrification, power generation, administrative reforms, or subsidies—reveals that, overall, the country has already adopted the appropriate policies and laudable—publicly announced—targets. But the country almost uniformly falls short in delivering on its intentions. This is partly due to the government's overstretched reach and the lack of institutional capacity to deliver on most promises. But the underlying problem is that the basic mindset of the leadership does not put a premium on results, or on holding people accountable for implementing agreed policies and programmes (box 5).

The power sector is a prime example. At the centre, the Ministry of Power and enterprises under it have repeatedly failed to meet accepted targets amply funded by the government. The state governments have routinely failed to cut power subsidies or make state electricity boards genuinely viable despite repeated agreements at many national summits. State-owned distribution companies routinely fail to reduce distribution losses required under various centrally funded schemes. Even though successive governments have assigned the highest priority to resolving the power shortages, reducing subsidies and connecting all rural areas, the shortages continue to mount, subsidies continue unabated and millions of rural users remain without grid-supplied power. Yet, no state has been deprived of funds, no fundamental changes have been made by the power ministry, and no senior officials or political leaders are known to have been held accountable.

**“ India must set measurable outcome targets, monitor actual results and enforce clear accountabilities**



Within this pernicious environment there are promising examples, albeit too few, showing that the “system” is still capable of responding quickly to changes in the mindset and priorities of the top leadership. Consider improvements in the overall quality of life, air quality and road transport in Delhi. Also look at the metro system in Delhi, the utilities and urban management in Gujarat and the recent strides made in primary education in Bihar, a state often dismissed in the past as “ungovernable”.

**Immediate steps**

What is necessary is a massive nationwide replication and scaling up of these isolated successes. And that calls for a basic change in the mindset of the entire political and administrative as well as business leadership. The country must set measurable outcome targets, monitor actual results and enforce clear accountabilities. Again, the starting point has to be at the central government level (until the decentralization and refocusing of government recommended above is fully in place).

Box  
5

**Accountable government**

The functioning of the Indian state lies at the centre of current concerns about political, social and economic outcomes. Its future performance will have a determining influence on whether India succeeds in the long transition to higher income or gets stalled in a middle income trap.

Currently the state displays a perplexing mix of characteristics. There is a tradition based on the principle of an autonomous, even Weberian, bureaucracy, epitomized by national services, such as the Indian Administrative Service. But many parts of the state are stuck in a low-level equilibrium—with dismal service quality, low levels of effort, widespread corruption and extensive politicization. All this is clearly problematic for the complex and responsive functions the state needs to carry out—now and increasingly more so in the long transition. But there are also problems with the many parts of the state where the Indian Administrative Service is dominant; for all their collective talent, the service has become a force for inertia, for resisting change in favour of just keeping the existing system and privileges.

The poor performance of the state is vividly manifest in a wide range of functions, from teaching to the judiciary. But the larger problem is that the state does not appear to be on a path of transformation to being more responsive and effective. And this is in large part because a weak state can facilitate political and economic decisions through corruption or political influence (as opposed to the highly desirable political influence that flows from an effective democratic process).

How can change occur? The challenge is to make the government genuinely accountable—to citizens, business and politicians—but through transparent processes. Such accountability works best when external societal pressures complement internal accountability structures within the state to provide incentives for responsiveness and checks and balances against corruption, discrimination or abuse. Among the catalysts for change, the most promising developments in India today probably flow from external, societal pressures, facilitated by important state-created processes. Examples include the Right to Information Act and the social audits as a legal requirement for government programmes. Potentially of equal importance would be pressure from business associations for a better state—working as a collective force, rather than seeking individual favour.

Also of great potential influence is the deepening of local democracy, with evidence of change in rural areas through the Panchayati Raj system. But a major gap in the existing structure of formal democratic accountability is the weakness of local democracy in urban areas, which will be the primary motor of change.

The transformation of the state is of fundamental importance for any transition to prosperity: there are no silver bullets, but change can occur through societal (and business) pressure and the deepening of democracy, complemented by internal administrative reforms.

**“The Indian electorate in the recent elections has unequivocally demanded a government that can function and deliver**

Specifically, we propose that a high-level monitoring unit be created in the office of the Prime Minister. It should have an unambiguous mandate to agree with the responsible parties and consolidate a timetable for policy implementation and for the outcome targets for all major government programmes, initiatives and projects. It would report quarterly and publicly on the progress relative to the agreed outcomes. It would identify issues needing cabinet attention and propose remedial actions. And it would pinpoint responsibility and accountability for success and for any major shortfalls.

In China similar functions are carried out by the State Council, with analysis by the State Economic Reforms Commission. In the United States, the Office of Management and Budget in the White House and the Government Accountability Office in the Congress have similar responsibilities. In both countries a critical success factor is their direct access and reporting to the head of national government as well as a strong professional staff (that transcends the term of the government in power).

The proposed monitoring unit should be in the Prime Minister's office, professionally led by a person of stature with no stake in a career in the general civil service and have a permanent statutory role (to transcend terms of individual governments and to give it the necessary clout over the bureaucracy). Similar monitoring capacity should be tried for state and local governments.

A related area is transparency in decisionmaking within the government. A major step in this respect has been the enactment of the Right to Information Act in 2005. The beneficial impact of this legislation in making government accountable and citizen-friendly is already visible. A further step in this direction is to require all ministries and departments of the government to proactively make information on their decisions available to the public (excluding security-related subjects). The information should be released by the ministries without the need for any member of the public to ask for it. If this is done, the free media and civil society institutions will be better placed to promote accountability in the decisionmaking process.

### **Reverse the deterioration in political governance**

There is almost universal agreement amongst everyone we consulted that almost all problems concerning the above facets of governance and their solutions are rooted in India's political governance. There also appears a strong consensus that India's democracy and political governance—a major strength and reason for India's survival during the period immediately after Independence—has deteriorated alarmingly during the past two decades, making it extremely difficult to govern the country, irrespective of which party is in power.

Our team was initially reluctant to comment on this central issue, since solutions can be devised only through an open and candid debate and agreement between the leaders of major political parties and experts much more knowledgeable than we are.

However, the Indian electorate in the recent elections has probably shown a greater recognition of the issue than the political power brokers and has unequivocally demanded a government that can function and deliver without having to drop to the lowest common denominator in order to mollify its coalition partners who share neither a national aspiration nor perspective.

This clarion call of the voters in May 2009, in our view, presents a historic opportunity for bold and decisive action. While clearly the government needs to develop a strategy and a plan of action first to generate a consensus around end outcomes and then the means, the momentum provided by the recent verdict of the electorate should not be allowed to dissipate.

The smaller regional parties have a vital role in their states, where they often form the state governments. Even with an effective national government at the centre, state leadership has to grasp control and act in a number of the areas mentioned in this report. A confident and committed central government that provides leadership and facilitates the states' ability to act would clearly accelerate the process.

**“ Even with an effective national government at the centre, state leadership has to grasp control and act**

**Immediate steps**

Soon after the elections in April–May 2009 the government should lay out, say in the next 30 days, clear targets for where the country should be on some 5–6 (if not all) of the intergenerational issues. These should be debated, over the next 60 or so days, in a public-private dialogue that engages the political sphere, civil society and the private sector. Based on the outcome of these discussions, the government should then refine these targets, establish clear yardsticks and milestones and spell out the accountability and the “how” of achieving them. These should then go through the formal federal and state legislative approval processes. The high-level unit recommended to be set up in the Prime Minister’s office (see earlier section) should be charged with monitoring and periodically reporting on progress.

Such an agenda should be supplemented by measures to enable and empower state and local governments to carry greater responsibility and accountability for meeting day-to-day needs of the public, including most essential public services (basic education, health, water, sanitation, power and public safety).

These suggestions for reforming political governance are by no means exhaustive. But if implemented, they would set the stage for India to seize the opportunities that lie ahead and make it one of the strongest economies in the world by 2039. Widespread poverty, illiteracy and disease would also be correspondingly reduced. The universally lauded democratic system of government would then have given all Indians their just rewards.







---

# INDIA 2039

---

---

## PART 4

---

**Realizing the  
potential:  
seven inter-  
generational  
issues  
requiring an  
immediate  
start**

---

This part of the report has focused deliberately on intergenerational issues that get short shrift in day-to-day political debates and in policymaking under crisis. It identifies seven areas or issues that have a long gestation period but that require an immediate start in order to meet the challenges as India moves from a poor society to an affluent society. Successfully tackling these issues will be critical to the country's ability to avoid the middle income trap. Governance, accountability and implementation are overarching issues common to all.

1. Tackle disparities and achieve inclusive growth.
2. Dramatically improve the quality of the environment.
3. Eliminate infrastructure bottlenecks—Create a competitive edge.
4. Improve the delivery of public services—Create functioning cities for sustaining growth.
5. Renew the focus on education, technological development and innovation—Keys to sustaining improvements in competitiveness.
6. Launch a revolution in energy—Ensure security and competitiveness.
7. Foster a prosperous South Asia and become a responsible global citizen—India, its neighbourhood and the world.

While our report is focused on these seven intergenerational issues, we would like to highlight the importance of reforms in a number of other areas that are also essential for India to sustain high economic growth rates. First and foremost we assume that the country will continue to maintain sound monetary, fiscal and exchange rate policies in a manner necessary to have macroeconomic balances. Second, India will need to accelerate reforms in its trade policy to open the economy much more and subject domestic producers to greater global competition. Third, far reaching reforms in the financial sector and in labour markets are absolutely essential. These areas as well as the need to make fundamental improvements in the basic education system are already on the country's policy agenda. In addition, in each of these areas many high-quality reports have been

prepared in the last few years. We did not feel that this work needed to be duplicated. We would, however, like to underline the urgency of implementing in practice the related proposals that have in most cases already been accepted and adopted as official policy.

### **Intergenerational issue 1. Tackle disparities and achieve inclusive growth**

Inclusive growth has become a leitmotif of the policy discourse in the past few years—not only in India but also in other developing countries. The shift to inclusive growth marks a broadening of concerns about inequality. The focus has been on how the excluded groups can participate in aggregate growth—that is, how can government policy, directly and indirectly, bring the benefits of growth to all. This takes policy discussions to the domains of education, health, basic infrastructure, agricultural productivity, basic urban services and so on.

Tackling disparities and achieving inclusive growth—and the policies aimed to do so—remain of great importance for India's longer term development prospects. The big issues lie less in design than in implementation, in the context of a governmental apparatus that suffers from severe distortions and inefficiencies, with typically dismal service provision, especially for middle and poor groups, and associated corruption and patronage.

In our view the imperatives for tackling disparities and achieving inclusive growth in India go further. Structural inequalities are not only deep and persistent, they are also intimately linked with institutional structures in the political, social and economic domains—and they are likely to impede the transformations necessary for long-term growth. Institutional and policy change to effect genuine social cohesion is necessary if India is to avoid the “middle income trap” and reach the status of an affluent society.

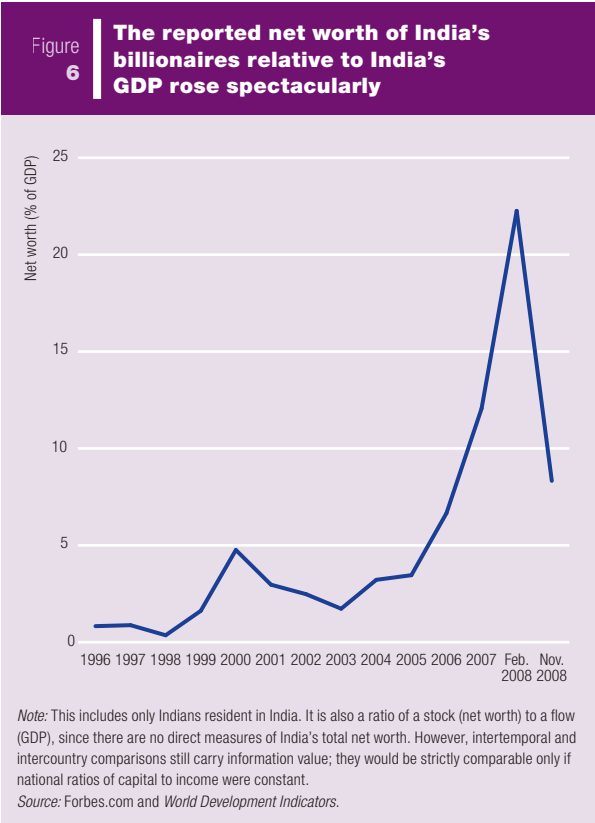
### **What inequalities matter most for India's development process?**

The most common yardsticks of inequality are based on differences in income or expenditure across individuals.

“ In the long term, entrenched inequalities are likely to take India down a sure path to the middle income trap

The Gini coefficient is a common synthetic index. By this type of measure, India is fairly equal, much more so than almost all Latin American countries. But this is misleading, both because India’s household surveys almost certainly underestimate inequalities and because this measure does not capture the differences most salient for economic, political and social dynamics. More important are structural inequalities associated with corporate wealth, groups, geography and education.

- *Corporate wealth* has soared in the past two decades (figure 6). By early 2008 India had almost 50 billionaires. The ratio of their net worth to GDP was over 20 percent, way above comparable ratios in Brazil or Mexico. Their net worth has dropped a lot with the financial crisis, but more important is the long-run shift. While the expansion of corporate wealth accompanied the pro-business policies that helped support



growth, there is now a growing risk that parts of the corporate sector will wield excessive influence over different parts of the state. The emergence (or consolidation) of oligarchic capitalism can slow long-run development through its adverse impact on incentives for structural change and through the reduced autonomy of the state.

- *Group-based inequalities*, associated with caste, gender and tribal status, have always been profound in India, affecting opportunities, incomes, education, health status and dignity. Differences across religions are also of great social and political relevance. Despite major expansions in services and affirmative action for scheduled castes and scheduled tribes, those differences have not narrowed—indeed, they have widened for Hindu scheduled tribes, many of which suffer further from being caught in the conflict between Naxalites and the state (table 2). There has been rising politicization of sociocultural differences, in response to government group-based policies, political mobilization and the long-standing tensions on religious grounds. Group-based distributional conflicts, if unresolved, can divert government policy from broad-based development and genuine equity, and in the extreme lead to open violence.
- *Spatial differences* have risen sharply in the past 20 years, across different states and between rural and urban areas. The ratio of per capita product between Gujarat and Bihar went from about two times in the late 1980s to almost four times the mid-2000s. Such spatial inequalities rose as some regions took off faster than others, in part because of the removal of the spatially equalizing industrial policies of the licensing system. But powerful influences from economies of agglomeration and institutional divergence also cause spatial differences to

**“ India’s current five-year plan rightly focuses on achieving faster and more inclusive growth**

**Table 2 | Household expenditure per capita of groups as a share of the national average (percent)**

Groups	1983	1993–94	2004–05
Hindu: Scheduled tribe	70	75	67
Hindu: Scheduled caste	79	78	78
Hindu: Others	109	110	111
Hindu (all)	99	100	97
Muslim	90	89	89
Christian: Scheduled tribe	92	95	103
Christian: Others	128	131	158
Other religion	139	128	132
All	100	100	100

Source: National Sample Survey, various rounds.

persist. This is particularly problematic in India because lagging regions include such populous and politically important northern states as Bihar and Uttar Pradesh.

- *Education and skill-based differences.* Engineering and graduate skills have been important sources of the growth acceleration in areas ranging from automobiles to information technology. But with the initial stock of such skills largely absorbed, salaries of the highly skilled started rising very fast in the 2000s. The supply of skilled workers has so far not increased—and it can take a generation or longer to change the structure of the labour force. Both basic and tertiary education suffer from serious problems of low quality, lack of accountability and disempowered teachers. Until these problems are overcome, skill-based differences can only rise.

These structural inequalities are embedded within, and support, a political equilibrium based on the creation and sharing of economic rents. Some of the rents shifted with economic liberalization, at least for the corporate sector—from access to land, major contracts or allocations of spectrum. And state-mediated subsidies and rents to social groups remain pervasive.

#### ***Long-term implications of disparities and remedial actions***

The inequalities have indeed been consistent with both the economic restructuring and the maintenance of political stability of the past 25 years. But in the longer term this system is likely to take India down a path of entrenched inequalities, excessive power to the few, distributional fights over patronage and rising collective and criminal violence. Think of this as the Latin Americanisation of India—a sure path to the middle income trap.

Experience in other countries suggests an alternative transformational scenario. It involves developing the political, social and economic institutions that assure genuine equity and provide incentives for innovation, investment in physical and human capital, and economic restructuring. Key areas for action include the following:

- *Laying the institutional bases for competitive and effectively regulated markets is an essential ingredient.* This would include implementing the 2002 competition law, genuinely independent regulatory and judicial processes and transparent mechanisms in domains of state control, such as land and public-private partnerships, complemented by societal watchdogs. This is in the interest of the business community as

**“ The key to inclusive growth and social cohesion is creating millions of jobs, both urban and rural**

- a collective, even if individual businesses gain from individual influence in the system.
- *The issues for group-based differences revolve around reducing conflict and the politicization of difference.* A requisite for genuine change is reducing the incentives for the political class to use group-based identity to obtain political support. The very weakness of the state is a source of the problem here, since politicians cannot credibly commit to deliver on promises requiring effective state action. Also fundamental is deepening the pursuit of universalistic approaches to citizen rights, exemplified by the design principles of the National Rural Employment Guarantee Scheme.
- *Spatial differences are also tough to resolve, as illustrated by the persistence of lagging regions in other countries—from southern Italy to northeast Brazil.* Regional policies have a poor record. Institutional change within lagging states, supported by deeper decentralization to the third level of government, is likely to be the most promising route.
- *A genuinely meritocratic education system is fundamental at both basic and tertiary levels.* While the expansion of the private sector has a role here, real equity will also have to involve major changes within the state system, especially for basic education.

**Achieving inclusive growth**

India's current five-year plan rightly focuses on achieving faster and more inclusive growth—a focus both necessary and timely. The plan lays out in detail the programmes and policies to achieve this ambitious objective. Given this focus, we mention only a few (obvious) points:

- *The key to inclusive growth and social cohesion is creating millions of jobs, both urban and rural.* Each year for the next 30 or more years, as many as 16 million people will enter India's

labour force. This is often referred to as India's “demographic dividend”—an increasing share of adults of working age who do not have to support an ageing retired population. The bulk of these job seekers will be in the slow-growing populous states of northeast India, coming from rural areas seeking employment outside agriculture. In these areas today only 1 percent of the population has a formal technical education, and only 7 percent has received any formal or informal vocational training. Without a massive increase in education and training aimed at the acquisition of skills relevant to future job markets, it will be hard to make growth inclusive.

- *Potential job seekers will face a labour market where 94 percent of employment is in the low-productivity informal sector: 85 percent of workers are either self-employed or engaged in casual employment; another 9 percent are in informal enterprises with typically about two workers.* Only 6 percent of the workforce has regular employment in the organized public or private sectors (more than 10 workers), where productivity is 19–27 times higher than in the agricultural sector. Also needing urgent attention is overhauling India's antiquated labour laws.
- *For growth to be inclusive, all Indians—urban and rural—must be connected to the markets through rural connectivity and infrastructure in the near term.*
- *Another major challenge is to massively scale up public services.* Universal access to quality basic public services—including basic and vocational education and health services—is essential.

Early and determined actions along the foregoing lines can turn future sustained high growth into a unique opportunity to build a more equitable and cohesive society. The basic problem appears not to be the policies already on the books but their weak ineffectual implementation and the lack of accountability.

## Intergenerational issue 2. Dramatically improve the quality of the environment

One of the most visible improvements in the quality of life, as India moves from a poor society to an affluent society, must be in the quality of the environment. The citizens of an affluent India will deserve and expect to have high-quality water and sanitation, clean air and clean streets along the lines of Madrid, Seoul and Singapore today.

This transformation in the quality of life will not occur overnight. Its seeds must be planted now and nurtured over the years. The process must start with a basic change in the mindset of public officials and citizens alike.

### Current official position

Instead of thinking of the environment from the perspective of its citizens, the official Indian government position on the environment appears dominated by the geopolitical considerations. The position articulated on behalf of India at various international fora appears to be built around four propositions:

- On a per capita basis, emissions from India that harm world climate—carbon dioxide and the rest—are much less than those from the developed countries.
- India is making perceptible, indeed substantial, improvements—in the area covered by forests (sequestering carbon), in energy efficiency (as in energy-intensive industries like cement and steel) and in improving air quality.
- Several measures and protocols being suggested will curb India's growth and perpetuate its poverty.
- Developed countries, as the main doers of harm, must do their bit first before compelling countries like India to curb their growth.

### India's self-interest

Even though most of the foregoing arguments for India's current official policy are at least partly valid, that policy, if sustained, will inflict grave harm on India in the

**“One of the most visible improvements in the quality of life, as India moves from a poor society to an affluent society, must be in the quality of the environment**

coming 30 years. It would worsen problems that will be extremely difficult and expensive to remedy later. And it would foreclose the enormous opportunities that remedial measures would hold for India if taken now.

More fundamentally, the current policy is driven mainly by India's geopolitical negotiating stance rather than by what is good for Indian citizens and what is in India's long-term self-interest. This basic mindset must change.

- *Neither the draft policy on the environment nor the pattern of development that underlies it is sustainable.* Even under optimistic forecasts for nuclear and hydro power projects, coal-fired power plants are expected to generate 60 percent of India's electricity in 2030. Only one in a hundred Indians owns a car today, compared with 70 of every 100 in Organisation for Economic Co-operation and Development countries. What would happen if India's more than 1 billion middle income citizens in 2039 aspire to meet their transportation needs through the private automobile? Then there are problems in mining coal. Underground fires in India's coal belt—particularly in the Dhanbad-Jharia landmass—constitute the highest incidence of such fires in the world. Apart from the danger, the fires have severe consequences for the health of miners and all who live in the area.
- *The ecological footprint of the developed world is more than 30 times that of other countries.* Were China and India to draw the same resources, it would be as if the population of the world had tripled. In a word, India must do its bit—both for itself and for the world. Even though the amounts of emissions and pollutants that it releases per capita are low, the totals in absolute terms are large. If India were to persist in acquiring the consumption levels and production processes of the developed world, the absolute volume of emissions would become fatally large because of the size of India's population.

**“ Within India are many successful examples of environmental policy that should be emulated more broadly**

- *Steps to preserve and restore the environment present an economic opportunity for India.* The trillion dollar market in carbon trade under the Clean Development Mechanism affords an immediate opportunity. Each solution that India develops for its own problems will be something that it can market to other countries facing the same problems: alternative fuels; microbes that break up pollutants; processes and equipment to desalinate seawater using solar and wind energy; an efficient and hygienic composting toilet; organic and biofertilizers, insecticides and pesticides; and technologies to recycle waste and water.
- *India aspires to global leadership.* Its aim is to be an exemplar and global power in 30 years. But it will not be able to urge others to take steps that it is failing to take itself.
- *Successes in improving efficiency of resource use and reducing emissions have been registered everywhere—in India as much as in Europe.* They have not curtailed growth. To the contrary, they have saved countries from having to expend resources to deal with the consequences of “growth”.

Within India are many successful examples that should be emulated more broadly: the swiftness with which land has regenerated itself once elementary steps have been taken to cordon it, the substantial increases in the incomes and assets of the community once local water bodies have been restored, the construction of buildings—such as the large office and research complexes at the Indian Institute of Technology in Kanpur—that consume 40 percent less power than conventional buildings and the considerable amelioration in pollutants discharged even for traditionally notorious polluters, like the leather and paper and pulp industries. Similarly, individual firms have shown how they can simultaneously benefit society and improve their bottom lines. For almost five years, ITC has been storing and sequestering twice the amount of carbon dioxide that it emits. Over

the last seven years, it has created rainwater-harvesting capacity that is three times the water it consumes. And it now recycles all its waste. Such solutions must be widely published and massively scaled up.

### **Things to be done**

For all these reasons, and for sheer survival, India must preserve and improve its environment—from the kitchen in the hut to the once-mighty rivers:

- *First is much more rigorous and credible enforcement of the environmental laws and standards already on the books.* For the environment, as for so many other subjects, India has a plethora of laws and regulations. The basic problem is that they are not being enforced. Instead, many of them have been converted into “octroi posts”, obstacles placed in the way, only to be lifted after pockets have been filled.
- *The second set of actions that need to be taken is on the fiscal side.* Ecologists estimate that the world spends \$700 billion a year to damage the environment—in harmful subsidies. India contributes its share—in terms of subsidies to coal, power, chemical fertilizers and the like. Already imposing a fiscal burden, they cannot be sustained for long. But that is the minor consideration: the greater injury is that they conceal consumption and production patterns harmful to the health of the people even as they make India more dependent on resources that will soon be exhausted. These subsidies should thus be weeded out. On the other side, India has the opportunity to pioneer green taxation—to tax commodities and processes by their ecological footprint and the quantum of nonrenewable resources used; it will do well not to defer action until it alights on the ideal rates for taxation of different commodities and processes. Levels that should be mandated will make the commodities and processes

expensive enough to make consumers and producers switch to alternatives.

- *In many spheres, technologies that can produce major savings are already at hand.* The Integrated Energy Policy prepared by the Planning Commission estimates that India can save up to 15 percent of its electricity consumption just by better demand management. In the same way, major savings in energy consumption can be affected by more thoughtful building design. Similarly, the least expensive way for fixing carbon is forestation. These better practices should be pursued—through pricing, enforcement, incentives, building codes and the curricula in schools of architecture.
- *But in many areas new technologies have to be developed.* With its large technological workforce, India can develop these technologies by setting up national research missions to develop, for example, more efficient photovoltaic cell technology, an efficient hydrogen fuel cell, clean coal processes, desalination of seawater using solar and wind energies available in virtually endless supply along India's long coastline, fast breeder nuclear reactors and the thorium cycle for nuclear power. Government and industry must work together to harness India's technological and engineering talent for breakthroughs in such products and processes. The pioneering work of Japan's Ministry of International Trade and Industry in bringing together industrial firms, government laboratories and technological personnel is an example for India to emulate.

#### **India's stance on climate negotiations**

India's per capita income in 2039 would be about the same as the average global income today, with dramatic implications for India's negotiating stance. Indian policymakers need to recognize that targets based on per capita emissions and targets based on GDP per capita

**“ India has the opportunity to pioneer green taxation—to tax commodities and processes by their ecological footprint and the quantum of nonrenewable resources used**

will not be very different for India in 25–30 years, when the measures start to become binding.

India will enjoy at least a 15-year grace period before being asked to take significant measures. So it may be better to negotiate a slightly longer lead time, say 20 years, and then give in to the use of targets based on GDP per capita because India will by then be at world average incomes anyway! In return for its enthusiastic efforts to fight and reverse climate change, India should ask for significant financial assistance and for free access to the latest technologies from the global community.

Such a strategy will be good for Indian citizens and the global community alike, demonstrating India's desire to be a good global citizen.

#### **Intergenerational issue 3. Eliminate infrastructure bottlenecks— Create a competitive edge**

There is a widespread consensus in the country—among the political parties encompassing all philosophies, the business community, the public policy experts, the civic society, and the public at large—that adequate infrastructure is crucial to economic growth and development. Since 1991 many far reaching reforms have been announced, related laws passed by the Parliament, and institutional changes implemented. So, progress has been visible in some areas, notably telecommunications and civil aviation.

#### **Massive investment requirements and public-private partnerships**

India's total investment in infrastructure in 2002 was estimated at \$31 billion, or 6 percent of GDP. This pales in comparison with China, which reportedly invested \$260 billion, or 20 percent of GDP in infrastructure that year. China is continuing to improve its infrastructure at a rate much faster than that of India. So, instead of catching up with China, India's investment rate dropped from 6 percent of GDP in 2002 to about 4.5–5 percent in 2006, before inching up to 5–6 percent during 2007/08.

**“ India should invest on average between 9–10 percent of GDP in infrastructure development to meet the needs of a fast growing economy**

Between 2009 and 2020 India should invest on average between 9–10 percent of GDP in infrastructure development to meet the needs of a fast growing economy. The 11th Plan anticipates average investment to GDP ratio of 7–8 percent between 2008 and 2012. Our estimates suggest that this level of investment may not be adequate if the economy resumes its fast growth soon.

These massive requirements cannot be met without much greater involvement of the private sector—for two main reasons. First, the government budget does not have the capacity to finance on its own anywhere close to the investments required, or even the levels assumed in the plan. Second, the lack of management and technical skills in the public sector is an equally important, and perhaps binding, constraint. The capacity of the many public bodies responsible for infrastructure (ministries, regulatory agencies, state-owned enterprises) is not adequate for transforming the efficiency and quality of services.

India's 11th Plan has assumed that the share of private financing would rise to about 30 percent of total investment during the plan period. This level of private investment would translate into almost \$400 billion during the next 10 years (based on our estimates of India's needs). A massive increase over current levels, this can be achieved only through much more extensive public-private partnerships in all facets of infrastructure development. Achieving these ambitious expectations would make the country a leader among developing countries in tapping private resources to build and operate infrastructure.

#### ***Is the main problem the policy framework—or policy implementation?***

An important development in the last five years is the major effort by the government to replace, or revise, some of the existing policies and rules relating to private-public partnership in infrastructure. These revisions were designed to correct anomalies identified as a result of the actual experience. Major efforts have been made to

put in place new policies for public-private partnership based on international best practice for airports, ports, and highways.

India now has, with a few exceptions, a robust policy framework for improving infrastructure services and facilitating much greater private participation. The framework is most robust for telecommunications and for civil aviation. The new policies for private-public partnership in national highways and for privatizing four major airports are also sound and need no major revisions. The country also has a progressive policy in the 2003 Electricity Act.

Overall, India's very progressive policy framework can put it at the forefront of enhancing the access to and the quality of infrastructure services and attracting significant private participation.

But implementation of the new policies leaves much to be desired in most sectors. Almost all implementation problems are rooted in two main causes. First are the implementation capacity constraints within the public sector to plan, build and operate the massive new generating, transmission and distribution capacity in a timely and efficient manner. And second, even more critical, one or more facets of governance prevent implementation of the agreed policies at the necessary pace.

#### ***Immediate agenda***

In the near term India's main focus should shift from policy formulation to policy implementation and achieving visible results on the ground. There should be a laser-like focus on overcoming the current infrastructure bottlenecks:

- *Implement policies already in place.* The government must ensure that all ministries and government entities implement the agreed policies and guidelines within a set time frame—and are held accountable for doing so.
- *Further increase investments to overcome current bottlenecks.* India needs to invest an average of 9–11 percent of GDP (including about 2.5 percent of GDP on maintenance and

rehabilitation) to support economic growth of 9 percent a year. Thus, even if the 11th Plan expenditures are achieved in practice, infrastructure bottlenecks would most likely worsen when the economy resumes rapid growth. So, budget allocations should be increased for sectors and states that implement agreed policies and demonstrate the capacity to use additional funds effectively.

- *Strengthen institutional capacity.* Many government agencies responsible for planning, reviewing, awarding and overseeing private-public projects have to acquire the requisite skills and managerial systems as soon as possible.
- *Simplify and delegate government decision-making.* The present implementation constraints arise partly from the cumbersome processes and risk-averse decisionmaking culture at all levels of government. To remedy this the government leaders at the highest level must delegate authority to the most competent bodies at lower levels as well as support a major simplification of decisionmaking processes.
- *Adapt crash programmes to eliminate power shortages and accelerate completion of rural electrification and national highways.* Continuing with business as usual, or tinkering at the margins, will not improve the situation in three critical areas: power generation and distribution, rural electrification and national highways. The only solution is to adopt a crash programme in each of these areas with the full support and commitment from the highest levels of government.
- *Monitor results and enforce accountability.* Government leaders should hold lower-level decisionmakers accountable for results on the ground. The key to resolving the current worrisome situation and preventing further deterioration will be the willingness and ability of the top political leadership to move the “system” with

**“ The basic goals of the longer term agenda should be for India to develop world-class infrastructure**

much greater urgency and a results orientation. Delegating authority, enforcing accountability and monitoring progress under the three crash programmes suggested here could be initial actions for the new unit in the Prime Minister’s office.

### *Longer term policy agenda*

The basic goals of the longer term agenda should be for India to develop world-class infrastructure—in coverage, quality and efficiency—that meets the needs of an affluent society and of businesses operating in a very large and globally competitive economy. By 2039 India would need infrastructure that at least matches South Korea’s today.

The longer term effort should be driven by the following reforms:

- *Decentralize authority and accountability to states and cities.* India, one of the two most populous countries in the world, is rapidly becoming one of the largest and most complex economies. Some individual states are bigger than most countries. Uttar Pradesh, for example, is more populous than Brazil. It is impossible for an economy of such size and complexity to meet its infrastructure needs through a process dominated by the central government. India must align the future roles, responsibilities and accountabilities in infrastructure in line with our earlier proposal for a major decentralization of power to the state and local governments. For example, the primary responsibility for providing and financing municipal services such as urban transport, water, sanitation and electricity should be delegated to the municipal governments.
- *Make government smaller and smarter.* With time, the primary role of not only the central government but increasingly the state governments should be long-term planning, policy formulation and market oversight. Some state-owned enterprises that continue to provide services should be made fully autonomous and subject to the financial discipline of the markets

“Infrastructure is a prime example of an area that needs a long-term and multigenerational perspective

- and the supervision of the relevant regulatory authority. This will also facilitate trimming and streamlining the ministerial structure.
- *Increase the role of the private sector.* Using Japan, South Korea and the United States as models, most public services can and should be provided by private suppliers by 2039. In some sectors (such as telecommunications) this may be achieved quickly, while in others (such as railways) the transition period would be longer. A longer term vision should be developed soon to allow all parties to adjust and prepare for the changes.
- *Make markets more competitive—with stronger and more independent regulatory bodies.* This is clearly a major prerequisite for giving the private sector a much greater role. The single most important agenda item in this context is the need to make regulatory bodies stronger, more independent and more credible, as is already the case with the Telecommunications Regulatory Authority. The need is urgent in power, civil aviation, railways and ports. Over time, water and sanitation must also be covered.
- *Focus on the longer term.* Infrastructure is a prime example of an area that needs a long-term and multigenerational perspective. It is imperative that governments at all three levels—centre, state and local—periodically formulate a long-term vision of infrastructure needs (quality as well as quantity) under their purview and make it publicly available so that both consumers and producers can take day-to-day decisions within this framework.

Intergenerational issue 4. Improve the delivery of public services—Create functioning cities for sustaining growth

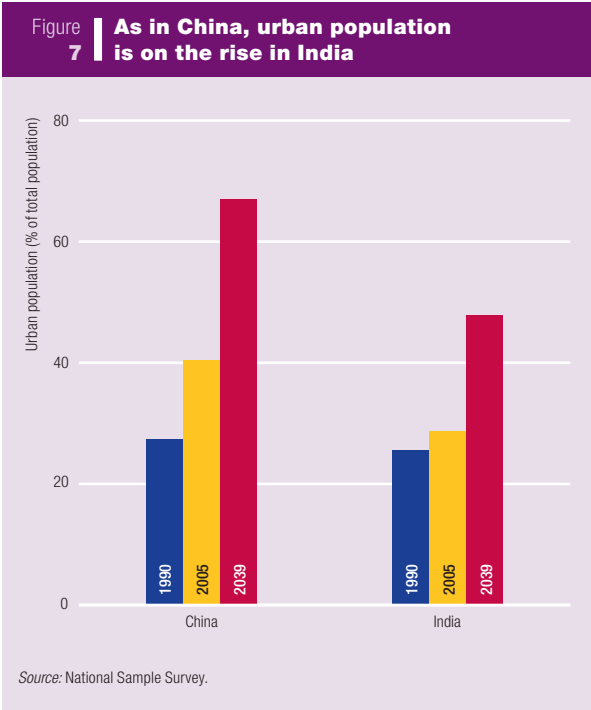
For citizens, perhaps the biggest difference between a poor (developing) society and an affluent (developed)

society is the quality of life—especially the access, quality and reliability of public services. In this context, most cities in India have the look and feel of a poor country. The quality of public services available throughout the country is abysmal. This must change between now and 2039.

A transformation to an urban society—half a billion more urban dwellers?

Within a generation India will be transformed from a largely rural to an urban economy. According to UN projections, about half the total population of nearly 1.6 billion will be living in cities by 2039; others believe the share could be as high as 60 percent. The absolute numbers are even more staggering. There will be at least 400–500 million more urban dwellers by 2039.

Almost all cities can be expected to grow. The current big cities will become still bigger, and many medium-size towns will become large cities (figure 7). This shift in population to cities is an inevitable consequence of economic growth driven largely by industry



and services, sectors that attract job seekers from rural areas and need urban agglomerations for their labour and skills.

The efficient functioning of cities will influence labour costs and thus have a direct bearing on competitiveness and growth. In a global world Indian businesses will need to compete globally for highly skilled Indian professionals, who will increasingly consider the quality of life as a factor in their own location decisions.

But most Indian cities are dysfunctional, suffering from serious deficiencies in the quality and quantity of infrastructure. Most suffer from poor roads, uncollected garbage, regular flooding, stagnant storm and waste water and unreliable supplies of drinking water. Major investments are needed not only to overcome the backlog of services but also to keep pace with population growth. Operations and maintenance are entirely inadequate. The ranks of those in slum and squatter settlements continue to grow. In short, the quality of life in Indian cities compares unfavourably with that in other lower middle income countries, and is far from the level India should aspire to as an affluent country.

Most Indian city administrators point to a lack of resources as the underlying cause of poor quality of infrastructure services. On average, an Indian city spends less than \$50 per capita on infrastructure and services. Estimates for what would be an adequate level vary widely, but it is generally recognized that the expenditure needs to increase several-fold.

Inadequate resources are only a part of the story. Most Indian cities suffer from poor management. There is a lack of proper systems and processes. The quality of staff is poor. Corruption is believed to be widespread. These considerations have ostensibly led most states to keep a tight grip on city administrations, controlling most functions to the point that cities function essentially as departments of the state government. The tight grip leaves little room for local initiatives to improve the provision of services and the quality of life in cities.

**“ Only self-governing cities functioning as autonomous corporate entities can alter the current situation**

### **Fundamental reform: full autonomy for major cities**

There is little likelihood that the present system of urban governance will significantly improve in the functioning of cities. Only self-governing cities functioning as autonomous corporate entities can alter the current situation.

That was the spirit of the 74th Amendment of the Constitution, approved in 1993. Unfortunately, implementation has been poor except in two or three states. Vested political interests at the state level, often in conflict with local interests, have prevented progress. The government of India needs to give a major push to ensure that all states implement the 74th Amendment, both in letter and spirit. Greater autonomy for cities should be accompanied by a strong push to improve their capacity and governance.

Of course, autonomy needs to be accompanied by clear accountability and related measures to ensure better governance. But these measures cannot be in the form of state governments keeping oversight over each and every aspect of city functions. Cities should function as true corporate entities responsible for financing and managing services in their jurisdiction.

A start can be made with the 100 largest municipal corporations. These would cover all cities with populations over 500,000, today accounting for some 160 million people. Most of these cities, if not all, will have million-plus populations by 2039.

The autonomy for cities should be defined under state law to encompass:

- *Functional autonomy for all activities normally carried out within the city jurisdiction—including town planning, land use regulation, infrastructure and service provision, basic education and public health. The states should have no direct role.*
- *Financial autonomy to mobilize taxes and user fees consistent with the needs of the city—and to plan and implement budgets. The law could specify types of taxes that the cities are empowered to levy but not the levels. Property*

**“ City governments have the longest distance to travel in delivering services that affect people's lives directly**

taxes, a grossly underused source in most Indian cities, should become the most significant source of revenues. The state governments have limited and well defined powers—for example, to prohibit taxes, such as Octroi, that hinder free movement of goods within the state.

- *Administrative autonomy to permit cities to have their own system of staff selection.* Professionalism in various aspects of city management should be promoted through competitive appointments, particularly for managerial positions. A city manager, accountable to the city council, should be the CEO of the city, as in many developed countries. Heads of other departments should report to the CEO. The state should have no role in any staff and managerial appointments.
- *All procurement by relevant departments in the municipal corporation within a prescribed procurement law.* That law would set out procedures for efficient and transparent procurement, without reference to the state government.
- *Land use planning entirely within the control of the city.* There is also a need to overhaul the land use planning process, which lacks any economic rationale and is subject to frequent litigation and court intervention. A modern concept of land use envisages the plan to be a living document that must be revised and updated with changing conditions. An open and transparent process encouraging debate among competing interests is much more appropriate than adherence to a rigidly prescribed plan.

#### **Introduce modern concepts of management**

Elsewhere we discuss the need for a smarter, leaner, stronger and more focused government. This is also true for cities. Indeed, city governments have the longest distance to travel in delivering services that affect people's lives most directly. That would require the following:

- *A sharp focus on essential functions—without being burdened with peripheral activities that are wasteful.*
- *A commercial orientation in service delivery.* Water and sewage are invariably mismanaged by unwieldy municipal bureaucracies without any financial discipline. They must be run by corporate bodies responsible to the city government and operating under a transparent regulatory structure for tariffs and service expectations.
- *Contracting out under clear service expectations, as the norm, in as many activities as possible—including road maintenance, solid waste collection and disposal, and billing and collecting taxes and fees.*
- *Qualified staff, selected transparently and competitively at all levels, but most specifically for managerial positions.* City managers in the developed countries are in great demand and often move from smaller to larger cities based on their highly valued managerial experience.

#### **Ensure good governance**

Autonomy for cities needs to be accompanied by measures that ensure good governance. Without such measures, the effectiveness of decentralization will be severely limited, adding to public skepticism about government. Indeed, consistent with the experience of most developed countries, local government, as the government closest to citizens, should enjoy the highest level of confidence.

The suggested measures include:

- *A municipal law that sets out the functions and responsibilities of the city government, the way in which it should perform the functions and its accountability to the citizens.* Full transparency and disclosure should be enshrined in the law.
- *Stronger accountability for results—of the city managers to elected officials, and of the elected officials to citizens.*

- *Elected municipal councils as the most important part of accountability to citizens.* Party-based elections and the large number of councillors needed for adequate representation make it difficult to assign clear accountability. Implementation of the recommendation of the Second Administrative Reform Commission for a directly elected mayor, with requisite powers, is necessary to pinpoint accountability more sharply. The council should have no executive implementation authority. Its functions should be defined under the law as setting policies and priorities and conducting oversight.
- *Senior managers of the city, including the city manager, proposed by the mayor based on a transparent selection process and approved by the council.* The mayor should also have the power to remove managers for cause, with approval by a majority of the council.
- *Appointment of an inspector-general with the power to investigate citizen complaints.* The inspector-general need not have any enforcement power. Any reports should be in the public domain and provide a basis for elected officials to initiate action against city officials and for the electorate to judge the performance of individual councillors.
- *Public information and disclosure of all aspects of the functioning of the municipal government—*particularly in the areas of budget, expenditures, procurement, personnel, land use planning and modifications, building permits, property valuation and taxes, and all deliberations of the council. The Right to Information Act already requires the appointment of public information officers to respond to citizen requests for information. But the cities should be required to do more proactive disclosure.
- *Monitoring of the performance of the city government by citizen organizations that act as watchdogs against malfeasance.* These

**“Autonomy for cities needs to be accompanied by measures that ensure good governance**

organizations can pursue the requirement for disclosure, using the Right to Information Act, if needed. They can also issue citizen report cards on the effectiveness of various government functions. And they can act as advocates for the citizens, particularly the poor and disadvantaged. Such organizations are emerging in many cities, particularly in the large metropolitan cities. Indian business houses should support their efforts.

#### **Central government incentives for granting autonomy to cities**

The central government can provide incentives to states to grant full autonomy to cities. Its role must be one of persuasion, either moral or party-based or through incentives.

The Jawaharlal Nehru National Urban Renewal Mission provides a useful model to build on. It should be increased and made available to the 100 largest municipal corporations if the states pass laws that grant full autonomy to cities, in letter and spirit, and implement measures for good governance.

These measures should be required as prior actions and not be promises of action before funding is released. The funding should be tied to the augmentation of self-generated revenues and be committed for a long period (say, 10 years) for budget support, not specific projects.

#### **Intergenerational issue 5. Renew the focus on education, technological development and innovation—Keys to sustaining improvements in competitiveness**

The recent growth in India's economy has come mainly from productivity gains as workers move from farms to services. But to sustain long-term growth and become an affluent nation without falling into the middle income trap, India will need continual improvements in competitiveness and productivity. It will have to replicate its success from information technology to other sectors, laying

**“ India’s rapidly growing and modernizing economy requires a massive expansion and dramatic improvement in the quality of education**

the foundation for perpetual gains from a workforce that consistently creates, acquires and uses knowledge, and making full use of existing technologies to raise productivity to the best possible domestic and global benchmarks.

In the coming decades India’s demographics will describe either its most significant comparative advantage or its most disappointing failure of political will. In the new global economy a nation’s wealth lies not in its land or capital but in its skilled people, who generate new knowledge and convert it into useful ideas, goods and services. With plenty of smart, young and competent workers the challenge for India is to deploy its resources to produce the highest possible return. For this, India needs a massive increase in the capacity and quality of higher education and in the amount and scope of investments in technology and innovation. Business as usual will not work. Instead, a radical change is needed in the political commitment, mindset and approach—including a redefinition of the roles of the government and the private sector.

### Higher education

Despite many islands of excellence—including the institutes of technology, management and science—India’s education system is dysfunctional, with low capacity, poor governance and overregulation, with low quality and grossly inadequate outputs, with funding and skill deficits and with faculty shortages.

At 11.8 percent, India’s tertiary gross enrolment ratio is dismally low, especially when compared with China (22 percent), the United States (84 percent) and South Korea (96 percent). A recent McKinsey study estimates that only 10 percent of Indian arts and humanities graduates and only 25 percent of engineering graduates are globally competitive—symptoms of a quality deficit in both public and private institutions. These conditions have already resulted in shortages of skilled workers in industry and academia, creating faculty shortages, throttling advances in science and technology and constraining competitiveness.

India’s rapidly growing and modernizing economy requires a massive expansion and dramatic improvement in the quality of higher education. The tasks: increase investments from 4 percent of GDP to 8 percent, increase tertiary enrolments by 8 times, create 1,200 new universities (100 of them world class), create 20,000 degree-granting and 100,000 community colleges and expand all existing institutions, improving their quality.

These ambitious goals are conceivable if grounded in universal access to quality basic education. The 11th Plan rightly puts major emphasis on improving primary education in the country. It also describes many laudable plans. But primary education today still suffers from numerous long-standing problems. Economic, social and political imperatives demand that the new government give the highest possible priority to fixing the system.

### Technology and innovation

With a comprehensive network of research institutions, India has the world’s third largest scientific establishment. It has done well in strategic research on space, defence, atomic energy and supercomputers. It is also becoming a top global player in biotechnology, pharmaceuticals, information technology and automotive parts and assembly. The recent crowning glory of India’s space research—the first moon orbiter project, Chandrayan-1—has placed India among a handful of nations that have a credible capability in space science and technology.

But India’s expenditures on research and development, at 0.9 percent of GDP (70–80 percent public), are lower than the 1.4 percent in China, 2 percent in Europe and 2.6 percent in the United States—and only 0.25 percent of GDP is focused on civilian applications. Moreover, the research and development system is narrow in scope, has low outputs and is disconnected from the market.

India needs a technology and innovation system that is highly productive, globally competitive and capable of meeting the needs of its globalizing economy and lifting



the productivity of its informal sector. This requires an increase in research and development investments from 0.8 percent of GDP to 3 percent—driven largely by the private sector—pursuing frontier, strategic and inclusive innovation, enhancing commercializable research and development and creating a foundation to diffuse and encourage the absorption of new technologies.

### *The reform agenda*

Translating this ambitious agenda into concrete actions will require a major shift in the roles of government and the private sector, including foreign direct investment. The government should be a facilitator with smart regulation, light oversight, greater financing, enhanced private participation with proper policies, taxes and other incentives, leveraging international knowledge and financial resources. It should focus on public goods where social returns are highest.

#### *For higher education*

- Increase the supply of quality faculty and the output of scientists, engineers and other masters and doctoral graduates.
- Set up an independent regulatory authority for higher education, drawing lessons from such agencies such as the Telecom Regulatory Authority and the Securities and Exchange Board, with authority to reward good performance and impose sanctions for poor performance and noncompliance.
- Grant academic and research institutions, fiscal and managerial autonomy, with high-quality leadership.
- Promote private participation in higher education and vocational training with tax incentives and an umbrella not-for-profit education company law.
- Establish generous and comprehensive student loan programmes while enabling institutions to charge suitable tuition fees, compete for faculty and students, create modern infrastructure and invest in global programmes.

**“ The government should be a facilitator with smart regulation, light oversight, greater financing, enhanced private participation with proper policies, taxes and other incentives, leveraging international knowledge and financial resources**

- Invite foreign direct investment in higher education and welcome reputable foreign universities to open campuses in India and allow Indian institutions to open campuses abroad.
- Export skilled labour and Indian higher education—to become a global skills capital of the world.

#### *For technology development and innovation*

- Develop an innovation ecosystem comprising an integrated science, technology and innovation policy, facilitative intellectual property regime, responsive infrastructure early-stage and venture capital, and science and technology parks and incubation centres with clusters of higher education and research and development institutions.
- Provide support for basic and applied research and technology diffusion through tax credits, matching grants, loan guarantees, technology rewards and training support.
- Pursue inclusive innovation to convert grass-roots innovations into viable products and to create affordable products for the masses—and increase research and development in agriculture.
- Review the vast chains of public institutions—such as the Council of Scientific and Industrial Research, Indian Council of Agricultural Research and Indian Council of Medical Research—and pursue appropriate actions to right-size them, including exit, privatization and transfer to universities and conversions to research universities. Those remaining should be operated as commercial corporations with increased cross-institutional synergies, transparent management and accountability, and a sharp focus on commercializing research and development and meeting market needs.
- Improve incentives to harness domestic and global knowledge, including appropriate changes in foreign direct investment, in trade

**“The benefits of India’s carbon savings to the global environment are enough to support a deal with the international community to enable India to afford and acquire the most advanced energy technologies**

and technology licensing, in royalty payment regulations and in foreign collaboration and technology diplomacy.

- Establish as a public-private partnership a National Research and Education Network—with high-speed nationwide dedicated links to expand educational opportunities (faster and cheaper), tap global knowledge and improve access to information for citizens.
- Create centres of excellence focusing on public goods such as research on advanced energy technologies, access to clean water, urban transport and ayurvedic and traditional medicine.

#### **Intergenerational issue 6. Launch a revolution in energy—Ensure security and competitiveness**

India’s aspirations to become an affluent society within one generation must be pursued in a global context of scarce, unreliable and expensive energy supplies, with rising pressures to reduce carbon emissions to preserve the global climate.

In addition to its large and highly skilled labour force, its ability to foster innovation, the entrepreneurial spirit of its people and the business acumen of its corporate sector, India’s long-term competitiveness will depend on its ability to use natural resources efficiently. In this context, the efficiency of energy use and the fuel mix will be most important. Reducing India’s appetite for energy supplies from international markets would also dampen upward pressures on energy prices. It is thus in India’s interest to base its growth path on an energy and carbon scenario that emphasizes efficiency, minimizes the use of fossil fuels and is thus sustainable for India and for the world (table 3).

On its current trajectory, India’s call on the world’s energy resources in 2039 would increase to about 3,100 million tons of oil equivalent, and its contribution to carbon emissions, to 6.5 gigatons—unsustainable for India and unacceptable for the world.

A sustainable scenario will require India to decouple its energy consumption from its economic growth and to decouple carbon emissions from energy consumption. To these ends, India has to achieve unprecedented

**Table 3 | Energy and the future: India’s business as usual and sustainable scenarios**

	Business as usual scenario			Sustainable scenario		
	2005	2030	2039	2005	2030	2039
Total energy (millions of tons of oil equivalent)	537	1,793	3,100	537	1,431	1,900
<i>Energy mix (%)</i>						
Coal	39	48	49	0.9	40	40
Oil	24	27	28	24	23	20
Gas	5	7	7	5	9	8
Hydro	2	1.8	1.5	2	3	3
Nuclear	1	3	3.5	1	5	8
Renewable	0	1.2	1.5	0	3	8
Biomass	29	12	9.5	29	17	13
Carbon emissions (gigatons)	1.1	3.9	6.5	1.1	3.2	3.6
Carbon capture and storage (gigatons)	0	0	0	0	0	0.4
Net emissions (gigatons)	1.1	3.9	6.5	1.1	3.2	3.2

energy efficiency and energy diversification: maximizing the use of clean energy resources, minimizing inefficiencies in the energy supply-demand chain and reducing its dependence on imported oil and deploying technologies to curtail the growth in carbon dioxide emissions. Such an energy revolution would bring energy consumption in 2039 to about 1,900 million tons of oil equivalent and carbon emissions to 3.6 gigatons, a footprint in line with India's share of the global economy.

The benefits of India's carbon savings to the global environment are enough to support a deal with the international community to enable India to afford and acquire the most advanced energy technologies as they become available.

#### ***Launching an energy revolution for energy security and competitiveness***

India will not be alone. The world will collectively go through an energy revolution or carbon revolution in the next three decades—a revolution that will create for India as much opportunity as challenge.

The international community recognizes that the global carbon emissions target cannot be achieved without India's cooperation. India could thus count on an effective partnership and a global compact with the global community, which would bring with it substantial technological and financial support in return for pursuing an energy strategy in India's self-interest.

India's gains from joining this global partnership will be to reduce the vulnerability of its economy to costly and unreliable energy imports and improve the competitiveness of its economy. And it will place India at the forefront of some very advanced technologies, critical in India's objective to specialize and become a global leader in a few advanced technologies.

A framework for India's energy revolution is based on assumptions for progress in energy efficiency and significant use of renewable and nuclear technologies, consistent with the emerging policies of the government. In June 2008 India's Prime Minister announced a climate change plan with a vision of making India's

**“The world will collectively go through an energy revolution or carbon revolution in the next three decades—a revolution that will create for India as much opportunity as challenge**

economic development energy efficient, having solar power occupy the centre stage and pooling all of India's scientific, technical and managerial talents with financial resources to develop solar energy. But the plan makes no explicit commitment to reducing carbon emissions. Our basic proposals are in line with the energy policy adopted by the Union Cabinet in December 2008, but with differences in degree and emphasis.

#### ***A laser-like focus on translating policy into concrete actions***

Perhaps the single most important recommendation is to give highest priority to translating government policies into concrete actions that demonstrate to all concerned that India is serious about the proposed energy revolution. This will require nothing less than a laser-like focus on producing results on the ground. In this context, the priorities for the three planks of the proposed energy strategy are:

- *Energy efficiency.* Phase out energy subsidies in a rapid but well designed and targeted manner; set clear targets and monitoring criteria for improving efficiency in the power sector; set national standards for all major energy users in transport (cars, buses and trucks), buildings and household appliances; give generous financial incentives for retrofitting and using new energy-efficient technologies; and launch a high visibility programme to make all government buildings and public enterprises models of energy efficiency and green technologies.
- *Sustainable fuel mix.* Provide financial incentives (tax reductions and exemptions and feed-in tariffs) for the development and supply of renewable energy and nonfossil fuels; set clear targets and measures of accountability for the power sector's transition to a sustainable fuel mix.
- *Clean energy technologies.* Establish a crash programme for developing clean energy technologies—particularly solar, clean coal and carbon capture technologies under public-private partnerships.

**“ The three planks of the proposed energy strategy are energy efficiency, sustainable fuel mix and clean energy technologies**

***Refocus the roles of government, private sector and civic society***

A prerequisite for implementing the energy agenda is a total reshaping of the relative roles of government (at all levels), private sector and civic society. India needs to develop a consensus on the desirable roles of government, the private sector and citizens in 2039, and start immediately to move in that direction.

Well before India becomes an affluent society and possibly one of the three largest economies, it will need a much smarter, much more focused and more effective government. Public sector enterprises would ultimately need to be privatized; in the meantime, they should be required to compete on equal footing with the private sector and be subject to the same financial discipline and accountability for promised results. The private sector should have the primary responsibility for implementing the agreed energy policy and strategy. All energy enterprises should be subject either to adequate market competition or to oversight by strong and independent regulators. And civic society and the media must make sure that government, the private sector and regulators are performing their jobs well:

- *Government.* Establish a single central entity responsible for all energy policy. The fundamental role of the government should be to create the incentive system and to lead a consolidated energy strategy. Instead of having many separate ministries with overlapping responsibilities for individual aspects of the energy sector, the responsibilities for setting policy, formulating strategy, monitoring results and establishing the appropriate legal and autonomous regulatory bodies should be given to a single entity at the centre. The government must establish an enabling business environment to attract the private sector to meet the huge energy investment needs efficiently. The most important part of this business environment is an energy pricing policy that provides financial incentives for timely investments and for the transfer and

adoption of new technologies by the private sector.

- *Private sector.* Businesses should have the primary role in producing and distributing energy and in conducting most research and development. In addition, they should lead efforts to adopt and implement energy-efficiency standards and practices, reduce carbon emissions, create new businesses to promote a worldwide energy revolution, develop clean energy technologies and eliminate energy wastage.
- *Regulatory bodies.* Establish independent and specialized regulators that can encourage competitive market behaviour. Give regulators financial autonomy and clear authority for setting tariffs. Limit price regulation to the segments of the energy industry characterized by significant economies of scale (natural monopolies).
- *Civil society and media.* Encourage civic society and the media to play their proper role in the energy sector by promoting transparency and enforcing accountability.

***Global leadership in advanced energy technologies***

Worldwide, the energy industry has always depended very heavily on research and development. But the role of research and development has never been as great as it will be in the next three decades. India should aspire, as part of its energy revolution, to global leadership in advanced energy technologies, establishing a global centre focused on such technologies as a first step.

The functions of the centre—demonstration, adaptation and dissemination of advanced technologies—are the items most favoured in the support menu of climate change funds. Mobilizing support from such funds would need to take place in two phases. In the first phase, these funds should be approached to finance the establishment of the centre. In the second, the centre would approach climate change funds and other resources to mobilize large amounts of finance for



projects. It would serve as a channel of transferring technology and finance to the relevant energy projects.

India needs to strengthen two other major aspects of research and development. There should be a much greater degree of openness to drawing on international experience and advances. And the modes of research and development support should ensure much more reliance on the private sector for technology imports and adaptation.

**Intergenerational issue 7. Foster a prosperous South Asia and become a responsible global citizen—India, its neighbourhood and the world**

It would be easier to visualize India as an affluent, buoyant economy if its neighbours in South Asia were also developing and stable. But instability surrounds India. Five of the seven countries that border India are on the *Foreign Policy* 2008 list of failed states— Bangladesh, Myanmar, Nepal, Pakistan and Sri Lanka, each affected by conflict and violence to varying degree. It will become ever harder to prevent spillovers—of terrorism, refugees, water conflicts or regional political factionalism—without greater stability across the region.

None of India's immediate neighbours, except China, is in the group of countries converging with Organisation for Economic Co-operation and Development countries. Their prospects for sustained development are poor. A rapidly growing India thus stands in sharp contrast to its neighbours.

Today, India's per capita income is only slightly higher than Pakistan's, half of Sri Lanka's and less than twice that of Bangladesh. If current trends continue—with India growing much faster than the rest of South Asia—the disparities in per capita income with its neighbours could be between 7-fold and 14-fold by 2039 (similar to those between the United States and Central America and between Europe and North Africa).

Such disparities would make India a magnet for immigration for up to 500 million South Asians, with obvious fragilities. The pressures for migration and

“ It would be easier to visualize India as an affluent, buoyant economy if its neighbours in South Asia were also developing and stable

access to the affluent Indian neighbour would become enormous, almost matching those between Europe and North Africa or the United States and Central America. India could face similar debates and issues over how to manage illegal immigration while ensuring domestic security without disrupting an overall outward orientation in its economic policies. India would also miss out on the economic benefits widely acknowledged to accrue from direct trade links and economic integration—as evidenced in East Asia and Europe.

**Four general factors**

Four ecological, demographic and economic factors are certain to affect India in ways vital to its prospects:

- *First is the impact that the pattern of development in India and its neighbours is likely to have on the ecology in and around India.*
- *Second is the evolving demography of the region.* Unemployment rates are already high in Bangladesh, Nepal and Pakistan, whose populations continue to grow rapidly. Pakistan, with its population of 165 million already exceeding Russia's, is expected to add another 100 million between 2000 and 2030 (table 4), according to the United Nations. Overall, India's five immediate neighbours would have a population of 532 million by 2030, an increase of 167 million, or 46 percent. If economic growth in these neighbours continues to be inadequate and

Table 4 | Population growth in other South Asian countries (thousands)

Country	2008	2020	2030
Bangladesh	150,448	185,552	203,214
Bhutan	670	820	902
Nepal	28,901	35,269	40,646
Pakistan	164,741	226,187	265,690
Sri Lanka	20,926	21,713	22,194
Total	365,686	469,541	532,646

**“ Looking beyond its immediate neighbourhood, India’s fortunes will become more closely linked to the world’s economic fortunes**

does not create enough jobs, ever-larger numbers will want to move into India.

- *Third, each of India’s smaller neighbours, except Bhutan, harbours apprehensions common to small neighbours of large states.* So, India will have to devote enormous efforts and very substantial resources to assuage the anxieties of its smaller neighbours.
- *Fourth, continuing deterioration of governance across the region could have consequences for India.* In several swaths of each of its neighbours, as in vast stretches of India, the writ of the state no longer applies. The resulting vacuum creates the space and opportunity for nonstate forces, and India will have to contend with these ominous conditions.

India, as the region’s largest country and biggest economy, stands to benefit most from regional stability and to lose most from instability. India must take the lead—unilaterally, if necessary—in promoting a more stable and prosperous South Asia.

Both Europe and the United States have used foreign aid and regional cooperation as instruments for balancing tensions with neighbours. They recognize the self-interest in having stable growing economies in their neighbourhoods. In the not-too-distant future India too will need to consider how it can best promote development throughout South Asia.

Only India has the size and clout to lead regional cooperation and promote regionwide prosperity. This will not be easy because differences between India and its neighbours have deep and sometimes violent roots. But the European Union and North-East Asia have demonstrated the potential for expanding economic ties between erstwhile enemies. And if India is to become affluent, it will surely need to lead cooperative approaches to regional development.

For the small countries adjacent to it, India must be as accommodating and as generous as any country can be—offering assistance on a scale and on terms that will allay their apprehensions. India should invite

organizations like the Asian Development Bank to devise and champion projects that India and its smaller neighbours can undertake together.

Other possible steps:

- *Use its advantages, its “soft power”, much more and much more creatively.* India would earn tremendous goodwill by expanding and improving its medical facilities to become the surgeon of choice for all neighbours—and by improving and expanding its facilities for higher and technical education as the region’s educator of choice
- *Start now to build think tanks and research programmes to develop a coherent strategy towards the rest of the region.*

More fundamentally, there is a need for a very different mindset for India to look at its neighbours. Fortress India, with major border restrictions and few economic interactions with its neighbours, is the current approach to minimizing negative spillovers. But that strategy will become counterproductive over time. It is India’s self-interest to have a stable and prosperous neighbourhood.

### India and the world

Looking beyond its immediate neighbourhood, India’s fortunes will become—as recent events have vividly demonstrated—more closely linked to the world’s economic fortunes. Over the past decade India benefited from faster global growth. Exports, foreign investments, nonresident deposits and remittances—important ingredients in India’s economic success—are linked to global growth. But India will increasingly have to bear the responsibilities of preserving the global economic commons—whether for climate change, free trade or stable international capital movements. It can no longer be a spectator in global economic management. Nor can it narrowly define its interests to include only short-term economic costs and benefits.

In 2008 India’s \$1.2 trillion economy represented 2 percent of global GDP. It was the world’s 12th largest economy. In many respects, India has been small in global terms, able to take advantage of global economic

growth but without having to worry about how its own actions might affect the global economy. Even rapid growth in foreign direct investment, nonresident deposits, remittances and other capital flows does not place India as a major player in global economic imbalances. In many respects, India is not central to the current discussions taking place on the global response to the financial crisis and the need to revive global growth.

That absence of global scrutiny has allowed Indian policymakers considerable freedom to pursue economic policies in their immediate national interest, without having to worry about the impact on the rest of the world. That will soon change. In our scenario India could be the world's third largest economy by 2020 and conceivably overtake the United States by 2039. India's economy could also be larger than the Euro zone.

India will also become a major consumer of the world's natural resources. Not only will this affect its approach towards economic security and its relationships with other countries, but it also implies that the world will have an interest in ensuring that India becomes more efficient in its use of resources. In some instances, that could rebound to India's advantage.

As discussed in the section on energy, a global compact with the international community—under which

**“ India will have to demonstrate to the rest of the world that it is taking its global economic responsibilities seriously**

India is given free (or at least preferential) access to clean energy technologies and receive generous financial support for its own energy revolution—would enable it to access and afford the most advanced energy technologies as they become available. But in other areas, India will have to demonstrate to the rest of the world that it is taking its global economic responsibilities seriously.

Recent events suggest that India will be called on to play a leading global role in trade, finance, oil and climate change. In each area, what is good for India is not always good for the rest of the world. Until now, that has not become a serious issue for India's global relations. But as India becomes a larger part of the world economy, such tensions will ramp up. India is already being invited to the world's major stages to discuss these issues. But its positions are narrowly defined by its immediate self-interest.

It is time to think more broadly about the long-term implications of those approaches. From a practical perspective, India will need to develop a strategy for using its seat at the global tables—whether the G-20, the UN Security Council, the BRICs forum, the post-Kyoto negotiations, the UN General Assembly or other bodies—and for playing a fair, inclusive and constructive leadership role in those fora.



