

India and the World: Scenarios to 2025



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Section

1

Preface

With one of the fastest growing economies in the world, India has taken on increased strategic importance as an emerging global player. India faces complex economic, political, social and environmental challenges, and stakeholders in India must be prepared for a variety of different futures.

To gain a better understanding of the possible outcomes, along with the key trends and events that might shape them over the next 20 years, the World Economic Forum and the Confederation of Indian Industry (CII) set out to develop scenarios on the future of India. CII had been facilitating an ongoing process of developing scenarios for India by engaging diverse people in business, government and civil society. Therefore, the next step was to form a joint project team in late 2004, led by Ged Davis and Arun Maira (who was leading the ongoing work for CII).

The resulting scenarios are the joint creation of those who took part in the project – they go beyond the assumptions and perspectives held by any individual, interest group or organization.

What are scenarios?

Scenarios are stories about the future. Good scenarios are plausible, challenging and rigorously constructed to address the most critical questions that decision-makers need to face. The scenarios that are presented in this publication were developed over a period of nine months at workshops held in Delhi, Goa, London, Davos and Jaipur. They synthesize the perspectives of many leaders in business, society, government and academia, from within and outside India. Supporting analysis has added further insights from multiple disciplines

including economics, social sciences, geopolitics and environmental studies.

For a country as diverse as India, no single set of scenarios can claim to describe all possible futures. Each story that has emerged describes a different, plausible future for India. They are not predictions but possibilities and intend to provoke readers, challenging their assumptions about what may happen and providing a useful shared basis for discussion.

In developing these scenarios, the Forum and CII closely involved senior executives from leading global companies, as well as thought leaders, scenario practitioners and public figures. Together they identified the following most critical questions:

- **Can India engage the whole nation in its quest for sustained security and prosperity?**
- **How will India's relationship with the rest of the world impact the Indian agenda?**

How will these scenarios be used?

Leading global companies often engage in constructing large-scale scenarios to help formulate their business and investment strategy. Specifically, scenarios:

- **Enhance the robustness of strategies** by identifying and challenging underlying assumptions and, hence, contributing to robust and pre-emptive positioning of corporations.
- **Allow better strategic decisions** by discovering and framing uncertainties and better understanding risks prior to making substantial, irreversible commitments.

- **Raise awareness of the environment** by helping business communities understand the complex interplay of underlying drivers and critical uncertainties and increasing sensitivity to weak signals that precede a significant change in direction.
- **Provide impetus for current action** by providing users with common languages and concepts for discussing current strategies across various businesses, in a non-threatening context of possible futures.
- **Increase response speed to unexpected events** by visualizing possible futures and rehearsing responses mentally, hence, raising the state of preparedness and agility.

The World Economic Forum is an independent international organization committed to improving the state of the world by engaging leaders in partnerships to shape global, regional and industry agenda. The Forum is impartial, not-for-profit and is tied to no political, partisan or national interest. Our members are often innovative and inspiring individuals who challenge conventional thinking and are committed to improving the state of the world. We also work closely with communities of leaders from academia, government, religion, the media, non-governmental organizations and the arts.

As such, the Forum is ideally positioned to convene the diverse group of individuals at an international level necessary to form robust scenarios. The Forum intends to use these scenarios to communicate a shared understanding of India and initiate dialogue and action at the international level. Through interactive sessions at various conferences and workshops held throughout the year, including the Annual Meeting at Davos, member firms will be able to discuss the development of their “India strategies” and communicate directly with key decision-makers their aspirations as well concerns for India’s development. The media who take part will disseminate this discussion to other public forums around the world. Further, through our

Industry Partnerships, our industry communities may delve deeper into our analysis and draw industry-specific implications.

As mentioned earlier, CII has been using scenario concepts to engage diverse people within India in dialogues about the forces that are shaping India’s future and the roles they can play to influence those forces to produce the desired outcomes. The scenarios that have emerged from the joint work with the World Economic Forum will sharpen these discussions. CII will use these scenarios, and the information and insights in them, in appropriate ways in its ongoing process of engaging decision-makers and citizens in the ongoing dialogue.

Conclusion

We hope these scenarios will spur action. The decisions we make today create tomorrow – and these scenarios raise crucial questions about the strategic decisions that will shape the future of India.

We hope that the scenarios will be used widely within and outside India, encouraging people from diverse backgrounds to engage in a productive discussion of their shared vision of the future, helping them to identify risks and opportunities and to develop more robust strategies.



Ged Davis
Managing Director
World Economic Forum



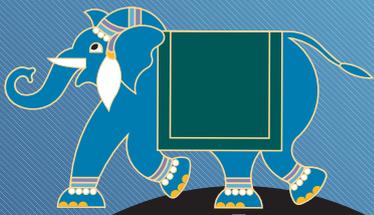
Arun Maira
Chairman, Boston Consulting Group,
India and Chairman, CII Leadership Summit

Section

2

Executive Summary

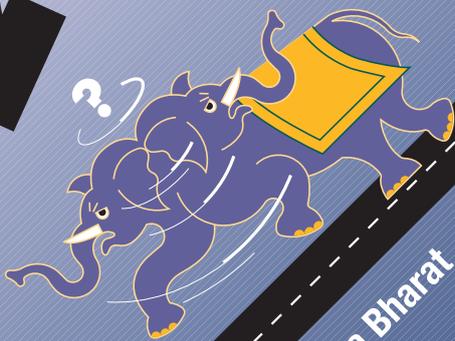
Bolly World



Pahale India



Atakta Bharat



Section

2

Executive Summary

Few countries can boast the immense diversity of India: among its 1 billion people, there are 18 main languages, 844 dialects and six main religions. Rich in the traditions and learning of myriad ancient cultures, the sub-continent has long been a place of pilgrimage for travellers. Since India's independence, ancient traditions have increasingly converged with modern influences, and India has become progressively more internationally integrated.

Since the late 1940s the effects of government controls led observers to coin the term "the Hindu rate of growth" to describe the country's sluggish economic progress. However, the reforms of the mid 1980s and early 1990s sharpened the pace of change and, as globalization has advanced, prompted by rapid technological developments, India has become more significant in international markets. Now many analysts are predicting India's emergence as a global player, set to follow the blazing economic success of another giant, China.

It is not difficult to see the rationale behind such optimism. Key trends that could drive and sustain these new dynamics include:

- **Favourable demographics;**
- **A large pool of low cost, skilled labour;**
- **Entrepreneurial, indigenous companies;**
- **Continuing economic reforms and global integration;**
- **A stable political regime and democracy;**
- **A record of high, sustained growth rates.**

However, there are also major challenges that India must address if it is to achieve and maintain this kind of growth and development, including:

- **India and the world: How will India take her place at the world table – and how will the world accommodate the emergence of India as a global player? How will the global environment change and how might India respond?**
- **Geopolitical stability: What direction will the war on terror take? What will be the nature of India's relationship with her neighbouring countries? How will India ensure her energy security?**
- **Employment and demographics: How can India take advantage of her young and growing population and transform it into a demographic bonus? Will the rising aspirations of the young be met?**
- **Education: How can India maintain and develop her educational excellence while making sure that increasing numbers of young people across India are equipped with employable skills?**
- **Infrastructure: How will India develop adequate social and economic infrastructure that meet the needs of both her people and developing industry?**
- **Leadership: Can India develop the leadership necessary at all levels? Will coalition politics continue to constrain necessary reforms? Can national interests and self-interests be aligned?**
- **Administrative and political reform: Can India strengthen her ability to implement and execute the necessary reforms and change? Will India break the back of deeply**

entrenched corruption and bureaucracy?

- **Rural development: Is it possible for India to develop the rural sector where the majority of her people reside? How will rural development contribute to the strength and robustness of India's economy? Can India manage the disparity between urban-rural communities, and between states?**

The Key Questions for the Scenarios

From amidst the many challenges confronting India, the project's participants identified two core questions, the answers to which will shape the path of India in the next two decades:

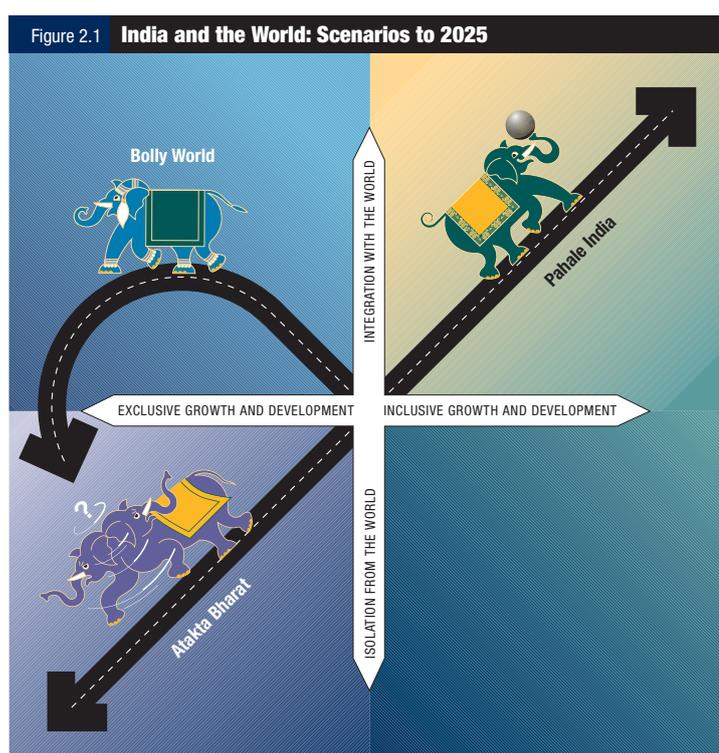
- **Can India engage the whole nation in its quest for sustained security and prosperity?**
- **How will India's relationship with the world impact the Indian Agenda?**

The project's participants used these questions to build three different possible futures for "India and the World" over the next 20 years.

Different paths for India through to 2025 are represented in figure 2.1.

Can India continue with "business as usual" — a path of rapid economic development that benefits only a minority of the population? **Bolly World** is a story of how initial economic success becomes unsustainable, and domestic social and demographic pressures soon trigger an economic reversal.

But need this happen? Could India achieve sustainable economic and social success? **Pahale India** ("India First") describes how a widely shared vision for India's future aligns national aspirations and creates common goals. Everyone puts India first, determined that the entire nation will benefit from India's development.



This building of a broad-based economy provides sufficient internal strength to support India's ambitions to become a major world player.

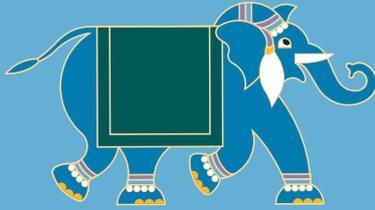
However, a less benign future is also possible, especially if the international environment proves less supportive of India's aspirations. In **Atakta Bharat** ("India getting stuck"), the global economy slows, offering few benefits to India, while within India there is little and uneven development.

These basic storylines were further developed by the project team. The three scenarios created were supported by detailed modelling and additional analysis. Boxes on selected topics and "shock boxes" (those are developments of unknown probability which if they happen would have tremendous impact) have also been included within the scenarios, and presented in creative formats for further illumination of the key challenges.

Bolly World

“Bollywood” is the name given to the highly successful Indian film industry, famous for its masala movies—melodramatic extravaganzas with spectacular song and dance numbers. The title “Bolly World” reflects a future in which India’s leaders are so dazzled by the immediate gains to be made in international markets that they fail to implement much needed domestic reforms.

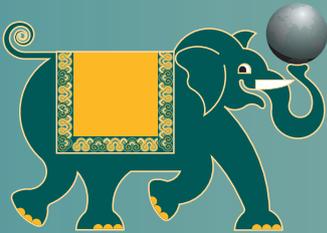
The scenario is told as a conversation overheard on a plane flying from Delhi to Dubai in 2025. A chartered accountant tells his travelling companion why he thinks India is no longer experiencing international success and is facing so many problems. As he puts it, the situation “is just like Bollywood itself—once you get behind all the glitter and the razzmatazz, you realize—the whole thing is just an illusion.”



Pahale India

“Pahale India” means “India First” and this is reflected in the scenario in at least three ways: 1) people from across India put the needs of their community and country first; 2) India emerges as a global economic leader; and 3) India’s dynamic internal developments make it a source of inspiration for the rest of the world.

This story is told by a successful Indian businesswoman at the 40th India Economic Summit in 2025. Her keynote speech explores the reasons for India’s remarkable success.

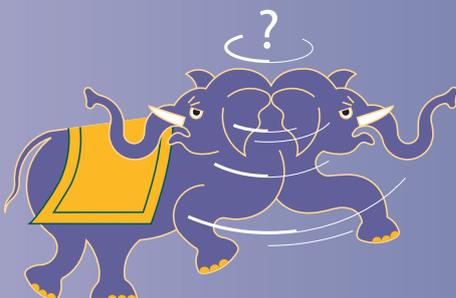


Atakta Bharat

“Atakta Bharat” describes an India “getting stuck without direction” reflecting the lack of unified action and absence of effective leadership that, in this scenario, create a continuous and cumulative source of problems for India.

The scenario is told as the transcript of a speech given at the monthly forum of the Hyderabad GM Crop Collective. The collective—a collaboration between the Hyderabad Farmers, Seed Developers and Rural Workers Cooperatives—is an example of one of the more positive responses made by some Indians to the multitude of troubles facing India.

The speech itself also draws attention to the importance of self-organization and self-help. Entitled “India’s last 20 years: Why we must help ourselves”, it explores how initial well intentioned attempts at reform in India failed—because of corruption, inadequate planning and insufficient political will. The speaker raises a number of what he calls “if onlys” to describe how India’s future could have been very different.



2005–2015: The lavish promises of international business encourage the Indian government to make changes that hasten immediate economic growth. Low operation costs and cheap labour attract the investments of the international community—but these are concentrated in IT and upper-end knowledge intensive sectors.

Anxious to hold the attention of global business, the Indian government follows its lead as it makes its own investments. Rural areas remain undeveloped and underfunded and growing numbers of poor and unemployed are migrating into the cities, whose infrastructure cannot support them. India's leaders discuss "the problem of poverty" but fail to make necessary reforms.

2015–2025: Inadequate structural reforms mean much of the Indian economy faces constraints and the growth momentum is unsustainable. Unreliable infrastructure, skill shortages and growing disparities between regions and

income groups hamper equitable growth. In many poorer states, unemployed and disaffected youth join extreme religious groups, take to petty crime, or are drawn to "sons of soil" type movements. These tendencies preoccupy policy-makers and governments at all levels, making it difficult for them to focus on measures to promote economic growth and equity.

A global economic downturn induces OECD countries to focus on efficiency and competition in domestic industries. This causes greater unemployment in these economies, prompting multinationals to withdraw and reduce international investment in India. Preoccupied with behaving like a global power, India has neglected regional relationships and now cannot rely on them to bolster economic performance. Economic growth is insufficient to alleviate chronic poverty or raise living standards. India's initial successes in the first years of the new century now seem like a dream.

2005–2015: The many diverse individuals and groups fighting for India's future align their energies and visions behind a single goal: putting India first. Crucially, this includes a new generation of leaders who push forward a series of legislative and administrative reforms. Six key areas needing urgent, large-scale investment are identified. They become the cornerstone of a massive, countrywide campaign for change, known as "PAHALE: the Six Pillars of India's Future":

- **P**overty alleviation – basic needs for all
- **A**griculture and rural development
- **H**ealthcare
- **A**ccess to education
- **L**eapfrogging infrastructure constraints
- **E**ffective governance

Burgeoning globalization provides a huge boost to the Indian economy—the government balances the desire for immediate profit with more long-term development goals.

Meanwhile, it manages its ambitions to become a global power with sensitive handling of regional dynamics, carefully fostering constructive relationships with individual countries.

2015–2025: The international environment gradually grows less benign and the global economy slows. However, because India has made adequate preparations—internally in terms of reform and equitable distribution and externally in its international relationships—it sustains a robust level of development.

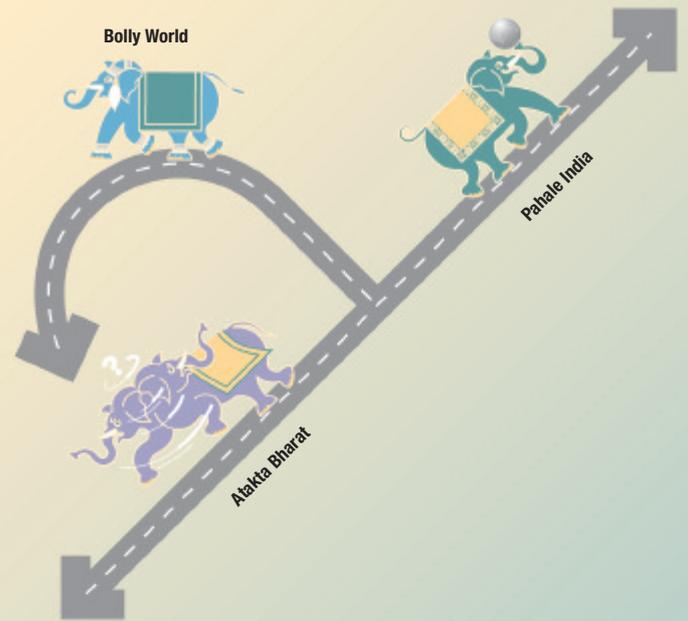
Over the 20 years of the scenario, India's leadership and society build the capacity to implement reforms and sustain inclusive development across the country, taking advantage of its growing population. By 2025, India has been lifted by a virtuous cycle of higher, sustained economic growth, balanced development and global integration, and is transformed into a significant, respected and responsible global power.

2005–2015: Despite endless committees and interminable conferences about India's future, the Indian government fails to take action to instigate reforms. Within India, this means a lack of infrastructure—inadequate roads; limited communications, healthcare and education systems; no attention to water management—and growing disparities between rich and poor. Rural areas remain undeveloped and the numbers of poor and unemployed increase.

The international environment is becoming increasingly difficult: economic demands and domestic pressures mean that the US is withdrawing from international engagements. And the rest of the world seems to be following its example, adopting increasingly protectionist policies. Gradually the global economy slows. In this context, India is not a tempting prospect for foreign investors who begin to pull out, or choose other cheaper, less dangerous destinations.

2015–2025: In the face of these escalating problems, the Indian government still cannot achieve consensus. The only area they can agree on is the importance of raising military spending as turmoil in surrounding countries increases. The Indian people stop looking to the government for solutions and concentrate on finding their own means of survival. Corruption increases, as do conflicts—over resources, and religious and ethnic differences.

But some, like the Hyderabad GM Crop Collective, find more peaceful and constructive ways to self-organize: pooling knowledge and resources, reaching out to find similar groups in other parts of the world. By 2025, it is movements such as these that provide a glimmer of hope in what seems otherwise to be a bleak future for India.



Comparing the Three Scenarios

This table provides a comparison of some of the most important aspects of the scenarios, with more analysis presented in section 6.

	Bolly World	Pahale India	Atakta Bharat
Economic performance	Growth led by a few select sectors, competitive in global economy. Rural development neglected.	Broad-based, high growth benefits majority and sustains internal economic development, while enhancing global economic integration.	Low growth, with potential constrained by lacklustre global economy and domestic economic weakness.
Social development	Unbalanced development driven by a few internationalized sectors and states. High disparity across states and regions.	Balanced development. Access to opportunities for all, benefiting majority, including women and the poor.	Rural development neglected. People and communities must help themselves. In best cases this leads to community self-organization; in worst cases, corruption and violence.
External relationships	Aspiration to be a major global player; neglects regional relationships.	Proactive economic diplomacy. Respected global player, ensuring peace and prosperity for South Asia and the world	Reactive foreign relations, shaped by global environment and immediate neighbours.
Leadership & governance	Oriented towards the self-interest of vocal and privileged minorities. Highly opportunistic; lacking in long-term vision.	Leaders put India first, above personal and sector interests. Aligned, effective and inclusive at all levels.	Dissatisfaction with ineffective national and state governance means that people take care of themselves. Leaders emerge from within communities with varying results.

Exploring the Future of India and the World

We now invite you to turn the pages, travel through time, and see for yourself what the future of India and the World may be like in the next 20 years.

Section **3** Bolly World





Scenario

A conversation overheard in Business Class, on the 17.15 shuttle from Delhi to Dubai...

Section

3

Bolly World

“ I’m so sorry—perhaps it would be better if we swapped seats. You see I have brought a cut of ham for my wife—and the bag has burst. Yes, you would have thought they’d have somewhere to keep it, wouldn’t you? But this is not the case, it seems. So I’m afraid I must keep getting up to make sure it has sufficient ice.

Thank you, you’re very patient. I am Deepak Malhotra. Yes, I’m Indian but my office is in Dubai. It’s to get away from the taxes. You know, in India they tax you for standing up, for sitting down...

... Well, that’s kind of you to say. A lot of people dismiss accountancy as boring—just columns of numbers. But I think, well, if you don’t pay attention to the numbers, then you don’t know what’s really going on, and whatever else you build on top will have no real substance. However attractive it may seem, it will just be an illusion.

I’ve tried to bring my children up to understand this valuable lesson. My son, I don’t know, he is a dreamer, too much under the influence of his mother. But my daughter knows all about the difference between illusion and reality—she is in the movies, a Bollywood actress. Perhaps you’ve heard of her? She’s C— Sh—. You know her? Well, yes, you’re right. Who hasn’t? Oh no, I hardly see her actually. She is always jetting off all over the world, you know.

But I comfort myself—at least she still comes home. Nowadays, most young people are trying to get as far away from India as they can. They seem

to feel that there is no point in staying here any more: after all, if you don’t work in IT or services there just aren’t enough jobs—and even those opportunities are shrinking now. And to think, India was doing so well only a decade ago!

So, what do you think about what has happened to this country? Let me give you my opinion: It seems to me that what has happened to India in her relationship with the rest of the world is a bit like what happens in those movies that my daughter is playing in. You know the sort of thing I mean: boy meets girl and they fall in love. Everything goes splendidly, until the girl makes a bad choice—or maybe the boy’s past comes back to haunt him—and then the boy loses the girl...

Well, usually in the movies it all turns out all right, doesn’t it? But for India, it’s hard to say if there can be a happy ending...

You like that description? Well, yes obviously, it’s a little simplified—it’s based on the movies! But I think you’ll find at its heart—if we look at it in some more detail—it’s quite a good way to think about it. In fact, why don’t we do that now?

...Nonsense! I don’t mind at all! It will help pass the flight...



2005-2010: Dil Chahta Hai (The Heart Desires)

Let's start with the first five to ten years of the new millennium. I think of these years as the period of courtship...

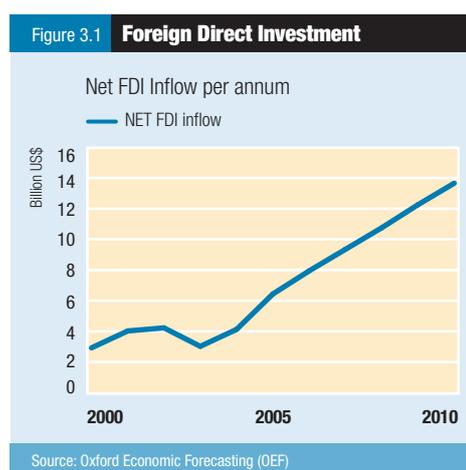
It was a good time—remember? The US and China were leading a period of booming global growth. India was dazzled by the lavish promises of international business and the global market. These visions were so sweet they even eclipsed the differences thrown up by our coalition politics—and that meant that the Indian government was actually able to push through some reforms. Granted, they were focused on encouraging immediate economic growth, rather than preparing the ground for longer-term goals, but it seemed like a promising start...

In turn, the international community was also charmed by India—by the cooperative attitudes of the government, by its industries' low operation costs and cheap labour.

And so the affair began: large businesses and corporations began to invest in India. Granted, their attentions were a little selective. They preferred to put their money into states that were growing or that already had sufficient infrastructure. But those states that could satisfy these requirements began to do very well indeed.

And, of course, the more growth they achieved, the more investment they attracted; the more investment, the more growth. Some neighbouring states speeded up this cycle by working together—sharing infrastructure for example or starting joint projects to boost each other's growth.

For these states, as they became increasingly active in global and regional markets, it was like a little honeymoon period. If



this were a film, we would have a big dance number at this point. Can you imagine? On come the states in India making great economic gains. They sing about the climbing growth rate of India and how happy they are to be globally integrated....

In many ways, the government was achieving its heart's desire. But it really needed to start using its head, as well! You see, in contrast to the Chinese experience of the 1990s, foreign capital was staying concentrated in particular sectors.

If I remember correctly, foreign investment in India reached US\$ 14 billion by 2010.

At this point, the money was being more or less funnelled directly into knowledge-intensive services—you know, like IT, bio-tech, pharma and engineered products or design services that were really skill-intensive.

...Well, yes, we do those very well—in fact, they're still the areas in which India excels. But think about it, yaar—it doesn't make for very broad-based investment, does it? It meant that only a limited number of sectors—those that didn't employ a great many people—and only a limited number of states were benefiting from India's new wealth.



¹ Between 2005 and 2010 only 40 million jobs were created (calculations by National Council of Applied Economic Research, or NCAER).

This isn't to say that the less well-off states called it quits! In fact, a number of them managed to create adequate IT infrastructure to be able to attract foreign investment, and by 2010, the IT sector had generated another million jobs.

But it just wasn't enough¹. Remember, we're talking about an estimated population growth of nearly 100 million people between 2010-2015 —and much of that population is springing up in the more backward states.

The stalling of education reform didn't help. Would you send your child to an Indian government school? Of course not! There were, then as now, excellent private schools, but state-run education was deteriorating fast. And it meant that the uneducated just were not able to — in fact, still can't — get the skills they need.

But the government was focused on the signs of its success. It saw India as an emerging global power, with a sparkling future—if she just played her cards right. And so it acted accordingly. What did they do? Well, I can give you several examples: for a start, there was the way we approached foreign policy. A bull in a china shop leaps to mind—but maybe that's unfair. India wanted to be recognized as a world leader, so that's how she behaved. She pushed for greater recognition in multilateral institutions, made a fuss about the US's deepening relationship with Pakistan, openly competed with China for oil and gas, and tried to tell them what to do about Nepal...

Or, take the example of aid. You may remember, in the early 2000s, India began to set herself up as an aid donor rather than an aid recipient. At one level it made perfect sense: after all, she couldn't very easily achieve her international political goals if she was dependent on foreign aid, could she? But this particular decision meant that a number of

crucial projects—water sanitation and education schemes that were dependent on bilateral aid—suddenly had no funding, and just had to be abandoned...

2010-2015 Dilwale Dulhania Le Jayenge (Brave Hearts Will Take the Bride)

The same was true of the way it channelled its own funds. Anxious to hold the attention of the global business community, the Indian government followed their lead as it made its own investments. And the result was that the kinds of long-term changes that India so badly required just were not set in motion. Nor were the growing needs of the burgeoning poor and unemployed addressed. Of course, they were raised in parliament, again and again. And, as you would expect, the speeches they prompted were passionate, heartfelt, sometimes desperately moving. But the fact remains that very little was actually done.

For many this was just because there didn't seem to be any real urgency. In lots of ways, it looked as if things were going really very well. Some states were flourishing; particular sectors were booming. Certain cities were almost choking with the influx of foreign and Indian companies.

But if you looked beyond the surface, the rural areas and those states dependent on agriculture were beginning to really suffer. There were a number of reasons. Key among them, of course, was that essential investments just were not being made. Farmers weren't being helped to diversify their crops, or to market or process them. Crucial infrastructure was never built. No one was trying to develop non-agricultural jobs.



Moreover, as we know now, a major groundwater crisis was unfolding. The lack of public investment in irrigation projects, alongside the failure to diversify the rural economy, meant that agriculture continued to absorb nearly 90% of fresh water resources.

In the early part of this period, there was no obvious crisis—so, although it was a topic of discussion in government, no action was taken, and the signs of future danger already apparent in the water stresses plaguing some states were simply ignored. But by 2015, over-exploitation and misuse meant that some aquifers had already run dry in the states of Punjab, Haryana, Andhra Pradesh, Gujarat, Karnataka, Madhya Pradesh, Maharashtra and Orissa.

And, to make matters worse, there was climate change—right?—irregular monsoons, droughts, etc. Remember the terrible drought of 2012?

So you can see why, as time passed, existing disparities between states didn't just continue—they got worse. By 2015, in contrast to their richer neighbours, some of whom had achieved the hallowed 10% growth (or even higher!), many poorer states were trapped in a vicious cycle of 2-3% gross state product (GSP) growth—that is, their economic growth barely kept pace with their population growth.

In Search of Success

The people in those states and areas didn't just take this lying down! Far from it: instead, over this period millions of people were moving away from rural areas to the big, rich cities in the hope of grabbing something for themselves...

But when they reached the big cities what did they find? First of all, no jobs (well, most of these country dwellers just didn't have the skills); and, second, a city that just couldn't

cope with all these new arrivals. The people who moved usually ended up in slums—no sanitation, not enough food, not even clean water. In fact, this was often worse for the bigger, more successful cities. The more foreign and Indian companies they attracted, the more people moved there in the hope of employment, the sooner these cities became overwhelmed ...

But people kept moving. By then a sort of vicious cycle had been set up—the more people moved, the more state and central governments had to channel funds into these areas. As a result, they had nothing left to develop rural areas... and so this meant that more and more people migrated to the cities, looking for the opportunities and wealth they'd heard about... and, well, you can see how this worked, can't you?

Of course, the concentration of people in the cities meant that, among other diseases, India began to see the real impacts of the HIV/AIDS epidemic. So, it turns out that the so-called doom-mongers were right—the virus had already moved beyond so-called "high-risk" groups into the general population back in the early 2000s. Long-distance truckers and migrating workers brought the virus into the heartland of rural areas. It became yet another source of division— while disease flourished, largely untreated, among the poor, those who were wealthier could afford drugs.

In fact, those who had the skills or education to ride the wave of India's success were doing very well, indeed. Many of them expressed concern for their mother country and its people. Everyone knew it was a problem—they talked and talked about how to help the poor become a part of India's glittering future.

I remember the fora and discussion groups that were set up—"India's Future?" "Whither

“WE JUST HAVE TO FACE IT WE GOT IT WRONG!”

This straightforward admission by the NGO activist Kameshwar Ambedkar confirms what many have feared for years: the HIV/AIDS epidemic in India may be out of control.

Back in 2004-5, the Indian government's estimate of current infections was conservative—only 5.1 million compared to the 5-8 million put forward by the CIA's National Intelligence Council (NIC). Unfortunately, it turned out that the NIC was right—and it was the upper end of its estimate that has proved to be accurate.

Underestimating the Risks

It really shouldn't have been that surprising. After all, India had all the risk factors that had led to devastation in other countries: high rates of commercial sex; unsafe sex between men and between men and women; marginalised groups; large mobile populations; drug use; poverty; ferocious stigma, low awareness and societal taboos against discussing sexuality.

But the struggle to combat the disease was mired by a lack of consensus on the extent of the pandemic, the "right strategy" to combat it, and how to deal frankly with sexuality. Stigma surrounding the disease was—and continues to be—a major obstacle to the effective provision of prevention and care.

Despite high-level government initiatives and public-private partnerships the epidemic has continued to spread. In 2004, HIV/AIDS was concentrated in six states due to sexual transmission (in the four southern states of Karnataka, Maharash

tra, Andhra Pradesh and Tamil Nadu) and intravenous drug use (in the north-eastern states of Manipur and Nagaland). Now, the epidemic has been carried into the rural heartland at a heightened pace by migrating workers and truck drivers via the recently completed national highways.

Facing a Disaster?

India's cash-starved health system lacks the infrastructure to deal with all the consequences of a major epidemic—and it is certainly facing that now. Again, NIC was right in 2005 when it predicted a prevalence rate of 3-4% by now. These apparently low numbers actually meant a staggering 20-25 million AIDS cases in India—more than any other country in the world.

Some argue that this is far from a disaster for India, pointing out that the massive population of the country will readily absorb the effects of such an epidemic.

But others have argued that the more complex impacts of the epidemic are only becoming more apparent. For example, the epidemic places a severe burden on state healthcare expenditure, especially as it interacts with other prevalent diseases, such as TB and malaria. Meanwhile, the demands of sickness, death and mourning mean losses in productivity. Experts believe that the virus is now spreading rapidly to the young, educated, urban population in India, exerting a significant impact on the skilled labour force. A few international companies have already announced plans to shift their operations out of India for fear of reputation and liability risks.

The ways in which the epidemic can erode the social, economic and political resources of a country is well known from African precedents—as is the scale of the human tragedy. Kameshwar Ambedkar is right, but for those with the disease, his admission comes far too late.



India?” “India 2050”—and they all had answers. Many of them made massive donations to the poor and lobbied the government for change. However, on the whole, their gifts could not make a difference—and there never seemed to be the time or opportunity to work out how to combine their efforts or take effective action.

2015-2020 Kaante (Thorns)

It was a shock when it turned out that India’s love affair was suddenly over. What had happened? Well, obviously, there was the global economic downturn around 2015—and that meant that countries were increasingly adopting protectionist policies; there was a greater focus on efficiency, and thus on competition.

In economic terms, by 2012, China was already outstripping the US as the principal contributor to global economic growth. Unfortunately this provided little comfort for India: although people talked about the “demonstration effect”, and how China’s example would be good for India, in fact China seemed to be sucking up all the available foreign investment, tempting investors with the latest, extensive high-end infrastructure. It was merciless—now you can bet that India felt remorse for her previous cavalier attitude. She just could not compete! In fact, capital seemed to be flying out of the country, leading to widespread bankruptcies, abandoned projects, worsening unemployment and increasing frustration.

International competition was rapidly becoming the name of the game—and for India that was not good news. Disappointment came from three directions:

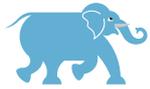
First, investors were finding that India just cost too much. Buoyed by success, many

Indian businesses had raised their prices. In this new, more competitive climate, investors began to pull out in favour of cheaper options, for example in Eastern Europe and elsewhere in South Asia. But opportunism was not the only motivation: the Indian government’s lack of attention to fundamental reforms had helped exacerbate a whole host of problems. These ranged from a lack of essential, reliable infrastructure to social unrest and rising crime, prompted by the growing disparities between rich and poor.

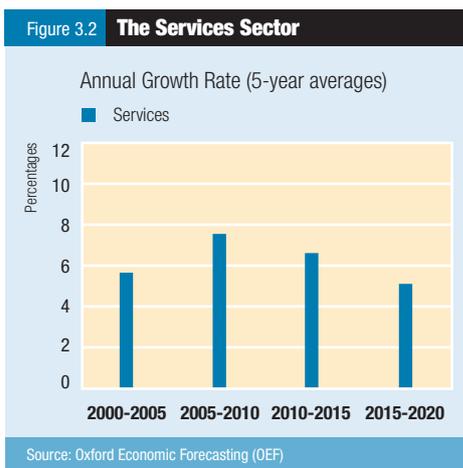
And this is linked to the final reason for investors’ disaffection. Why should investors care? Well, it would have been fine if people were happy with their lot. But the first ten years of success in India had given people aspirations. They had seen what they could have—you know, a nice house, good food, an interesting job. But now, as India’s economy slumped, the problem was they just couldn’t get it.

The growing numbers of poor and unemployed people were becoming increasingly angry and frustrated. Crime rose, and, in a number of the poorer states, some young people started to join extreme religious or ideological groups—some of which promote violence. In the poorer states like Bihar, Andhra Pradesh, Madhya Pradesh, Chhattisgarh and Orissa, naxalism began to reassert itself. Of course, this had a knock-on effect: investors tend not to like that kind of volatility.

Perhaps it would have been okay if India had had some regional relationships to fall back on; but it had been so concerned with strutting its stuff as a global power that it hadn’t paid much attention to nurturing these connections. Some of them are salvageable, but in the case of Pakistan—as you know—the results have been pretty disastrous.



² India's share in developing countries' FDI rose from around 2% in the 1990s to around 4% in 2010 and declined to just over 3% in 2015 (calculations by Oxford Economic Forecasting).



For a while, progress in service industries kept India's overall growth rate up around 8%. Unfortunately, for a while this also meant many people, especially those in government, denied that there was a problem. But when some multinational companies were the targets of terrorist attacks, even the service industry began to suffer.

This was the other side of the affair that seemed to promise India so much in the first decade: in an open market investors do indeed have a choice. But after 2015, it became increasingly apparent that they were choosing to invest elsewhere.²

The Dance of Leadership

Confronted with this change, despite brave rhetoric (and continued pressure from NGOs), the central government was still finding it difficult to achieve the tough reforms—they might manage to go one step forward, but coalition pressures usually forced them two steps back. Voters were showing little patience with this frustrating dance, and a succession of different parties (promising different solutions) was rapidly voted into, and out of, office. Ironically, although they faced increasing pressure to prove themselves and to deliver,

most governments did not even have enough time in office to see their policies through.

Meanwhile, or perhaps as a result of the inadequacy of central government, local governments were also under pressure. During the boom years, the plight of a number of poorer states had been eased by their wealthier neighbours, who had offered some financial aid.

But in this new, more competitive environment the richer states realized that they simply couldn't afford these fiscal transfers—they must reinvest everything they could in themselves. Other rich states took even stronger measures, struggling to protect themselves from the demands of their poorer neighbours by trying to minimize wealth transference by the central government and even attempting to restrict migration from poorer states.

And this wasn't the only evidence of competition, either. You've heard about the 2017 Water Conflicts, haven't you? That was the year of damming—yes, damming. Water had long been a source of tension—but nothing like this had happened before. States that were facing the threat of falling water tables were damming rivers with no thought for how it would affect those downstream. Among others, conflicts were simmering just below the surface in Punjab, Rajasthan and Haryana. Meanwhile, other states were lobbying for the renegotiation of international water treaties.

2020-2025: Bombay Dreams

As these factors have come together, you see, the world has just stopped believing in India... And we don't make it any better for ourselves—our young people, skilled and unskilled seem to be leaving this country as

LETTERS TO THE EDITOR

monsoon—and water such that Haryana, Gujarat dy permanently

pressure for global ited the will and impose and enforce ve industries, e.g. id paper, textiles, sugar, food and ig to more causing severe on and widening ven states and rce resources and worsening social

come. Climate s. Monsoons are edictable, while leading to more e dry summer . Add to this the peratures may nd glacier melt, to become more e Indus, Ganga you can see why

NGO's slogan is the last drop". s case, India's

form didn't help. ld to an Indian e not! There were, vate schools, but orating fast. And it st were not able e skills they need. ed on the signs of 1 emerging global ture—if she just nd so it acted ?

From Mr George Smedley

Sir,

Following your feature article on India's current water crises, and the ongoing "water wars", I would like to make the following points.

Disputes over India's water resources are far from new—for example, the Punjab assembly, supported by both the ruling and opposition parties, passed a resolution in 2004 to annul all its water treaties with its neighbouring states.

Moreover, it was already clear in the early 2000s, that there was a problem of monumental proportions developing. Already at that time, more than 75% of India's rural population (approx. 520 million people) did not have access to a public water supply; fewer than 40% of urban population enjoyed sanitation coverage. Per capita fresh water availability had dropped at an alarming rate: from 5,177 cu.m in 1951 to 1869 cu.m in 2001, and it seemed clear that the threshold of 1000 cu.m would be reached.

It did, a few years ago, faster than anyone thought in 2005! People have under-estimated then how fast water demand would increase, and in those heady days no one cared about preserving water resources in the pursuit of growth.

Some problems were just not addressed despite a veritable well-spring of rhetoric on managing and augmenting water resources, ensuring efficient and equitable allocation and utilization, involving the participation of all stakeholders, promoting public-private partnerships and ensuring fair pricing.

Unfortunately, there has been a drought of action. There remained excessive

dependence on the monsoon—and over-exploitation of ground water such that several states such as Punjab, Haryana, Gujarat and Rajasthan had already permanently exhausted their reserves.

More recently, competitive pressure for global investment and jobs has inhibited the will and ability of local authorities to impose and enforce regulations. Most water intensive industries, e.g. thermal power plants, pulp and paper, textiles, iron and steel, fertilizer, sugar, food and beverages, are migrating to more water-abundant locales, causing severe economic and social disruption and widening the existing disparity between states and regions. In the rural areas, scarce resources and migrating industries are worsening social discontent.

I believe the worst is yet to come. Climate change is exacerbating matters. Monsoons are becoming increasingly unpredictable, while decline in winter rainfall is leading to more frequent droughts during the dry summer months in many states of India. Add to this the fact that rising average temperatures may change the timing of snow and glacier melt, causing the melt-water flows to become more unpredictable and affecting the Indus, Ganga and Brahmaputra, and perhaps you can see why I despair.

Is it too late for action—our NGO's slogan is "We will fight for water to the last drop". However, my fear is that, in this case, India's chances may have run dry.

Yours faithfully

GEORGE SMEDLEY

"WATER WORKS"
155 Waterloo Road
London SE5 4GT

From Mr Thon

Dear Thomas

be able to attrac the IT sector hac jobs1. But it just wasn't remember, we're people [by wher is springing up in

The stalling of Would you se government sche then as now, state-run educati meant that the to—in fact, still c But the governme success. It saw In with a sparkling cards right. And s they do?

Well, I can give there was the wa A bull in a chin that's unfair: In world leader—s pushed for gre institutions; mad relationship with China for oil an to do about Nepa Or, take the exai in the early 2000 an aid donor ratl level it made per very easily achiev if she was depend

But this particular crucial projects— education schem bilateral aid—suc had to be abandon 2010-2015 Dilwa Le Jayenge (Bra the Bride)



fast as they can! Yes, it's the likely result of the current situation, but in terms of the world's view of Indians, it's becoming quite negative. You've seen how Indians are portrayed in the international media—we're either taking other people's jobs, or feeding off other countries' welfare.

Of course, some of the big companies have stuck by us—most of them in IT or biotech—hunting out our brightest minds... But I wonder how long they will stick around? And even if they do, how far can it profit India?

Our political situation means that the government still cannot pull itself together to work out a coherent response. Moves towards greater privatization are still being resisted, reducing the possibility of providing greater services across the continent, and diminishing the government's potential budget.

And India is suffering: just look at education—attendance is falling, especially in the youngest age groups; more and more teachers are absent from school; increasing numbers are dropping out of, or not even applying to college. As foreign investment has drained away, we have looked again to foreign aid. But, of course, in this economic climate, there's been less and less of that available.

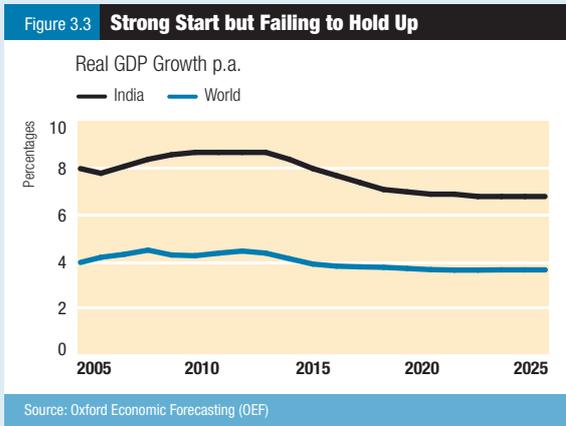
So, our erstwhile love affair is over. It is just like my daughter's movies. In fact, it is just like Bollywood itself. Once you get behind all the glitter and the razzmatazz, you realize the whole thing is just an illusion.

The effects of this disappointment are dividing India. Some people are attributing India's problems to globalization. They argue that India should look inward and concentrate on building its own strengths and look after its own problems. They espouse self-sufficiency and direct poverty reduction measures despite their rather dismal past performance in achieving their avowed objectives of greater employment generation and poverty reduction. Others, mostly in the richer states, argue that such a focus on self-sufficiency and social equity at all costs will only lead to a dead end – we have to chase after our international partners if we want our happy ending. In the best tradition of the “argumentative Indian”, the debate rages throughout the country.

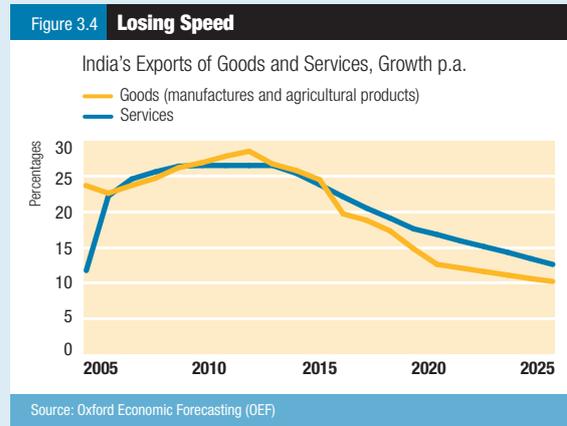
But, in amongst the squabbling, I'm afraid, yet again, no one is looking at the basics. But then I'm just an accountant-wallah, heh? What do I know?



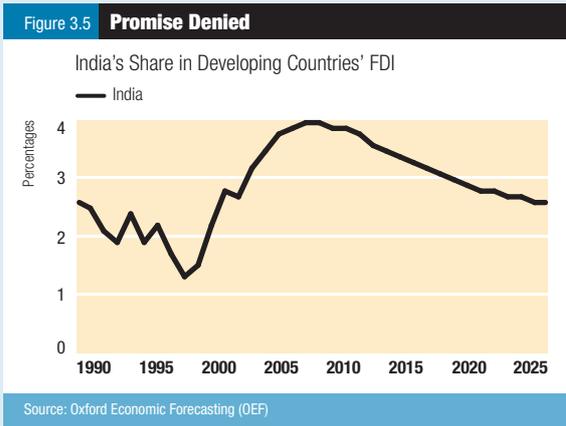
This page torn out of the in-flight magazine illustrates India's economic development over the period 2005-2025 and before.



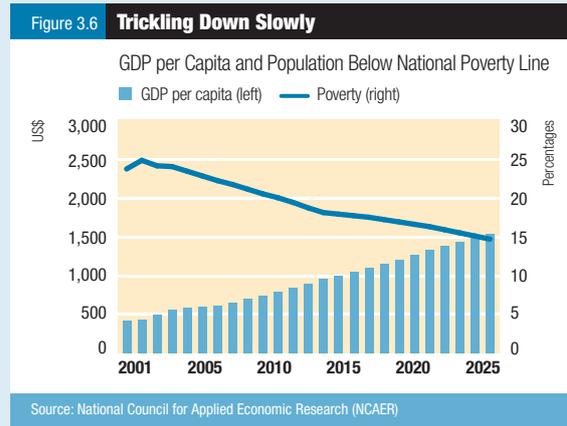
Reliant on external economy, India is severely affected by the global downturn around 2015. Its GDP growth rate slows by over 1.5 percentage points during this period.



Between 2015 and 2025 the growth rate of exports is reduced by half.



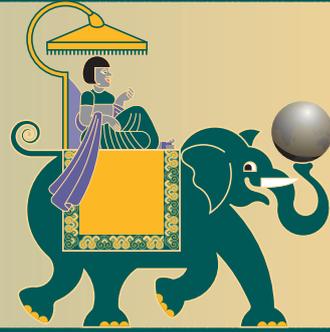
After an initial success in attracting FDI, India's share of the world FDI (here depicted as developing countries' FDI) drops to reach the level of 1990 in 2025.



Despite the slowdown in the second decade, per capita income almost triples between 2005 and 2025 and over 50 million people are lifted out of poverty.

Section

4 Pahale India





Scenario

40th India Economic Summit, 2025 People's Palace of Technology, Orissa, India

Keynote Speech

Section

4

Pahale India³

³ Pahale is a Hindi word meaning "first".

“ Thank you Sanjay, thank you Ladies and Gentlemen for the gracious introduction. And let me add my own welcome to the 2025 India Economic Summit, which we are proudly hosting here in the Orissa People's Palace of Technology.

What a venue! I invite you, if you have time, to please take a look around. As its name suggests, this building was indeed, once, a Maharajah's palace. Now, you will see it is a site of international scientific excellence. The projects worked on here are designed specifically to answer the needs and further the ambitions of our people. The displays are fascinating.

I have been asked to begin this event by reflecting with you on the last 20 years of India's development. In that context, this incredible building is ripe with symbolism.

It suggests how proud India is of her rich culture and heritage; it is a reminder that we face our future standing on the shoulders of the past; it is a living demonstration of the crucial changes that have taken place in this country.

For this event it carries immense significance.

At the same time, it has great personal meaning for me. When I heard the conference was to be held in Orissa I was particularly pleased, because, as some of you know, I was born here. Indeed, this very venue was, many years ago, the site of my first school.

Orissa Free Primary, as it was known then, was a government school—just a series of small buildings in the palace gardens. Back then, there was still some shame attached to going to a government school rather than a public school. Our parents didn't like telling the

other parents. After all, standards were lower, fewer children passed the public examination.

But what a turn around there has been! Why did it happen? We can sum it up in one word: investment. Less than two decades ago, the government started what would become the "Educate, Innovate, Participate" campaign. It brought sustained investments in education across the country, but especially in those states where attendance was low.

But investment also meant a lengthy and intelligent reconsideration of what education meant: who needed education, and what should it comprise? Both the curricula and the nature of educational institutions were redesigned in the light of the real needs of our country and our people. As a result, many vocational training institutions and adult education programmes were started. Some schools, including Orissa Free Primary, started to offer specialized teaching in particular areas.

And, finally, investment involved the development of public-private partnerships between government schools and local businesses, in the form of scholarships for students, sponsored teaching positions, donations of all kinds. The private sector would use government school buildings to offer evening classes, and vocational training courses. Orissa Free Science and Maths Primary—as it had become—was one of the first schools to benefit from such an arrangement in this area!

Now the school has moved to a separate and much larger site. It specializes in teaching science and maths. It is one of many Free Primary Schools, supplying free primary education to all the children of the area, and recent surveys have shown that 99% of children from all backgrounds are staying in school. What's more, the standards within our



government schools are on a par with and in some case are exceeding those of private education facilities.

Orissa Free Science and Maths is feeding the country's appetite for scientific research. It is also one small example of the huge role education plays in the future of our country. After all, as C.N.R. Rao, the prime minister's science adviser back in 2005 so acutely observed: "You cannot be industrially and economically advanced unless you are technologically advanced, and you cannot be technologically advanced unless you are scientifically advanced."⁴ We might add to that: You cannot be scientifically advanced unless you have sorted out your education system!

Besides, as the East Asian model showed—you cannot have a just social system without ensuring adequate and equal access to education.

So now Orissa is renowned for the excellent quality of its education. My old school is filled with the cream of the business elite from all over the world. A maharajah's palace has become a people's palace of technology. And where I used to run around these halls, a little *badmash*⁵, now I stand before you as an international Indian businesswoman. Baap-re! What a turn around, huh?

I have told you about this because for me it provides a little parable that demonstrates what India has achieved over the past 20 years. First, the coming together of different groups of people within India, aligning their aspirations to create a determined and sustained effort for their country's future; and, second, as a result of such efforts, India's increasing integration with the rest of world.

But this does not mean that we are losing our sense of identity. Far from it! I believe that this is globalization desi-style. What do I mean?

I think it was described best in a famous song from the 1950s, from Raj Kapoor's *Shri 420*—the story of a little man trying to make it in the big city:

Mera joota hai Japanese
Yeh patloon Englistani
Sar peh lal topi Russi
*phir bhi dil hai Hindustani*⁶

Don't worry, that will be the last you will hear of my singing today! But I hope that the point I am making is clear. As we review the journey that India has taken towards its future, as we look back over 20 years of remarkable achievements that have transformed India into a significant player on the world stage, we must not forget that India remains proud of her culture and heritage; proud and supportive of all her people and their hard work, whether they are travelling the world for international companies, or home in the villages, working the land; proud of her multi-ethnicity, her plurality, her democracy.

To underline this point, you will hear in my speech that I have deliberately picked a metaphor of seeding, flowering and planting. As I composed my speech, I felt that these would emphasize some of the most important shifts that have occurred in this country over the last 20 years.

2005-2010: Seeds of Aspiration

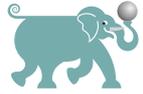
It started with the emergence of a movement.

The seeds were already there—had been there for years—individuals or groups scattered across the country who were doing their best with what they had to improve life. But over the first five to ten years, something remarkable happened:

⁶ My shoes are Japanese; My trousers (are) English; On top (a) red Russian hat; Still my heart is Hindustani.

⁴ *New Scientist*, 19 February 2005; p. 32.

⁵ Little rascal—used of naughty children.



these isolated activists found each other. They managed to align their visions and their passions, their creativity and energies, behind a single goal: putting India first—pahale India!

Of course, that makes it sound so simple. But of course, it wasn't. In fact, it's not at all clear how it happened. In previous times, such coherence had always emerged in response to crisis. Looking back, some people say that India was threatened with crisis—it's just that most people didn't see it. Others disagree: they say that this was one of the remarkable things about this movement—the fact that it happened for positive reasons.

Whatever the motivation, those involved came from every part of society, every part of India. Men and women, young and old, farmer or bank manager, bureaucrat or NGO activist, they stood side by side and they were all hungry for change.

It may have been that such widespread support created the kind of political pressure that could not be ignored; others, more puzzled, just say that the gods were on our side. My personal view is that China's achievements were providing both a positive example for India, as well as a deep concern about being left behind.

Whatever the cause, the result cannot be questioned: the many political parties aligned themselves around a shared vision; a common purpose slowly but surely harnessed the political system.

Putting Down Roots

As a result, the usual destructive interference with parliamentary processes diminished, and legislative and administrative reforms were able to proceed fairly smoothly.

Across the many parties, consensus was reached on the reforms that must receive

attention: six key areas were identified as needing urgent, large-scale investment. Known as "PAHALE: the Six Pillars of India's Future", these became the cornerstone of a massive, countrywide campaign for reform. They were:

"Poverty alleviation—Basic needs for all": The first and most important of the six pillars—the right of everyone to food, clean water, hygienic sanitation and employment. Included in this was a determination to improve the disparities suffered by women, lower castes, the rural poor, etc.

This was not just about providing increased services for the socially disadvantaged, but rationalizing and developing those that already existed. For example the states and the central government worked together to streamline those schemes for providing food and nutritional support that were overlapping. Governments also focused on the fact that food provision programmes for some vulnerable groups needed to go beyond the simple calorie-protein norms.

"Agricultural and rural development": Intent on inclusive development, central and state governments worked with the private sector to improve rural access to power, irrigation, financing and markets, allowing farmers to diversify their land use, and to process and export their produce. Problems with the cooperative credit system were addressed, along with structural changes in the banking system, so that banks were able and willing to extend direct credit to farmers. The changes in land rights started in the early part of this period slowly came to fruition. As local communities gained land ownership, the amount of land in productive use expanded.

Agricultural research universities benefited from the changes in approaches to education. In addition, recognizing that aiming for higher



From a private letter sent by farmer-activist Gurcharan Dasgupta, to his brothers in Delhi

January 2008

My dear brothers,

For a long time you tried to persuade me to move away from the family farm and join you in Delhi. Never mind the slum conditions, you argued, at least there was a chance of making a living.

Now it is my turn to write the same to you! Things are changing so rapidly out here in the country, you would hardly believe it.

What is happening? Let me quote from the leaflet that our local Rural Development Officer has recently distributed:

“In order to increase the productivity of Indian agriculture it cannot work simply to impose practices from more advanced countries, such as corporatization of farming, large land-holdings and mechanization. These approaches are likely to have disastrous unintended consequences on the overall development of India: for example, these new techniques would displace several hundred million people from their current livelihoods.

The principal challenges of developing the India rural economy are:

- Distance, making access to services, such as health, education and markets more difficult and expensive;
- High dependence on access to common property, e.g., water, forests, grazing lands, etc.—community models of resource management are needed rather than corporate/consumer models;
- Limited opportunities for earning cash incomes, compared to urban activities, because of high dependence on mixed livelihoods, primarily agricultural.

We must find the right approaches for India—we must put India first!”

I know that you will dismiss this as just more rhetoric, but really, believe me when I say it is actually being put into practice!

In our area alone, a whole host of successful projects have been started:

- More roads, electricity and telephony systems are being built;
- Modern communications technologies are being used to develop new models for remote service delivery;
- More resources are being given for the provision of services, such as water, sanitation, health and education;
- The local community is being deliberately involved in the provision of social services and physical infrastructure—which all help to ensure that services meet our needs and are maintained and at the same time we get access to information about the government funds we’re meant to receive;
- Proper attention is—at last!—being paid to water management and irrigation with an additional 10 million hectares of land to be irrigated in the next 5 years, generating employment for an estimated 10 million people at the rate of one person per hectare;
- Tiny business—often run by women—are springing up everywhere because of the spread of micro-lending, and bringing lots of our people into the regular, cash economy;
- Partnerships are developing between voluntary organizations (including NGOs), government agencies, business organizations and the local community—and this is really helping to create the best resources possible for starting and sustaining projects from those best able to give them.

The learning from each individual project is shared at regular meetings—within and between panchayats. This approach means that change is able to happen faster, more effectively—and with so much excitement behind it!

Come home brothers! Never mind the bright lights and opportunities of the city—the countryside is the place to be now!



⁷ Tiered system of local self-government.

agricultural productivity would inevitably mean the displacement of labour, the government focused on the development of new agriculture-related jobs—for example, processing and rural services.

“Healthcare”: Central and state governments focused on infant mortality and care for those with AIDS. Back in 2005, India already had an AIDS infected population of 5.1 million, the largest outside of Africa, even though the overall infection rate remained low.

“Access to education”: At the beginning of my speech I used the story of my old school and of education within this state as an example of some of the changes that have taken place in attitudes to education. The final goal of real education was—is still—not just to provide primary education for all, but also to make education relevant to the needs of India, her people and her future. This included reviews of the curricula, the establishment of adult education and vocational training institutions, and more and better quality higher education.

“Leapfrog infrastructure”: From roads to telecoms, to a sustained countrywide focus on water management issues.

“Effective governance”: The move to devolve power away from the centre towards the states continued. But during this process, the central government turned a critical eye upon itself, improving accountability and transparency, examining the productivity and efficiency of its own spending and reforms, and urging states and districts to do the same.

Part of this was, of course, tackling corruption, which was widespread, almost endemic, within many parts of the government. Technology was one method that was used to create greater transparency around government activities. You may remember an early

example—the computerization of land holding records in Andhra Pradesh. Judicial reforms also helped, so that court cases were decided more quickly; as did the devolution of decision-making and implementation to *panchayati raj*⁷ institutions. But none of this would have worked without the strong and consistent will to confront anything that might undermine India’s future.

Helping to push all these changes forward, a new generation of leaders was coming to the fore across the country—in both state and central government. These young people were focused on the future of the country and were anxious to find ways to work together despite their different ideologies.

These young leaders recognized that, to ensure the sustainable and robust development of India, leaders at all levels needed to put long-term goals alongside those that promised more immediate profit. This meant focusing on equitable, inclusive policies that nurtured the people of India.

They also took the lead in building each of the Six Pillars. Myriad different programmes were started at community, panchayat, district and state levels. The government helped ensure that crucial information was shared, so that successful initiatives could be replicated in other areas. But the energy, the will, the commitment came from everyone.

Meanwhile, the government set about implementing the kinds of changes that would create the resources these investments would need. For example, value-added tax reform, support for small- and medium-sized enterprises and entrepreneurs, and liberalization in favour of greater FDI opened the floodgates for substantial, growing investment not just in infrastructure, but across many industry sectors.



From: Jai Premji
Government Task Force on Indian Education
To: Minister of Education
Date: 23 April 2009

A full report is attached, but our key recommendations are outlined below. We would advise that the report be shared as quickly as possible with all crucial personnel within the central government, all state governments, relevant NGOs and educational institutions, so that we can move forward on implementation. We look forward to our next meeting.

Strengthening the Indian education system

Attention must be paid and action taken at two key levels:

1) Sector-wide policy issues: The education sector as a whole is constrained by regulation—far more regulation than is found in other industries such as manufacturing and IT. Any educational reform should ideally start by reducing the regulatory constraints before proceeding to more specific issues.

2) Problems within particular sectors:

- Engineering education – While most of India’s 5,000 top engineers (IITS, BITS) pursue non-engineering careers or migrate abroad, there are 60 regional engineering colleges in India admitting 25,000-30,000 high-quality engineering students each year. Driving excellence in these colleges can ensure increased availability of quality engineers. This can be addressed through improvements at engineering colleges in:
 - o Governance and administration;
 - o Financial autonomy;
 - o Faculty/curriculum development;
 - o Increasing electronic connectivity.
- Vocational education – Leveraging existing infrastructure to provide training in key verticals such as business process outsourcing (BPO), textiles/apparel, pharmaceuticals and auto components.
- Adult literacy – Using computers to increase effectiveness of adult literacy programmes.
- Research and higher education – Investment in R&D should not only be increased, but also integrated with national development needs.

[The following scribbled on the memo by the education minister]

Jai,

Go ahead and implement the plans. We have talked about various initiatives for far too long. There is sufficient alignment and consensus now to make a big push, as we did with infrastructure 3 years back. Set targets, put someone in charge, give her full responsibility. She should report to me directly next year on progress.

Signed
30 April 2009



2010-2015: Working the Soil

Nowadays, you can find these changes listed in many a history book, but I'll just remind you of a few of the really significant achievements that were made by 2015:

- FDI, hovering around US\$ 4 billion in the early 2000s, hit US\$ 14 billion by 2010, and US\$ 25 billion by 2015 as a result of the sustained liberalization measures that were announced in 2005;
- As a result of the implementation of the recommendations by the private-sector led Investment Commission set up in 2004, infrastructure was radically transformed, with more than US\$ 15 billion invested each year to modernize ports, roads, rail, airports, etc.;
- Near full employment was achieved—the overhaul of the labour laws (starting with special economic zones and then deployed across India by 2015) rapidly generating jobs across the country;
- States focused on their particular strengths, so for example those with little infrastructure could take advantage of the spreading wave of international outsourcing projects. After all, most outsourcing just needs an adequate telecommunications system. Others built on their tourism opportunities, or particular specialties, for example software development. It became easier to attract FDI, especially from non-resident Indians. Lagging states were able to catch up with their richer neighbours in terms of both growth and opportunities, reversing the widening disparity recorded in previous decades.

Little by little, within states across the country, the combination of these efforts began to generate the necessary structures and

institutions, the mechanisms and support for sustained—and equitable—economic development. Many of the achievements I've listed were reached with the help of innovative public-private partnerships. In addition, the value-added tax system was successfully implemented; financial systems within states were productively restructured, state governance improved. In fact, countries and multilateral institutions are now seeking to replicate our successes.

Benign International Environment

These difficult but critical changes taking place within India during this first decade were helped by the global environment, which helped to nurture these shoots.

The first ten years of the period we're discussing saw peace and growth blossom throughout the international environment. The US and China were powering the global economy, and the substantial increase in jobs that this brought was also boosting the prosperity—and stability—of a number of Middle East, Asian and African countries.

Across the globe, cooperation between countries was flourishing. Iraq, Palestine and Afghanistan enjoyed relative peace and stability amid widespread economic and political reforms across the Arab world. A better understanding of the root causes of terrorism meant that developed countries were prepared to lend greater support to tackle poverty and failing states—thus undermining terrorist networks.

But don't be misled—the international attention that India was receiving was not a result of altruism. Far from it: the fact was that the changes taking place in India meant that it was increasingly attractive to foreign investors and net FDI inflows rose to US\$ 25 billion in



2015. The Doha round had been successfully completed, improving world trade—and the phasing out of the Agreement on Textiles and Clothing had given India's textiles industry a huge boost. Countries and companies were investing broadly across India, in a wide range of locations and industries. India offered new markets and low-cost labour—access to those at the bottom of the economic pyramid was increasing, as the rural areas were developed—while the global market was increasingly open to India's agricultural, textile-based and rural-based products. Our global market share for goods doubled between 2009 and 2015!

Meanwhile, India was balancing its ambitions to become a global power with sensitive handling of regional dynamics, carefully fostering constructive relationships with individual countries. For example, it was still enjoying all the benefits behind the US's 2005 promise "to help India become a major world power in the 21st century". But, it also came to appreciate the benefits of sharing US favour with Pakistan, building a robust alliance with its increasingly stable neighbour.

Meanwhile, India and China found amicable ways to work together—for example, to satisfy their growing demands for oil and natural gas, or to resolve mutually irritating regional disputes—helping to build confidence and a spirit of cooperation.

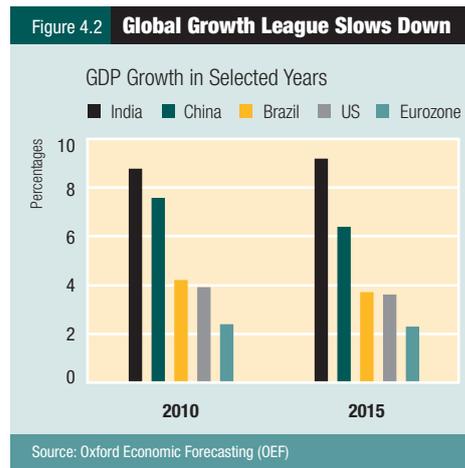
In South Asia a free trade agreement was working by 2009, accelerated by India's proactive economic diplomacy. India's flexible and visionary approach to foster greater economic inter-dependency within the region led to the implementation of the so-called "peace pipelines", leading to energy deals between Pakistan, Iran, Myanmar, Bangladesh and countries in Central Asia that benefited all participants. These successes in turn laid the



basis for resolving long-standing bilateral issues. India's "Look East" strategy also resulted in an invitation from ASEAN+3 to join the fledgling East Asian Community.

By 2015, India was widely viewed as a benign economic actor and was playing an instrumental role in the creation of a regional economic union with bilateral free-trade zones. As the minister for trade noted in his address at the union's inaugural meeting, India's explicit aim in this was to fuel the economies of neighbouring countries in order to help establish stability.

These radical changes within India, encouraged by the favourable global environment, helped unleash the dynamism of India's entrepreneurs. Indian companies expanded aggressively—not just in India, but worldwide—laying the foundation for a meteoric rise in India's share of global trade and investment over the next decade. Global business leaders were dazzled by the capacity of many Indian companies to create breakthrough business models—for example, managing to reduce the price of developing certain drugs from the US\$ 800 million it had cost in the West to a mere US\$ 80 million.



More and more Indian companies were breaking out beyond their original core business—for example writing code on demand—to provide far more comprehensive services for clients across the world, not hesitating to bring in outside marketing, management and top-drawer consulting expertise as required. In the business press, these organizations were increasingly being described as providing the blueprint for successful global companies.

2015-2020: A Thousand Flowers Budding

As the next decade began, it became apparent that India was edging ahead as the fastest-growing economy in the world.

Large-scale investments in productivity in a large number of sectors were producing more jobs and improved investment. Indian industries and companies were growing increasingly competitive, expanding their presence across the world on the back of a booming home market.

By focusing on relevant education and developing its agricultural sector, India was managing to turn its rapidly growing population

into a demographic bonus rather than a liability. This meant that multi-national corporations were seeking India's talented workforce. And in both manufacturing and services, India was competing effectively with China, where one of the results of the one-child policy was now a smaller, and older, population.

In fact, as the positive results of India's reforms became apparent, China began to see India as a serious competitor in areas such as FDI and energy resources. But there were also significant areas of cooperation, for example the extension to China of the Iran-Pakistan-India pipeline.

International Growth Slows

And the fact was that the global economic slowdown that started around 2016 meant that international competition was rapidly becoming the name of the game.

The US, seeing the global influence of India and China expand, started to become more concerned about its superpower status. Meanwhile, China's growth was, in fact, starting to slow, becoming more volatile as its leaders contemplated the democratic reforms called for by the country's growing middle class.

As global growth slowed, there were renewed calls from the developed world for increasing protectionism. And yet, despite the change in the international environment, India still continued to flourish—her overall growth rate rising to around 10%. The fact was that the changes that had been implemented during the first ten years of this period had created a broad-based and resilient economy.

India could become one of the fastest growing large economies

FDI continued to rise. It was drawn not just by growing Indian markets, but also by her rich talents: Indian companies were—as they still



Excerpts of an interview with Kamal Singh, Director of the Global Energy Research Centre at the “Energy 2030 scenario workshop”, as part of the Asia Roundtable held in Shangri-la Hotel, Singapore, 28 April 2015

Interviewer: India’s economic growth looks set to be sustained at 9-10% in the coming decade. Many have said oil and gas prices will continue to hit new highs. What should be done?

Kamal Singh: The answer lies in enhancing the efficiency of energy usage while diversifying energy supply sources.

We must implement appropriate energy pricing, adopt novel environmentally friendly technologies and reduce inefficiencies in electricity distribution. According to the World Bank, grid losses are particularly dramatic during peak hours because of poor infrastructure and illegal grid connections. The “peace-pipeline”, so-called because the greater inter-dependence will help bring long-lasting peace to a region that has been plagued with conflicts, from Iran through Pakistan to India, to be ready next year, will provide a new source of energy. According to some studies, the 2,670 km long pipeline could provide Pakistan annually with US\$ 500 million in transit fees while saving it US\$ 200 million by purchasing cheaper gas from this pipeline project. At the same time, it could supply India with up to 45% of its medium-term natural gas needs at half the international market price based on the bilateral contractual agreement between Iran and India. Other “peace-pipelines” that are under construction now will link Burma to India through Bangladesh, and Turkmenistan to India through Afghanistan.

India’s coal deposits account for about 9% of world reserves. With current technology in coal gasification⁸, advanced power systems will be capable of achieving up to 50% thermal efficiency at an investment cost of less than US\$ 1,000 per kilowatt. We can even integrate coal gasification technology with combined cycle generation and the sequestration of carbon dioxide emissions, so we can operate large scale energy plants with virtually zero-emissions.

India’s international leadership in using Fast Breeder Reactor (FBR) technology for large-scale power generation means we can now safely secure a long-term clean source of power, while using indigenous uranium and thorium reserves.

Providing energy to rural communities using large-scale power plants is both uneconomical and environmentally unsustainable. Instead, solutions that leverage the region’s specific characteristics, such as solar radiation, wind or biomass, are better adapted to local needs, while also being economically viable. Furthermore they have the potential to substantially reduce energy poverty in rural areas.

Take for example, wind and solar energy. In many Indian coastal areas wind conditions are such that wind turbines provide an ideal solution. Most parts of India experience clear sunny weather roughly 80% of the year, with Rajasthan and northern Gujarat receiving the highest levels of radiation in the country. Solar solutions will greatly vary depending on the locale, ranging from solar cooking and heating to solar home systems and large-scale solar power stations.

Interviewer: So it seems that India indeed has the opportunity to provide energy for everyone, everywhere, presenting a model for many other countries in the world!

Kamal Singh: Yes, indeed. India will therefore be able to reduce its reliance on energy supplies from abroad, meet the needs of both the large cities and rural villages, and realize an environmentally friendly programme that will contribute to reduced carbon dioxide emissions.

⁸ Coal gasification is a process in which coal is reacted with oxygen and steam to produce a combustible mixture of gases consisting primarily of carbon monoxide and hydrogen – synthesis gas. After cleaning, the synthesis gas can be used either to power a gas turbine or an assembly of high-temperature fuel cells.



are—leading the world in both growth and innovation. India was not just surviving, she was thriving.

And the emphasis on equitable development has continued. For example, lagging states have continued to catch-up to their more successful neighbours with the help of transfers from the central government and other richer states granted on condition that they improve governance and implement reforms.

India's concern with taking care of the poor extends beyond her own borders. In contrast to her position as a major recipient of official development assistance in the early 2000s, India has become a significant donor of development aid to poorer countries.

The Indian government has continued to look ahead. For example, in terms of energy, over the next ten years, India reinforced ties with Iran and Russia to ensure energy security, while continuing to work with the US on securing peace and democracy in the Middle East. Still, because she was 90% dependent on imports, India became more vulnerable to occasional oil price spikes, although her exposure was limited by so-called “peace pipelines” through Pakistan to the Middle East and a dedicated search for alternative sources of energy (such as nuclear and biomass) and energy efficiency.

2020-2025: Harvesting the Fruits

As we look back from 2025, we can say that in many ways India has achieved the impossible. For example, there is near-full employment and 100% primary and secondary education, which is free, compulsory and admired across the world. Telecoms are all-pervasive, bringing crucial information to even the most isolated villages. There is improved transport

infrastructure; and distributed energy systems are providing new models of power, even to the remotest rural areas, all of which help to encourage balanced economic development.

Of course, it hasn't all been easy. Rapid growth brings turbulence in its wake, especially with increased global integration. The thrill of new money can go to people's heads. Some have been frustrated and pessimistic about the chaos of new construction.

Many feared, for example, that India's dramatic development would mean the growth of massive mega-cities that would suck those in search of success out of their rural communities, across states, to survive in sprawling slums. But in fact, quite the reverse seems to be occurring now. Steady investment in rural areas has seen thriving, mid-sized cities mushrooming across the country. Yes, there are some major conurbations—Mumbai and Delhi, for example, have continued to grow. But on the whole, most people have ample employment opportunities close to where they live—and any migration tends to happen within states.

Some argue that it's the unquantifiable losses that we must beware of. For example, that Indian traditional values will be lost in a sea of rising consumerism and materialism. However, I have observed that in fact it is the Bollywood actors and directors and Indian themes that are spreading throughout Hollywood, not vice versa. It's one small example of how India has become a source of inspiration, prosperity and talent to the world.

I can also say, perhaps more seriously, that if Indian traditional values included the religious divides—then, yes, perhaps it was time for it to change. Change sometimes opens up opportunities—it has for me. My family is from the Vaishya or trading class. I am proud of the ways in which my culture is



addressing and adapting age-old structures.

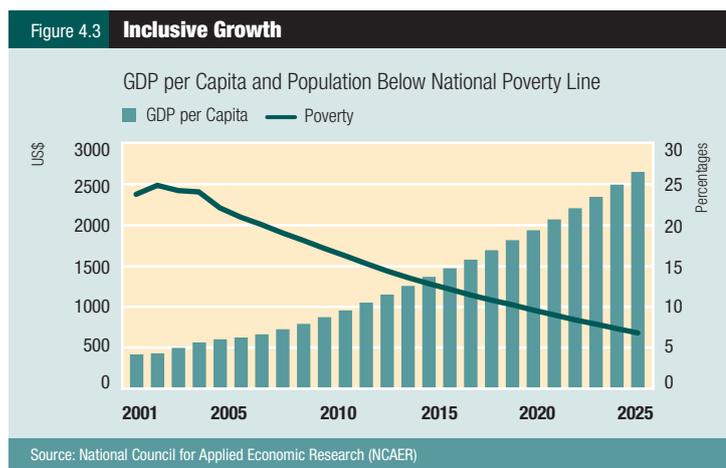
Lifted by a virtuous cycle of higher, sustained economic growth, balanced development and global integration, India has transformed itself into a significant, respected and responsible global power.

Its young leaders have matured and developed on the international stage: making careful strategic alliances, taking India into the United Nations Security Council (UNSC), ensuring that she plays a leading role in the Asian Economic Community.

Indians everywhere are justifiably proud of India's growing economic, geopolitical and cultural influence. Our efforts lifted over 150 million people out of poverty and only 7% are poor today! And how much better off we all are! GDP per capita has quadrupled in 20 years. As every year passes, more and more of the diaspora are deciding to return, coming home to *Bharat-mata*.

Who would have believed that we could come so far in only 20 years? The seeds that were sown so long ago, have blossomed and flourished. We expect that by 2045 most people in India will be enjoying the same standards of living as their neighbours in the developed world.

This is what comes of putting India first.





⁹ This topic box is adapted from a contribution from Mrs Anu Aga, Director of Thermax Ltd, India.

During the 40th India Business Summit, Shalini Mathur explained to journalists after her plenary speech her views on how the state of Indian women has improved over the last twenty years. Here are some excerpts⁹:

“Twenty years ago, no one would have thought it possible. Back in 2005, millions of women were struggling for survival, struggling to find the basic necessities of life. Foeticide was on the rise thanks to pre-natal diagnostic techniques – educated, relatively well off families were aborting girls. In states like Punjab, Haryana, Himachal Pradesh and Gujarat the child sex ratio had drastically declined to less than 800 girls for every 1,000 boys.

In poor families, boys were educated, but education for girls was neglected. Of course, education is tied to economic independence – uneducated women are always at the mercy of their fathers, their brothers or husbands for economic survival. There was no investment in women’s health and many innocent women were afflicted with HIV. A woman was considered to be a man’s “property” and was discriminated against, harassed, and physically and psychologically exploited. It was quite usual for the police to say to a woman, “Why do you complain; after all he is your husband”, when she complained that she had been battered by her husband.

Over the last 20 years things have changed in so many ways:

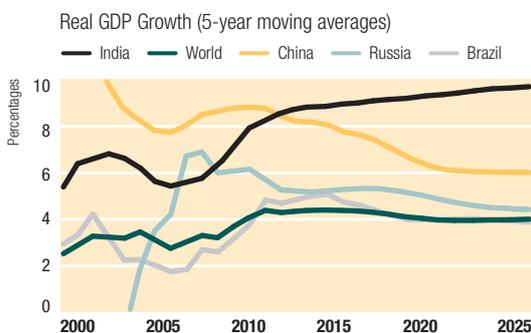
- All institutions, including the police force and judicial system, have been sensitized to the equal rights of women. Anti-discrimination laws like the Prohibition of Sex Selection have been rigorously implemented.
- Enhanced accountability has ensured that government resources earmarked for women’s causes are directed to the right source.
- The provision of basic amenities like water in rural areas has helped women avoid the back-breaking task of walking for miles to fetch drinking water.
- Substantial investment in the education of its women has paid off—not just in the increased independence it has brought individual women, but also because when you educate a woman, you educate a family. Back in 2005, adult female literacy in India was 46%, compared to 89% in China. But now India has caught up.
- Many corporations have played a role by recognizing the multiple responsibilities that women bear. They have provided flexible working hours, increased maternity leave and childcare for women where they live, rather than at the workplace.
- Women are supporting each other: those who have risen to positions of responsibility and power in various organizations have become mentors—both for other women within their organizations and to girls still at school.
- Many NGOs have helped by raising awareness about women’s issues, fighting the exploitation of women and working to improve women’s economic opportunities.

We now have a much better India. Look at the indicators: reduced birth rates and child mortality; improving health, nutrition and education; fewer women dying in childbirth; more young girls finishing their primary school education. The cultural changes that have led to these improvements in women’s rights have also helped to stop the rapid spread of HIV/AIDS—more and more men and women understand that the traditional sexual subjugation of women must change. Across India, across all its diverse cultures, many more people now recognize that the female child has a right to be born, nurtured and educated so that she has a fair chance in life.”



This handout, summarizing the main economic developments in India between 2005 and 2025 had been distributed during the speech:

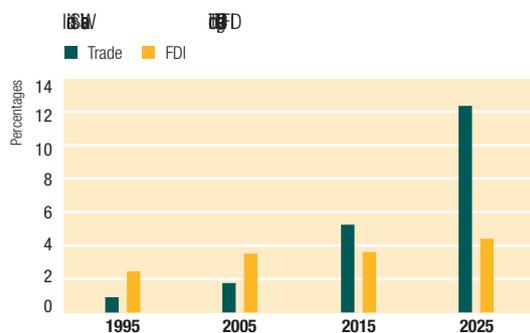
Figure 4.4 The Indian Growth Miracle



Source: Oxford Economic Forecasting (OEF)

Between 2005 and 2010, India benefits from a booming global environment as its economy climbs onto a higher growth path. After this initial period of export-led growth, India's internal market develops quickly and helps sustain India's economic growth even during the global slowdown around 2015.

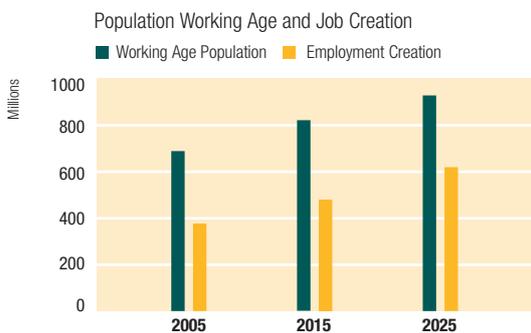
Figure 4.5 A Global Player



Source: Oxford Economic Forecasting (OEF)

India's global trade share grows quickly to reach 12% in 2025

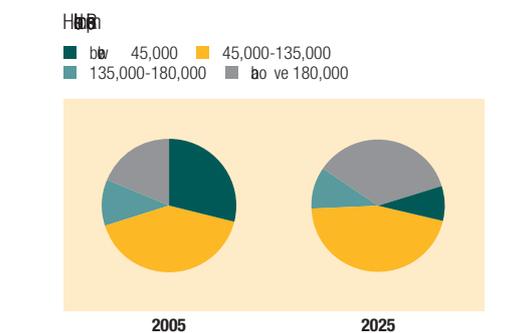
Figure 4.6 Closing the Gap



Source: National Council for Applied Economic Research (NCAER) and United Nations

Employment creation grows faster than working age population, reducing the unemployment rate.

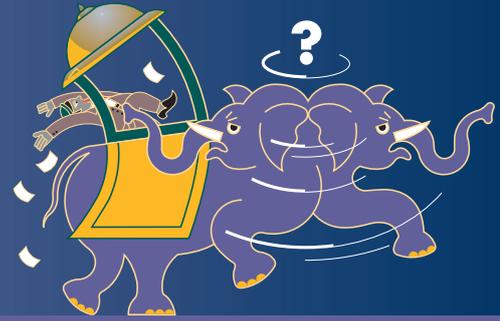
Figure 4.7 Income Distribution in 2005 and 2025



Source: National Council for Applied Economic Research (NCAER)

The overall purchasing power rises substantially, with a burgeoning middle class by 2025.

Section **5** Atakta Bharat





The Hyderabad GM Crop Collective

In a time of such difficulty for India—and the world—we feel that people must come together to help themselves. Founded in 2019, HGMCC is a collaboration between the Hyderabad Farmers, Seed Developers and Rural Workers Co-operatives.

We are a community-minded, environmentally conscious, worker-operated group, who feel that GM crops can offer a way forward for India's farmers.

We want GM seeds—and their crops—to be affordable and accessible to all. At a time when climate change and water issues are making farming so difficult for so many, we see GM crops, adapted for growth in unpredictable conditions, as offering crucial hope.

In addition to bringing rural workers, farmers and seed developers together, the aim of our collective is to examine these complex issues, providing information for people who are interested, and in particular to represent the farmers who make their livelihood from these crops.

HGMCC, 3-17-238/5. Street No. 13, Nehru Nagar, Hyderabad;
Phone: 040-25147980; E-mail: secretary@hgmcc.hyd.org

April 27, 2025 - For immediate review

MEETING ANNOUNCEMENT AND INVITATION

GM Farm Map Unveiling

And Public Forum: "India's Last 20 Years: Why We Must Help Ourselves—A Follow-up Discussion"

Sunday May 16th, 2025

3:30pm at 3-17-238/5. Street No. 13, Nehru Nagar, Hyderabad

- 3:45pm – Unveiling of Mural and Pamphlet Mapping 40 Local GM Farms
- 4:00pm – Public Forum: "India's Last 20 Years: Why We Must Help Ourselves"
- 5:30pm – Local Organic Buffet Prepared by the Hyderabad Farmers' Wives Collective
(Payment by Open Contribution)

The aim of our meetings is to create local links between farmers and consumers interested in healthy, local, environmentally friendly crops and nutritious foodstuffs.

The surest route is to put consumers directly in touch with farmers – thus skipping as many expensive middlemen as possible and developing the face-to-face relationships between producers and consumers that strong communities are built upon. On May 16th we will unveil a mural and pamphlet showing the 40 farms using GM crops in this region, and providing information about what each farm produces and where consumers can buy these fresh local foodstuffs.

These new materials list the locations of these farms, so that consumers and business people can contact and visit them—either to buy direct or meet the people with whom they are doing business.

The main business of the day will be a follow-up to our last public forum, which was led by one of our most active members, Mr. Sanjay Kumar. He spoke last month on: "India's last 20 years: Why we must help ourselves". This proved so stimulating that a follow-up discussion seems merited. Attached to this pamphlet is an edited transcript of his presentation.

Come prepared to debate and ask questions!

All are welcome – first come, first served!

For more information contact us at Phone: 040-25147980; E-mail: secretary@hgmcc.hyd.org



Section 5

Atakta Bharat

¹⁰ Atakta Bharat means “India getting stuck”.

India: The Last 20 Years 2005-2010: Action Falters

Back in 2005, it looked like it would be business as usual in India for the next 20 years—some states showing promise, doing well, others lagging behind. The government appeared to be trying to do its best to see through reform, but coalition politics were making it hard to achieve real progress.

Even those reforms that people could agree to were seldom realized. The thickets of bureaucracy created one level of obstruction, but that could have been overcome with time. It was the corruption—rife throughout all levels of government, from central leadership to village panchayats—that really drained the resources allocated for development.¹¹

Don't talk to me about “change agents”! That retinue of doctors, teachers, engineers drafted into the rural areas to help develop the villages—most of them with dubious degrees and qualifications not worth the paper they're printed on! Oh they were pretty active, all right! Active in grabbing land, embezzling funds, while all the time keeping away from the schools and health centres and villages where they were meant to be using their highly paid expertise!

You don't need me to tell you this; the evidence is all around you. Thousands of schools completed on paper that do not actually exist; hundreds of health centres—apparently full of busy doctors, thriving patients—that simply have never been built; villages recorded as enjoying full electrification, whose inhabitants have, in fact, been using kerosene, wood and diesel for years!

If only it had been different. If only the government had managed to find consensus and implement reform. If only there had been

10

less corruption. When I look back over India's last 20 years, I see a story strung together by “if onlys”.

Let me explain what I mean with a brief example. I'll start with that cornerstone of India's future—its population.

If only the population had not been growing so fast... Sure, the growth rate has fallen over the years. Some say that by 2030 it may even reach replacement rates. But back then it was increasing at a rate of 1.9% per year, and it was clear even then that, by 2040, India would overtake China as the most populous nation!¹² The prevalent assumption then was that this would give India a massive advantage—in the form of a “demographic bonus”. If only! If we had just asked ourselves—how realistic could our expectations be when 40% of our children were dropping out of elementary school and just could not be regarded as employable?

Could this situation have been addressed? Certainly, with foresight, sensitive family planning programmes, investment and the appropriate development of our public education system. But it seems those in charge—NGOs or those in government—were too busy arguing about what should be the right strategies rather than getting round to actually implementing any of them.

Need this have created a problem? Well, you see, this introduces the next “if only”. If only the government had recognized the potential of that population—as a talent pool for India and the rest of the world—it could have been a positive benefit, a real bonus! If only they had managed to shake up the education system, made sure that our children and their children got the skills they would need.

But constrained by fiscal problems¹³, public investments made in education, even while they increased, just could not keep up with what was needed. The same was true of the money spent

¹² The Chinese population will reach 1.43 billion in 2040, while India's will hit 1.53 billion.

¹¹ In 2004, India ranked 80th out of 104 countries in the World Economic Forum's Corruption Sub-Index and 90th out of 146 countries in Transparency International's Corruption Perceptions Index.

¹³ Already back in 2004, India had a serious fiscal deficit problem. It was ranked last out of 104 countries in that year's Global Competitiveness Report. This was due to a very narrow revenue base, with India back then collecting only 18% of GDP in revenues compared to some 26% for other developing countries.



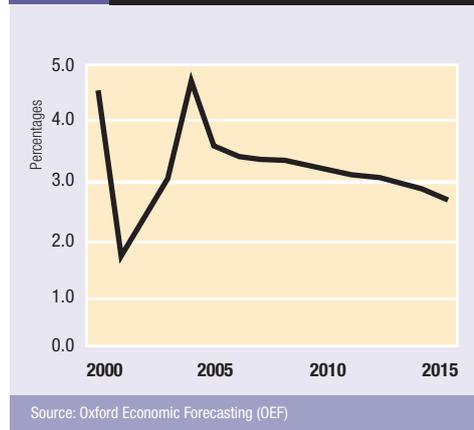
on healthcare and infrastructure. And this was especially true when, as we've discussed, because of corruption, only a small part of it actually reached those who needed it. So, with each passing year—as the population grew and existing systems were placed under increasing pressure—it became more and more of a challenge. In terms of education, it meant that only a very few acquired useful vocational skills, while literacy rates rose only marginally. Similarly, there were few improvements in primary health, access to clean water, or conditions for the survival and healthy growth of children.

Now, perhaps it would still have been all right, if only there had been increased—or at least sustained—foreign investment coming into India over the years. But, as we will see, this was also not to be the case... And this brings me back to the story I was telling.

2010-2015: Promise Fades

As I pointed out, the continued political stalemate meant that the Indian government remained unable to work out a coherent response to the country's mounting problems. Interminable discussions were held to chew over the intricacies of desperately needed and long delayed reforms. Endless committees were set up to investigate the difficulties of implementation. The much-touted concept of public-private partnership was one of the solutions offered, but for various reasons, it just never took off—probably because the private sector saw no money to be made in these activities. Nevertheless, a number of local officials continued to lobby particularly hard for such partnerships—although it was rumoured to be the opportunities for handouts rather than India's development that spurred them on.

Figure 5.1 World Real GDP Growth



It wasn't surprising that faced with this situation foreign investors, initially full of hope about India's prospects, were growing increasingly sceptical about promised reforms. In the meantime, western China, Eastern Europe and southeast Asia offered much more attractive alternatives for foreign investors... More specifically for India, the West began to see a backlash against the idea of outsourcing certain types of jobs.

Events in the external environment were making this worse: during this period, geopolitical stability gradually deteriorated. The increasing severity of the Middle East conflict was stirring up fears about global and local terrorism. Across the world, concerns were slowly building about energy resources, security and economic growth.

Perhaps it would still have been all right if the US hadn't decided to reduce its international involvement. America's determination to fight the war on terror in one "rogue state" after another had, over the years, created a significant, persistent drain on its resources. By 2012, following a round of elections in the developed world, the US



bowed to domestic pressure: weakened economically, as well as facing an increasing outflow of jobs to India, China and elsewhere, it began to decrease its foreign diplomatic and military engagements, focussing instead on ensuring security within its borders.

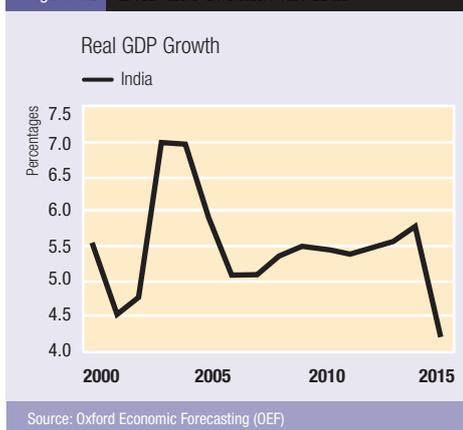
But India found no comfort closer to home: the rest of the world seemed to be following the US example, becoming increasingly insular. China's growth was slowing drastically amidst an increasingly difficult economic environment and stalling political reforms. At the same time, it grew less and less willing to compromise its own interests. Cooperation with India became increasingly difficult—around competition for energy, for example, or in resolving shared border disputes. Meanwhile, within Pakistan, as US engagement faded, jihadist groups were reasserting political influence. Terrorist attacks started to increase, and the gains that had been made between India and her neighbour in the early years of the decade were soon forgotten.

In turn, of course, this growing volatility also undermined investor interest... As external stimulus stuttered and internal vitality stalled, India's overall economic growth began gradually to fall, settling at around 5.5% per year, but occasionally dipping lower – in fact to 4% in 2015.

And so we come to another “if only”: If only more attention had been paid to developing rural areas. It's not as if no one was calling for it. Indeed, twenty years ago, there were already many who were passionately urging the importance of “Bharat”, emphasizing the challenges that had to be faced, and asking how India could expect to thrive without nurturing this, her most important resource!

The capacity of the industrial sector to create jobs was always going to be limited.

Figure 5.2 **Low and Volatile Growth**



Hope lay in regenerating agriculture—up until the 1990s, it had always been India's major employment-generating sector. Diversification of crops, agricultural processing—these were just a few of the areas that could have forged enormous benefits for farmers, for states, for India. But beyond the usual “heartfelt” rhetoric—no one paid any real attention.

Instead, as more and more people moved to the cities looking for jobs, state and central governments pumped any available funds into developing urban areas. It was an understandable reaction to the crisis of the moment—cities were choking under the influx of migrants—but it could only ever really be a short-term measure.

And it made little difference: in 2005, more than 60% of Mumbai and Delhi's population was living in slums; by 2015 this number had risen to 73%. But it was the provincial cities that bore the brunt—and, as state funds ran out, many came close to complete collapse.

2015-2020: Growth Slows

As 2015 dawned, terrorist attacks were rising across the US and Europe. Increasingly



¹⁴ This write-up draws heavily from “Cost of Conflict Between India and Pakistan” (2004) and “The Final Settlement: Restructuring India-Pakistan Relations” (2005) published by Strategic Foresight Group based in Mumbai, India. We are grateful for its kind permission to adapt its materials.

Extract of a review article by an Indian correspondent from *The Star*, an Australian Newspaper¹⁴

October 2015

Back in 2005, there was widespread optimism that the India-Pakistan relationship was set for some sort of a final settlement. It had been long hoped for—so many lives had been lost.

There seemed to be many reasons for that optimism. US foreign policy post-9/11 had centred on the war against terrorism, with Pakistan as a key ally. At the prompting of the US, Pakistan and India set peace talks in motion, their leaders meeting regularly (sometimes after cricket matches). Meanwhile, China, which had backed Pakistan in the past, was also seeking a strategic partnership with India as part of its plans to ensure a peaceful future. All these developments, analysts thought then, seemed to indicate a fundamental, irreversible shift towards peace and prosperity in South Asia.

If only that were so! Now we can look back at 2005-2015 and see why India and Pakistan are back on the verge of another serious conflict:

- Peace has always been skin-deep: even during the period of the peace process from January 2004–March 2005, as relationships seemed to be improving, there were 20 missile tests by India and Pakistan, as well as expensive weapons shopping sprees by both countries.
- The US’s gradual disengagement from the region around 2012: this was because of rising domestic pressures—the war on terror and interventions in rogue states had cost many lives without actually preventing large scale terrorist attacks in the US.
- The ongoing jihadization of Pakistani society and the rise of Islamic fundamentalism (largely due to poor socio-economic conditions leading to an increase in unemployed youths) had led to the near collapse of the Pakistan state, especially after successive coups between 2010 and 2015. In 2005, there were more than 100 jihadi organizations in Pakistan with around 200,000 armed militant members; in 2010, membership had risen to 300,000, and to almost a million by 2015 as tensions rose.
- Talks among a handful of Indian states about unilaterally annulling the Indus Treaty in the coming years (due to their own water needs) has been perceived as a direct threat to Pakistan’s water lifeline.

In the last few years, the tensions in the relationship have escalated, with mutual accusations of interference in domestic affairs; increased terrorist violence; the breakdown of bilateral ties; international intervention and imposition of sanctions; and, lately, frequent reports of military skirmishes. Bangladesh, Myanmar and Nepal have all been drawn into these disputes, adding to mutual suspicion and instability in the region.

Most disturbingly, the two countries have recently exchanged threats that they are prepared to use nuclear weapons. With the substantial arsenal of nuclear warheads in each country, any strike and counter-strike would mean complete annihilation of Pakistan and parts of India.



stringent security measures were making global trade difficult, with the unintended but inevitable effects of discouraging trade, investment and talent flows around the world. In response, most countries continued to turn inwards, developing increasingly protectionist policies. Regional trade blocs developed at the expense of an open, global trade regime. Outsourcing and off-shoring both slowed drastically.

Meanwhile, as turmoil in the surrounding countries increased, India's military expenditure rose sharply, sapping funds for social or economic development. Conflicts also threatened within India as the Maoists stirred unrest in the northeastern states.

In a global climate of heightened anxiety, many investors saw India's situation as potentially dangerous. And events within India did little to reassure them.

Certainly, some states had managed some reforms. Some were even maintaining growth rates of 7%. But the poorest few states were trapped in a vicious cycle of 2-3%, implementing only minimal reforms and attracting the least FDI. Unfortunately, they also had the faster growing populations—together accounting for nearly 40% of India's total population.

It isn't surprising, really, that some of those unemployed young people would start to question the justice of the system that seemed to have condemned them to live in poverty, with little future hope. It isn't surprising that some joined terrorist groups or that crime rates rose as sharply as they did.

By 2018 it was clear that the largest democracy in the world had lost its faith in its own system of governance. Surveys indicated that most people thought politics had lost all sense of public service—it was about making easy money. Increasing

numbers were just not bothering to vote; many even stopped participating in street demonstrations—although of course these still continued.

Corruption grew exponentially in government ranks—in fact, in many cases it was scarcely concealed. Some people protested, of course, but in their hearts I doubt they expected any redress—the perpetrators have always seemed to escape punishment, ever since independence! Perhaps we should take some comfort in the fact that politicians and bureaucrats had found at least one area where they could work together successfully.

In many states, the same effects could be seen in the economic and social spheres—India's famous entrepreneurial spirit seemed to fade. The number of genuine NGOs shrank, while “briefcase NGOs” (organizations with no known offices, usually set up to funnel aid money into private pockets) multiplied across the country.

People still cared—they just did whatever they had to do in order to survive. No one looked to the authorities for help anymore—they had rarely shown signs that they were listening, and very seldom delivered on any of their promises. Mirroring the behaviour of the external world, people became focused on safeguarding their own interests and those of their immediate communities, rather than working for the future of India as whole.

Sadly, this has all too frequently led to conflict. Sometimes the fights have been explicitly sparked by concern about resources—water wars have broken out between, and within, a number of states. In the poorer states of central India, especially the tribal belts of Andhra Pradesh, Madhya Pradesh, Chhattisgarh and Orissa, anger among the landless has prompted the



¹⁵ This write-up is adapted from a contribution from Mr Sanjit (Bunker) Roy, Director and Founder of Barefoot College, India.

An extract from the original leaflet distributed at the founding of the Hyderabad GM Crop Collective (October 2018)¹⁵:

Avahan—A call to action!

“First they ignore you, then they laugh at you, then they fight you, then you win.”

Gandhi

“One would think the politicians would at least speak out for their people and make life miserable for the bureaucrats. But corruption is rampant, deep and, as they say, getting more expensive to conceal. It speaks volumes of the collusion between the politicians and the bureaucrats that, since independence, not one has seen the inside of a jail even after being caught red-handed.

Hope is to be found at home—in our own knowledge and traditional wisdom! In our own strength and resilience! In the years ahead, rural India must demonstrate the power and effectiveness of traditional knowledge, village skills and practical wisdom for our own development. We have the capacity and competence to initiate a “barefoot” revolution where semi-literate people with no paper qualifications from any college or university can serve their own communities as “barefoot” doctors, teachers, solar and water engineers, architects, pathologists and computer programmers.

The case of drinking water

Just take the harvesting of drinking water as an example. To provide drinking water for village communities, the primary choice for water planners and engineers in much of India is to install hand pumps for the exploitation of groundwater. Where this is not possible, the second preference is for piped water-supply schemes, sometimes from a source hundreds of miles away. Many companies provide the technical support to implement such projects, including gathering and interpreting information from satellites, manufacturing pipes, pumps and desalination plants and providing other accessories. This is an expensive process.

Rooftop rainwater harvesting is a viable alternative. This is a traditional practice that dates back hundreds of years, is relatively cheap to implement and is usually ignored by engineers. The technique is particularly relevant in arid or mountainous areas where rainwater would otherwise flow rapidly away, or areas where the groundwater is saline. Indeed, owing to the unsustainable extraction of groundwater, mainly for irrigating crops, many areas of India are suffering from increased groundwater salinity. Harvesting rainwater can also mitigate problems with the increasing salinity of groundwater.

Moving forward, we intend to train thousands of barefoot architects, including women. Building the rooftop rainwater harvesting systems will provide gainful employment to tens of thousands of other villagers.

This is just one example—but there are many others. It serves here to show how easily we can make our own future. And it will be a future in which communities depend on each other’s skills, in which there is dignity and respect for each other and development has a human face, in which there is no discrimination, injustice, exploitation and corruption. This is the future I dream of for our community—I believe that, together, we can make it a reality.”

“Traveller, there is no Path.

Paths are made by walking” (Antonio Machado)



accelerating spread of naxalism across the country and in increasingly violent forms. In other areas, poverty and anger have exacerbated existing tensions: over the last ten years, Jammu and Kashmir have flared up repeatedly—violent insurgencies, reminiscent of those back in 1998; ethnic conflicts have worsened in the northeastern states; and there has been rising violence in the name of religion.

For some, however, the answer has not been violence, but self-organization. For some, it has not been about doing another down, or capturing rare resources for themselves, but using the power of traditional knowledge, village skills, practical wisdom and the latest technology to adapt to the current circumstances.

Our own collective was founded in this troubled period: a small group of farmers facing the same problems, coming together to help each other find solutions. For us, the answer lays in working with seed developers to find the crops that will survive in our unpredictable climate. We have since united with other rural workers to process these crops and market them successfully.

Some have called this “the barefoot revolution”: what started as a group of five farmers has grown to include 40 farms, a non-profit research unit and four agro-processing units. As we have grown we have taken advantage of technology to link up with our counterparts from around the world. Our online chatrooms are filled with farmer workers and seed developers from as far afield as Brazil, Africa, China and Europe all of us sharing our expertise and experience. Indeed, thanks to technology, some of our overseas colleagues have been able to join us for this discussion.

We can talk proudly of the crops we are

growing and selling, our mounting profits, the people we train and employ. These figures are all very pleasing. But there is another way to describe our success—which many think is at least as important as these numbers, if not more so. This version tells of the rekindling of hope in our community and, alongside it, the growing dignity and self-respect among our people, especially our young people.

2020-2025: Struggling for Survival

And now we come to the last five years of our story, and a new set of “if onlys”. In 20 years time, what will we look back and wish we had done?

There are signs that people are tired of suffering—they want things to change. As all know, at the approach of 2025, a number of states split to temporarily assuage demands for better accountability and governance.

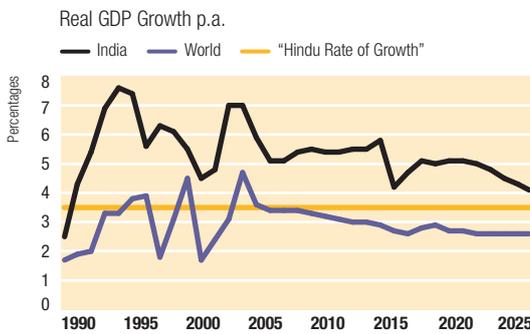
Myriad new political parties are now emerging, some comprising the strangest partnerships. Some still dare to claim that they have the answers: for example, they offer free power, water, along with guaranteed jobs and pay, despite the fact that such policies would only push the government closer to bankruptcy. There are others whose goals sound more down-to-earth, more realistic, more what India needs. But it’s unlikely that they will be elected; their policies are simply not popular.

Perhaps it has had to get worse before it could get better... Who knows? I believe it is better to look forward and not back. Now we know how much we can achieve if we stand together, the question we should ask is not “What should we have done?” but “What must we do now?”



We prepared a sheet with some facts for you to make it easier to prepare for the next public forum:

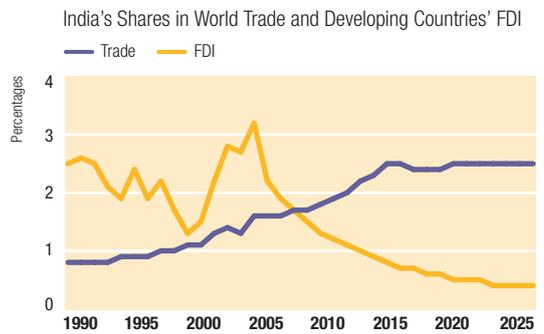
Figure 5.3 Back to the “Hindu Rate of Growth”



Source: Oxford Economic Forecasting (OEF)

Economic growth trends down over time towards around 4% by 2025.

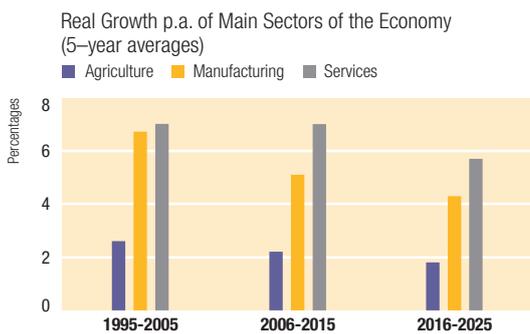
Figure 5.4 Putting the Brakes on Growth



Source: Oxford Economic Forecasting (OEF)

India's share in developing countries' FDI drops drastically over time, leading to a slowdown in exports growth.

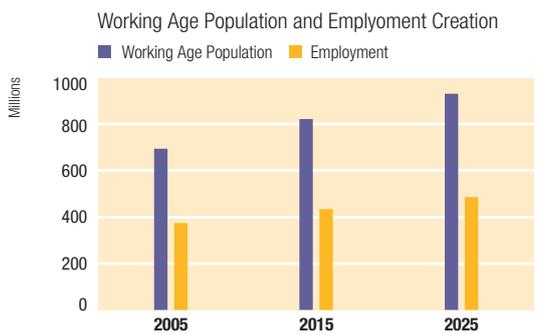
Figure 5.5 Slowing Down



Source: Oxford Economic Forecasting (OEF)

Manufacturing and agriculture slow down over the decades for lack of investment. Even the competitive services sector slows down in the decade leading to 2025.

Figure 5.6 The Unemployment Time Bomb



Source: National Council for Applied Economic Research (NCAER)

Unemployment worsens over time, as employment creation does not keep up with the growth of the working age population.

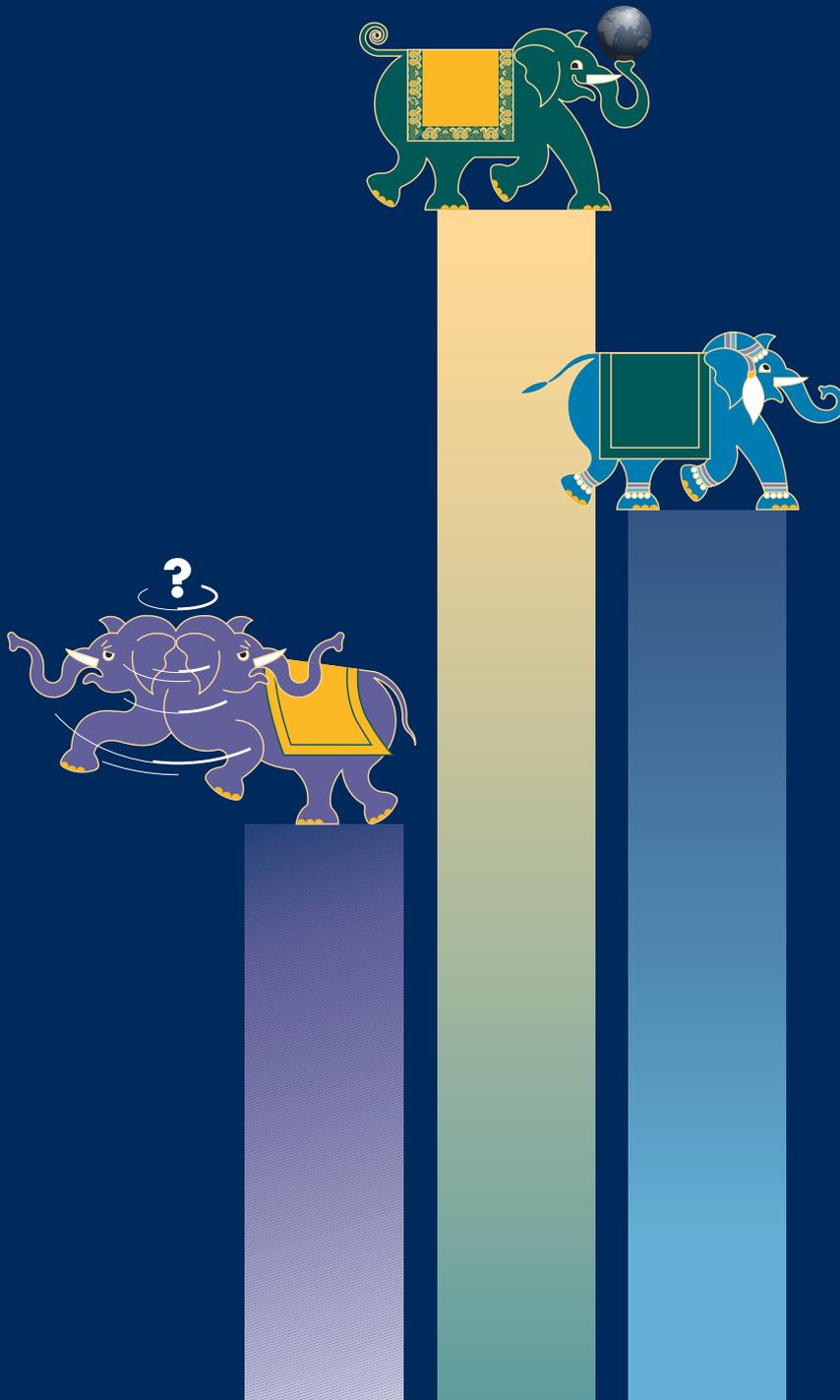


The Hyderabad GM Crop Collective

Section

6

Comparing the Three Scenarios



Section

6

Comparing the Three Scenarios

This section provides an overview of how some selected economic and social indicators may evolve over time. This analysis is based on economic modelling and analysis, to ensure plausibility and internal consistency of the various scenarios.

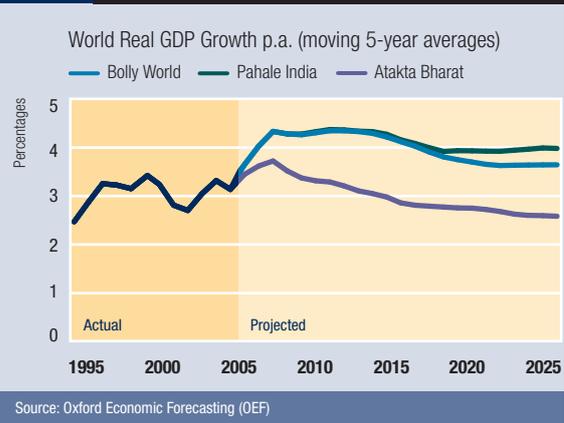
The selected indicators that we provide here include:

- i) **Global GDP growth**
- ii) **India's share of developing countries' FDI inflows**
- iii) **India's share of world trade**
- iv) **India's GDP growth**
- v) **Change in poverty levels in India**

Using the data

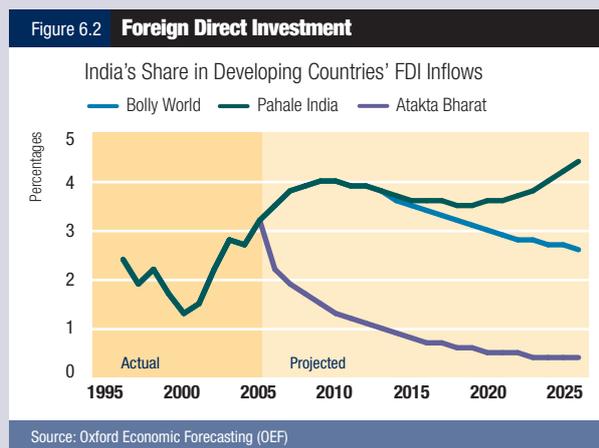
The data provided above could be used for developing leading indicators to determine which of the three scenarios is actually unfolding. Of course, users need to bear in mind that the scenarios and the attendant analysis are descriptions of only a set of possible futures, as seen from the current perspective. They should not be seen as predictions or forecasts. Hence the data provided serves only as a guide and should be applied and monitored with careful judgment.

Figure 6.1 **World Growth**



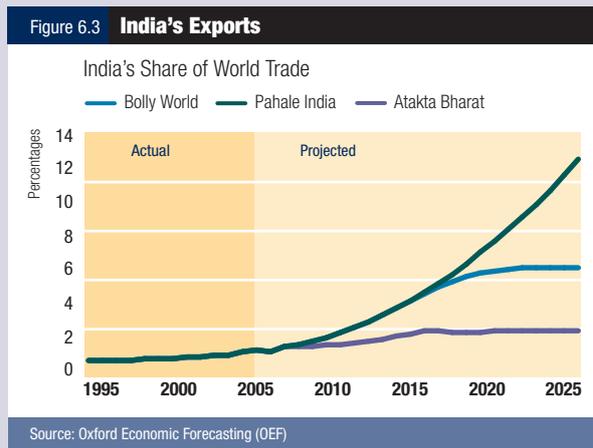
i) Global GDP growth

A benign external environment enables economic growth in India in the first decade in *Pahale India* and in *Bolly World*. Global growth peaks in 2008 with a real GDP growth rate of 4.5% before slowing down to a moderate growth of about 4% – still fairly high in historical terms. In *Atakta Bharat*, the international environment is difficult and increasingly so throughout the scenario period. Global growth slows gradually to as low as 2.5%.



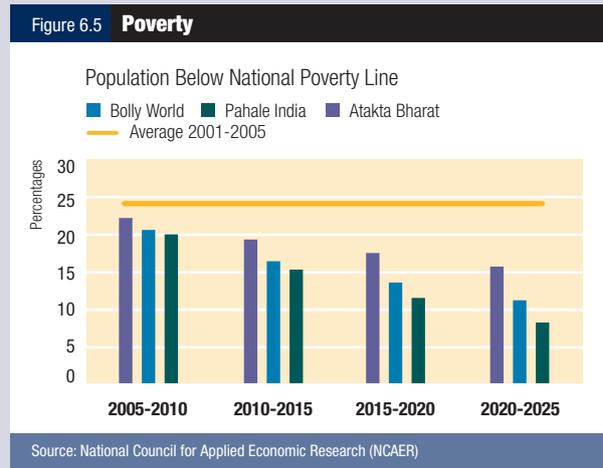
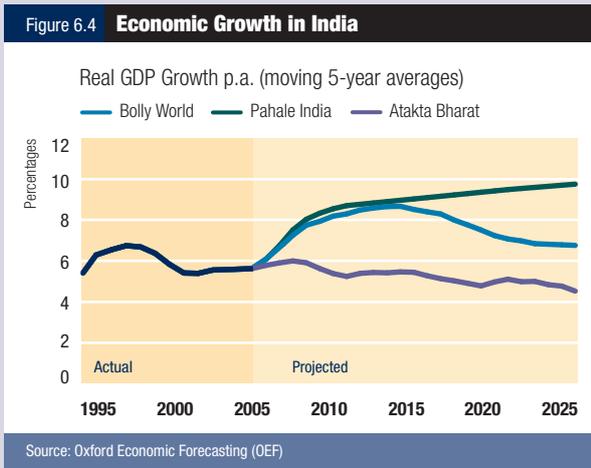
ii) India's share of developing countries FDI

India's share in developing countries' FDI rises constantly in *Pahale India*, while in *Bolly World*, it drops after the first decade as India loses its attractiveness. In *Atakta Bharat*, investor confidence is extremely low and the share drops steadily.



iii) India's share of world trade

India's share in world markets increases more than seven-fold in *Pahale India*, driven by both services and goods exports, while in *Bolly World*, the growth in market share tapers off in the second decade. In *Atakta Bharat*, India's trade share fails to improve in view of the poor global environment and her inability to gain in relative competitiveness.



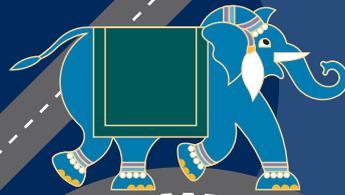
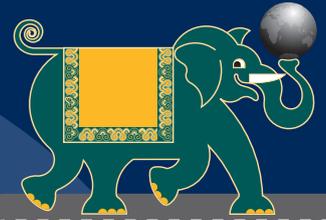
iv) India's GDP growth

In *Pahale India*, despite the global downturn in the second decade, i.e., around 2016, India manages to maintain and even slightly increase its growth due to its improved competitiveness and growing internal demand. It moves steadily towards a growth rate of 10% per annum. In *Bolly World*, the slow down in global demand in the second decade has a direct effect on India's exports and FDI inflow and thus on the GDP growth, which goes back to the levels of the 1990s. In *Atakta Bharat*, India is unable to benefit from the difficult global environment or implement internal reforms, and growth moves steadily back to the "Hindu rate of growth" of the 1980s.

v) Change in poverty levels in India

The sustained and inclusive growth and development in *Pahale India* allow India to reduce the poverty ratios by two-thirds of its 2001-2005 average. In *Bolly World*, growth is still strong enough to cut the ratio in half, while in *Atakta Bharat*, the poverty ratio is reduced by only one-third.

Section **7** Conclusion



Conclusion

As this publication gets ready for print, India has been enjoying unprecedented international limelight as leaders from the US, China, Japan and elsewhere have visited the country, all seeking to foster a strategic partnership. To many government and business leaders, India seems finally ready to fulfil its destiny as a great nation. To many analysts and economists, India looks set to impact the world as greatly as China has done in the last twenty years.

The scenarios that are presented here recognize the great potential that India holds as a global player. But they also point to the fact that India's greatness can only be achieved if certain critical challenges can be overcome, and it is not certain that this will happen.

As many thought-leaders and experts involved in the scenario workshops have pointed out, while global integration presents immense and unprecedented opportunities for India, these can be fully exploited if and only if India anticipates and manages the attendant risks posed by an increasingly fast changing global environment. Striking a balance between internal and external development, and bringing along the entire population will continue to be the single greatest challenge for India.

While the international environment will boost or constrain India's choice and opportunity set, this is not to argue that India's future is wholly dependent on external events. To a significant extent, India can shape or influence the external environment to its advantage. Its ability to influence external developments will turn on a number of factors, including its inner strength and unity, as well as how it perceives itself—primarily as a regional or global power, for example— for its self-perception will determine its behaviour on the international stage and how the world views and responds to India.

Last but not least, an overriding message of the three scenarios that comes across to many is the importance of inclusive, decisive and effective leadership. The challenges that India faces and the actions that India needs to take to secure its future seems well known to many observers and those in government. The question is, can its leaders and people put this understanding into practice and do what is needed as a nation, in collaboration with the international community?

Pahale India, Bolly World and Atakta Bharat have provided some possible answers. Only time will tell which path India will travel in the next 20 years.

Annex: Recommended Reading

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